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PURDUE UNIVERSITY GRADUATE SCHOOL Thesis/Dissertation Acceptance

This is to certify that the thesis/dissertation prepared	
By Jamie Lynn Loizzo	
Entitled Adult Learners' Perceptions of MOOC Motivation, Success, and Completion: A Virtual Ethnographic Stu	udy
For the degree of Doctor of Philosophy	
Is approved by the final examining committee:	
Peggy Ertmer	
Chair	***************************************
Jennifer Richardson	
William Watson	
Jake Burdick	
To the best of my knowledge and as understood by the student in the Thesis/Dissertati Agreement, Publication Delay, and Certification Disclaimer (Graduate School Form 3 this thesis/dissertation adheres to the provisions of Purdue University's "Policy of Integrity in Research" and the use of copyright material. Approved by Major Professor(s): Peggy Ertmer	
Approved by: Phillip J. VanFossen	4/3/2015
Head of the Departmental Graduate Program	Date

ADULT LEARNERS' PERCEPTIONS OF MOOC MOTIVATION, SUCCESS, AND COMPLETION: A VIRTUAL ETHNOGRAPHIC STUDY

A Dissertation

Submitted to the Faculty

of

Purdue University

by

Jamie Lynn Loizzo

In Partial Fulfillment of the

Requirements for the Degree

of

Doctor of Philosophy

May 2015

Purdue University

West Lafayette, Indiana

For my husband and children.

Put your mind to it, work hard, be kind to others, and achieve your dreams.

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ABSTRACT

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Massive open online courses (MOOCs) have been credited with disrupting the traditional classroom and challenging distance education models in higher education. MOOCs were developed with the intention of opening up education to the masses, specifically those in developing countries who could not readily access educational resources or opportunities. However, early quantitative reports have shown that MOOC participants tend to be adult learners who already possess bachelor's or master's degrees. Additionally, MOOC completion rates have been reported to be significantly low with less than 15% of enrolled students actually completing them. This has led to questions about who the true target learners are and whether completion is the proper measure for gauging the effectiveness of MOOCs. Qualitative research has the potential to demystify questions about MOOC learners' motivations and perceptions of success and completion. However, ethical issues of conducting qualitative research in open online environments present challenges and require a thoughtful research design regarding consent, privacy, and intellectual property.

This study used virtual ethnographic, narrative inquiry, and photo-elicitation methods to qualitatively examine the experiences of adult learners (n = 12) from around the world who were enrolled in a MOOC on the social justice topic of human trafficking via the Coursera platform. The anthropological nature of the research methods led to a richer understanding of the adult learner MOOC culture as a socially dynamic democratic environment involving social presence, lurking, up-voting, down-voting, peer review, and reputations. Results from the study include co-constructed narratives of adult learners' MOOC experiences, themes of commonalities and differences across learner experiences, a thick description of MOOC culture, and an initial conceptual framework for understanding adult learners' perceptions of MOOC motivation, success, and completion.

The findings of this research and its resulting conceptual framework could be beneficial for platform providers, instructors, and instructional designers who are developing MOOCs intended for adult learners in the areas of continuing education, professional development, volunteerism training, as well as for adults who are considering enrolling in graduate school. This study highlights a need for a more learner-centered approach to MOOC design and suggests that MOOCs have the potential to facilitate a global discussion on social justice topics as a component of attitude change instruction. Implications for MOOC design and suggestions for future research are presented.

CHAPTER 1. INTRODUCTION

1.1 Background of the Study

Due to the development of the Internet and Web 2.0 technologies such as social media tools for collaboration and constant access to information and content, the processes of education and knowledge attainment are changing (Bonk, 2009; Seely Brown, 2008). Bonk (2009) wrote, "We have stepped into a new culture of learning where we assume radically new perspectives of ourselves as learners and what it means to participate in the learning process. The culture is one of participation and personalization" (p. 327). Seely Brown (2008) described how the demand for online content and collaboration has the potential to change how education operates:

It is also unlikely that sufficient resources will be available to build enough new campuses to meet the growing demand for higher education, at least not the sort of campuses we have traditionally built for colleges and universities. Nor is it likely that current methods of teaching and learning will suffice to prepare students for the lives they will lead in the twenty-first century. (p. xi)

Massive Open Online Courses, popularly called MOOCs, are one example of how educational delivery models are changing. MOOCs are in a variety of experimental stages and have emerged in recent years with the goal of opening up university-based education online for millions of learners from around the world (Liyanagunawardena,

Adams, & Williams, 2013; Mangan, 2012; Rodriguez, 2012). MOOCs have been credited with disrupting the traditional classroom and challenging distance education models in higher education (Jaschik, 2013; Jenkins, 2013; Lekart, 2010). MOOCs have approximately an eight-year history. The development of MOOCs is traced back to the growth and demand for distance education around the world, as well as the Open Educational Resources (OER) and Open Course Ware (OCW) movements (Bonk, 2009; Liyanagunawardena et al., 2013). MOOCs first began as a means to help learners form online communities via the use of Web 2.0 tools such as social media, wikis, and blogs (Clarà & Barberà, 2013; Rodriguez, 2012.). The form and function of the massive courses took a turn in 2011, when a group of computer science professors at Stanford University offered three MOOCs for free (Rodriguez, 2012).

MOOCs typically involve a higher education institution partnering with a MOOC technology platform provider (e.g., Coursera, Udacity, edX, Canvas) to offer distance education courses to thousands of learners on a wide variety of topics (Kolowich, 2013b). The current MOOC model involves a single faculty member or subject matter expert (SME), possibly with the support of instructional designers and/or teaching assistants, teaching an asynchronous online course in their area of expertise to thousands of students around the world (Belanger & Thornton, 2013; McAuley, Stewart, Siemens, & Cormier, 2010; Rodriguez, 2012). Most MOOCs are free of charge, although some universities and platform companies charge a fee for earning a certificate or college credit (Kolowich, 2013c; Liyanagunawardena et al., 2013; McMillan, 2013).

1.2 Problem Statement

MOOC research is in its infancy, and much of it has focused on quantitative information in regards to student demographics and participation (Esposito, 2012). Based on these early quantitative reports, student demographic data suggest that the original, intended mission of MOOC platform providers is not being met. That is, many of the MOOC platform providers stated their mission was to make higher education accessible to populations who typically do not have the means to pursue college degrees (Rhoads, Berdan, & Toven-Lindsey, 2013). For instance, MOOC technology company, Coursera, stated on its website, "We envision a future where everyone has access to a world-class education that has so far been available to a select few. We aim to empower people with education that will improve their lives, the lives of their families, and the communities they live in" (Coursera, 2015a).

MOOCs were originally intended to open up higher education to the masses around the world and make a college degree more accessible to, and attainable for, underprivileged populations. However, data released by MOOC providers, HarvardX and MITx, challenged the assumption that students are taking MOOCs as part of their initial steps in the pursuit of a bachelor's degree. Two HarvardX and MITx papers about the students who enrolled in the companies' 17 MOOCs from fall 2012 to summer 2013 showed that students were typically adults, 26 years old or older, who had already attained bachelor's degrees (Ho et al., 2014). While MOOCs are reaching learners all over the world, adult learners with college degrees comprise the majority of the MOOC learner population. Therefore, MOOC platforms are not reaching their intended goals of opening up education to under-privileged populations. However, it is still important to

determine why adult learners with higher education degrees are taking MOOCs, what they are experiencing, and how their experiences might inform the design of future MOOCs. One author, Gose (2012), profiled four different adult learners and asked why they were taking MOOCs. The learners described participating in MOOCs as a means of professional development or to brush up on topics. While professional development could potentially be one MOOC motivator, what are some of the other factors leading adult learners to enroll in MOOCs?

Another controversy relates to student MOOC completion rates. Quantitative reports have shown that typically less than 15% of students who enrolled in a MOOC completed it (Kolowich, 2013c). This has led MOOC developers and providers, as well as higher education administrators and faculty members, to question the value and purpose of MOOCs (Kolowich, 2013f). As a result of the latest demographic data and ongoing debate regarding the intended focus of MOOCs, Sebastian Thrun, former Stanford University professor and developer of the MOOC platform provide, Udacity, called for a new 'MOOC 2.0' to successfully use the platforms to meet professional adult learners' needs (Lewin, 2013). As MOOCs continue to evolve, some with a focus shifting to adult learners, it is important to understand how the next versions of MOOCs could be effectively designed for a target learner population of adult learners with higher education degrees. As such, there is a need for MOOC stakeholders to better understand adult learners' MOOC experiences, motivations, and perceptions of success and completion.

In a review of MOOC literature from 2008–2012, Liyanagunawardena et al. (2013) noted a gap in knowledge in regards to learners' motivations, perceptions, and

experiences with MOOCs. As mentioned, quantitative data have provided demographic descriptors of MOOC learners, but qualitative studies with direct student insights are lacking. There is a need for qualitative MOOC studies to provide a deeper, richer understanding of what is happening within MOOCs, specifically in regards to learners' motivations, perceptions, and experiences.

Unfortunately, there are many logistical and ethical hurdles to overcome in conducting online qualitative research, and these challenges are amplified in MOOCs (Esposito, 2012). In 2007, Kanuka and Anderson reviewed literature concerning the ethical issues of conducting online qualitative research. The authors concluded that "there are three main areas of confusion and uncertainty among researchers in the field of e-learning: (a) informant consent, (b) public versus private ownership, and (c) confidentiality and anonymity" (2007, pp. 20–21). Challenges such as these have proven to be daunting for MOOC qualitative researchers.

Five years after Kanuka and Anderson (2007), Esposito (2012) wrote about the continued ethical concerns of online education research and used the example of a hypothetical study of a MOOC applying virtual ethnographic methods. Esposito stated there are "different approaches to ethical issues in an online research context, privacy concerns in a public online setting, the choice between overt and covert research, the application of the informed consent and issues of anonymity" that should be considered in designing a qualitative MOOC study (p. 318). There is a need for empirical research that uses Internet-based research (IBR) qualitative methods, such as virtual ethnography, to provide insight and possibly serve as models for future studies.

As previously pointed out, much of the misunderstanding of MOOCs comes from the lack of student voices and experiences in the published literature (Esposito, 2012). IBR and arts-based research methods could potentially be another means for demystifying the MOOC phenomena. Barone and Eisner (2012) wrote that arts-based research has the potential to uncover "vagueness" in education and to "redirect conversations about social phenomena by enabling others to "vicariously re-experience the world" (p. 20). By developing relationships with adult MOOC learners, observing and discussing their MOOC experiences, as well as co-constructing text and photo-elicited narratives, this study was one of the first of its kind to qualitatively investigate MOOC adult learner experiences.

1.3 Purpose of the Study

The purpose of this research study was to gain a deeper understanding of the MOOC experiences of adult learners with bachelor's and master's degrees including their motivations for participating in MOOCs and their perceptions of MOOC success and completion. The focus on quantitative learning analytics in prior MOOC research has prompted questions about adult learners' motivations, perceptions, and experiences within the massive courses (Esposito, 2012). To date, published MOOC research studies have been limited, resulting in missing information about student experiences, which is crucial to the future development and mission of MOOCs. Qualitative methods provide a means to examine student experiences more acutely (Esposito, 2012; Liyanagunawardena et al., 2013). The few existing qualitative accounts have involved professors participating as students in MOOCs and writing about their experiences, brief learner profiles in *The Chronicle of Higher Education*, media reports, and marketing information

from the MOOC platform companies (Gose, 2012; Kirschner, 2012). The proposed study was designed to engage directly with MOOC adult learners through IBR methods to gain a better understanding of their experiences in order to discern implications for the design of future MOOCs. The online inquiry method of virtual ethnography and the arts-based research methods of narrative and photo-elicitation were implemented as the means for researching adult learners' MOOC experiences.

1.4 Research Questions

The study examined adult learners' experiences within MOOCs. Specifically, the research looked at adult learners' motivations for participating in MOOCs and how their motivations impacted their online presences and their perceptions of learner success and completion. The central research question surrounding adult learners' MOOC experiences was:

RQ1: What are adult learners' perceptions of their experiences within a Massive
 Open Online Course (MOOC)?

Sub-research questions included:

- RQ1a: What motivates adult learners with bachelor's and master's degrees to participate in MOOCs?
- RQ1b: How does an adult learner's motivations influence his/her level of online presence within a MOOC?
- RQ1c: What are an adult learner's perceptions of online interactions with classmates and instructors within a MOOC?

- RQ1d: What does an adult learner describe as key factors for succeeding in a MOOC?
- o RQ1e: How does an adult learner define 'completion' of a MOOC?

1.5 Significance of the Study

Due to the evolution and continuing quantitative study of experimental MOOCs as possible models for 'opening up education' (Bonk, 2009; Green, 2011; Hilton, Wiley, Stein, & Johnson, 2010), this qualitative study was of importance to higher education administrators, faculty, instructional designers, and online adult learners. Researchers are studying large quantitative data sets to learn more about the learners who are enrolling in MOOCs, but there has been a lack of published studies that investigate learner experiences with a qualitative approach (Ho et al., 2014). This study provided a qualitative look at adult learners' overall MOOC experiences, reasons for participating in MOOCs, perceptions of what it means to succeed in a MOOC, and their definitions of MOOC completion. One reason for the gap in qualitative MOOC research could be the ethical challenges of applying qualitative research methods to online learning environments (Bianco & Carr-Chellman, 2002; Esposito, 2012). As an additional benefit, this study provided an example of how IBR methods of virtual ethnography as well as arts-based methods of co-constructed narratives and photo-elicitation can be implemented to study online learning environments. This benefits future online qualitative researchers and opens the door for new qualitative MOOC research.

CHAPTER 2. LITERATURE REVIEW

2.1 Chapter Overview

Massive Open Online Courses (MOOCs) have grown in popularity and controversy in the past few years (Jenkins, 2013; Kolowich, 2013f; Lombardi, 2013; Rodriguez, 2012). MOOCs are described as challenging the role of higher education and disrupting the traditional distance learning landscape (Jenkins, 2013). Early MOOC research reports have focused on large sets of demographic data to identify trends in MOOC student populations, such as high incompletion rates (Esposito, 2012; Kolowich, 2013d; Ota, 2013). There is a gap in MOOC research regarding student perspectives and experiences that has the potential to be filled with qualitative online inquiry approaches. This first section of this chapter reviews literature related to the background of MOOCs, arriving at a working definition of 'MOOC,' and presents arguments for and against the use of MOOCs. The second section looks at the literature on adult learner motivation related to distance education and online presences in e-learning, specifically the Community of Inquiry (CoI) instructional design framework as a perspective for understanding learner and instructor roles and interactions in e-learning environments. The final section reviews ethical considerations and methods for conducting MOOC qualitative studies. Specifically, virtual ethnography, narrative, and photo-elicitation

are defined and examined as potential online inquiry and arts-based research methods for examining MOOCs.

2.2 Background of MOOCs

2.2.1 The Origin of the Massive Open Online Course (MOOC)

The development of MOOCs is traced back to the growth and demand for distance education around the world, as well as the Open Educational Resources (OER) and Open Course Ware (OCW) movements. Online learning is growing in all sectors across the country: industry, nonprofit, PK–12, higher education, and professional development. Learners are engaging in both real-time and asynchronous educational programs. The interest in online programs comes as professionals are seeking training and degrees to increase their skills and capabilities within a fast-paced job market that demands twenty-first-century, Internet-based skills (Hilton et al., 2010; Seely Brown, 2008). Within PK–12 education, schools are participating in online learning programs such as "Skype in the Classroom" to introduce their students to multicultural experiences, careers, and more. In higher education, incoming undergraduate and graduate students are said to be "digital natives" having grown up with the Internet (Prensky, 2010).

Predictions are that distance education will increase even more in the coming years. A national report from the Babson Survey Group and Quahog Research Group (Allen & Seaman, 2013) showed 32 percent of higher education students were taking at least one online course, as compared to less than 10 percent in 2003. At the same time, 69.1 percent of "chief academic leaders" reported, "online learning is critical to their long-term strategy" (p. 3). The same report stated, "2.6 percent of higher education

institutions currently have a MOOC, [and] another 9.4 percent report MOOCs are in the planning stages" (Allen & Seaman, 2013, p. 2).

Due to the development of the Internet and Web 2.0 technologies such as social media tools for collaboration and constant access to information and content, the process of knowledge attainment is changing (Bonk, 2009; Seely Brown, 2008). Bonk (2009) noted, "We have stepped into a new culture of learning where we assume radically new perspectives of ourselves as learners and what it means to participate in the learning process. The culture is one of participation and personalization" (p. 327). Seely Brown (2008) described how the demand for online content and collaboration has the potential to change how education operates:

It is also unlikely that sufficient resources will be available to build enough new campuses to meet the growing demand for higher education, at least not the sort of campuses we have traditionally built for colleges and universities. Nor is it likely that current methods of teaching and learning will suffice to prepare students for the lives they will lead in the twenty-first century. (p. xi)

In general, OER, OCW, and MOOCs appear to be the result of an even greater transition in education and the need to open up education to everyone, regardless of background, location, profession, financial status, and other demographics. Watson and Watson (2014) described a need for systemic transformation across higher education institutions. Watson and Watson stated that there is pressure for universities to shift from an "elite" one-size-fits-all model to a "universal model" that is "tasked with educating the majority, if not all of the population" (p. 48). The new educational paradigm would need to "unbundle" higher education to be more learner-centered for effectively addressing the diverse backgrounds and goals held by today's learners (pp. 49–50). MOOCs are just

one part of this much larger discussion regarding the changing role of higher education institutions and educational access.

As part of the immediate demand for at-your-fingertips education, some universities and institutions are responding to the OER and OCW movement. For example, from 2001–2008, the Massachusetts Institute of Technology (MIT) placed all of its course materials such as syllabi, lesson plans, and assignments online for free, as part of its OCW effort (Bonk, 2009). The content is open not only to MIT students, but also learners across the world interested in any of MIT's courses. MIT (2011) stated, "the OCW site is being used by educators, students and self-learners to successfully accomplish a wide range of educational objectives; and visitors are widely satisfied with the breadth, depth, quality and currency of OCW content" (MITOpenCourseWare, 2011). MIT reports there were "127 million visits to OCW content from 90 million visitors as of October 2011," and that number has continued to grow in the last few years. The same report indicated the OCW site is used not only by students to earn MIT degrees but also by "self-learners" who were "exploring interests outside of [their] professional field (40%)," "planning for future study (19%)," "reviewing basic concepts in [their] field (19%)," and "keeping current in [their] field (11%)" (MITOpenCourseWare, 2011). Hence, through its data, MIT is building the case that there is a current and growing demand for OCW resources for a diversity of educators and learners across the world, and the institution plans to continue along the OCW trajectory. Meanwhile, other OER and OCW universities and projects have also emerged, such as the open university of the United Kingdom (http://www.open.ac.uk/), Carnegie Mellon's 'open learning initiative'

(http://oli.cmu.edu/), and the United States Agency for International Development's (USAID) 'Open Learning Exchange' (Olé) (http://www.ole.org/).

To continue with this discussion, it is critical to understand and define "open" and "openness" in online education. Hilton et al. (2010) described OER as free and accessible, and they also used this analogy: "openness is not like a light switch that is either 'on' or 'off." Rather, it is like a dimmer switch, with varying degrees of openness" (p. 38). For example, an important aspect of how 'open' an OER really is relates to how easy it is for learners and Internet search engines to find it. In order for OERs to be reused, it is necessary for them to be found. The same authors listed the 'Four R's of Openness' as "reuse, redistribute, revise, and remix" (p. 39). Therefore, based on the four Rs framework, anyone should be able to use any portion of an OER at any time, share the material, make changes to it, and combine it with another resource (Hilton et al., 2010). It is worth noting that OOCs were offered before MOOCs. Wiley is credited with offering the first OOC: "a wiki based course named OpenED Syllabus covering the topic of open education" (Bremer, 2012, p. 1). However, there is little literature about OOCs other than they existed and were successful in a variety of forms such as online learning modules for professional development from various sources (Rodriguez, 2012).

2.2.2 MOOC Specifics: Variations, Technologies, and Examples

OER and OCW set the stage and provided context for the origin of MOOCs. In this section, the variations of MOOCs, current technology providers, and specific examples of what MOOCs are, as well as what they are not, will be outlined. MOOCs are a product of the demand for open access to educational materials and courses, specifically online. This suggests the 'open' feature of MOOCs is the most important.

"A MOOC brings together people interested in learning (or 'students') and an expert or experts who seek to facilitate the learning. Connectivity is usually provided through social networking, and a set of freely accessible online resources provides the content or the study material" (Liyanagunawardena et al., 2013, p. 204).

In the past four years, MOOCs have emerged to become a topic of much debate among administrators, educators, and students in higher education (Liyanagunawardena, et al., 2013; Managan, 2012). One published review of the literature from 2008–2012 credited George Siemens and Stephen Downes, of the University of Manitoba Canada, with offering the first MOOC in 2008 (Liyanagunawardena et al., 2013). The men coined the phrase MOOC when 2,200 people signed up for their OOC entitled "Connectivism and Connected Knowledge." The first MOOCs covered topics including "connectivism and connective knowledge (CCK); personal learning environments and networks and knowledge (PLENK); online learning for today and tomorrow (EduMOOC); education, learning and technology (Change11); learning analytics (LAK12); the more technically involved on mobile learning (MobiMOOC) and digital storytelling (known as DS106) from the work of Groom & Levine (2011)" (Rodriguez, 2012, p. 2). These early MOOCs about connectivisim are often referred to as c-MOOCs (Liyanagunawardena et al., 2013; Rodriguez, 2012).

The next iterations of MOOCs are often called AI-Stanford or xMOOC models.

Much of today's attention on MOOCs focuses on learning effectiveness, collaboration technologies, and MOOC platform companies such as Coursera

(https://www.coursera.org/), originally developed by professors working at Stanford University; Udacity (https://www.udacity.com/), developed by a professor also working

at Stanford University; and non-profit edX (https://www.edx.org/), developed by professors working at MIT and Harvard University. These companies all emerged from what are often termed the AI-Stanford or xMOOCs. The computer science department at Stanford University offered three xMOOCs as an experiment in 2011 (Rodriguez, 2012). The courses focused on the subject matter of artificial intelligence, and the largest MOOC had 160,000 enrolled students from 190 countries with 20,000 of the students completing the course to obtain a certificate (Rodriguez, 2012).

Rodriguez's (2012) article posited that c-MOOCs and the AI-Stanford MOOCs have some similarities, but the biggest difference is that c-MOOCs "belong to the connectivist DE (distance education) pedagogy while the AI courses to the cognitivebehaviorist (with some constructivist contributions)" (pp. 2–3). Siemens and Downes are credited with developing the learning theory of connectivism (Clarà & Barberà, 2013). The theory is concerned with how we teach and learn through symbols and information and social exchanges via Web 2.0 technologies. Clarà and Barberà (2013) outlined three areas of contention with connectivism in regards to c-MOOCs: "the limited instructor presence and reliance on learners to make sense of materials, the expectation that students will form relationships on their own without support, and a lack of explanation of learner acquisition of knowledge and concept development" (pp. 130–132). In light of these shortcomings, the authors also wrote that as MOOCs progress to new models such as AI-Stanford xMOOCs, administrators, developers, and educators will need to quickly revisit behaviorist and learning technology models to more clearly define a pedagogical base for MOOCs.

Additionally, it is critical to understand the evolution of MOOCs and the differences between c-MOOCs, and AI-Stanford MOOCs/xMOOCs. The important distinction between the MOOC formats is that c-MOOCs relied more on student-developed social networks, limited instructor presence, and collaborative, social learning. In contrast, the AI-Stanford MOOCs propose a more traditional learning model between instructor and student, with a structured focus on content and interactions. The learners work more individually at their own pace within AI-Stanford MOOCs. Coursera, Udacity, and edX have emerged from the AI-Stanford MOOC model and include a central technology or hub for the delivery of the MOOC. The term 'xMOOC' is synonymous with the AI-Stanford MOOC. xMOOCs feature the content-focused structure with a limited amount of social connectedness, such as that provided by c-MOOCs. xMOOCs are often focused on increasing scalability and offering videos and lessons to the largest number of interested learners possible (Bremer & Weiss, 2013).

To look more closely at the current status of MOOCs, the example of the company Udacity is presented. As mentioned, Udacity was developed out of the original AI-Stanford MOOCs by two of the computer science professors, Drs. Sebastian Thrun and Michael Sokolsky (Udacity, 2013). Companies such as Udacity partner with universities, schools, institutions, and organizations to launch the partner's courses to a massive, global scale of learners. Udacity's mission statement on its website is clearly related to the OER and OCW movements and the call for a change in the educational process and access:

Higher education is broken with increasingly higher costs for both students and our society at large. Education is no longer a one-time event but a lifelong experience. Education should be less passive listening (no long lectures) and more

active doing. Education should empower students to succeed not just in school but in life. (Udacity, 2013)

The company currently offers courses in business, computer science, design, mathematics, and science at beginner to expert levels. Udacity's courses include interactive "activities, quizzes, and exercises interspersed between short videos and talks by instructors and industry experts" (Udacity, 2013). The courses are free to everyone, and there is an option to receive a certificate of completion for participating in the assessment portions. However, a cost structure is developed when partnering institutions offer credit to degree-seeking students.

To understand how MOOC platform companies partner with universities to offer courses, the University of Illinois (U of I) will be used as an example. The U of I partnered with the company, Coursera, to offer at least 20 different MOOCs (Coursera, 2015b). The courses are on a variety of topics including an 'Introduction to Sustainability' and a two-part course on organic chemistry. Through this partnership, the university provides instructors, expertise, and content, while Coursera provides the online delivery platform and marketing to learners around the world. The U of I's website explains the university's stance that MOOCs have the potential to raise its profile and diffuse its expertise across the globe (University of Illinois, 2013a). At the same time, a statement on the site described the institution's understanding of the unpredictability of MOOCs and how the university would conduct research on the effectiveness of each of its offerings. Concurrently, the U of I continues to offer its closed distance learning courses at a cost to degree-seeking students (University of Illinois, 2013b). This

demonstrates the separation between closed, traditional online courses versus MOOCs at the institution level.

An example of what is often incorrectly categorized as a MOOC provider, not yet mentioned in this paper, is The Khan Academy (2013). Khan offers continuously running free lessons on a variety of topics within the STEM (science, technology, engineering, and math) disciplines, as well as the humanities, for learners of all ages inside and outside of the classroom. Founder Salman Khan is often cited in the press for wanting to revolutionize the way education is delivered and how learners engage with content (Akanegbu, 2013). The Khan Academy features video-based lessons, interactive activities, and learner-centered tools such as a dashboard of information about the learner's pace, performance, and knowledge gained through enrolled courses (Khan Academy, 2013).

The instructor role in the Kahn Academy is described as one of a coach or facilitator. Students work at their own pace to earn digital badges upon completing assignments, quizzes, and tasks. Khan has not wanted to call his academy a MOOC provider, and some have argued that the Khan Academy is more of a massive open online series of resources, rather than courses (Delvin, 2013). Due to some of these key differences, the Khan Academy should not be placed in the same category as MOOC providers such as Coursera, Udacity, and edX. While millions of people participate and utilize the Khan Academy, it does not quite fit the c-MOOC or AI-Stanford mold. It appears to have similar features and a mission to open up education, but it could be argued that the Khan Academy has more of a non-profit mission, content portability and

flexibility, a focus on the learning resources and collaboration, and does not necessarily have the same course-based structure as the other MOOC providers.

2.3 Defining MOOCs

2.3.1 A Working Definition

In April 2013, the term 'MOOC' was officially entered into the Oxford Dictionaries Online (Kolowich, 2013c). The definition is as follows: "noun; a course of study made available over the Internet without charge to a very large number of people: anyone who decides to take a MOOC simply logs on to the website and signs up" (para. 4). Kolowich (2013a) pointed out that "Oxford Dictionaries Online is not the same as the Oxford English Dictionary, the venerable series of tomes that make up what is widely viewed as the supreme authority on English words" (para. 5). Hence, the definition is not permanent on printed pages as of yet; it is still adaptable to change in the online dictionary.

In 2010, McAuley et al. provided this MOOC definition:

...a MOOC integrates the connectivity of social networking, the facilitation of an acknowledged expert in a field of study, and a collection of freely accessible online resources. Perhaps most importantly, however, a MOOC builds on the active engagement of several to several thousand students who self-organize their participation according to learning goals, prior knowledge and skills, and common interests. Although it may share in some of the conventions of an ordinary course, such as a predefined timeline and weekly topics for consideration, a MOOC generally carries no fees, no prerequisites other than Internet access and interest, no predefined expectations for participation, and no formal accreditation. (p. 4)

Three years later Liyanagunawardena et al. (2013) cited McAuley et al.'s (2010) definition, with less focus on social-learning, to account for the AI-Stanford MOOC model:

A MOOC brings together people interested in learning (or "students") and an expert or experts who seek to facilitate the learning. Connectivity is usually provided through social networking, and a set of freely accessible online resources provides the content or the study material. Furthermore, they generally have no prerequisites, fees, formal accreditation, or predefined required level of participation. (McAuley et al., 2010, p. 204)

Taking into account the above definitions, origins of MOOCs, current research, online platforms, and specific examples of MOOCs presented throughout this paper, I propose the following working definition of a MOOC:

A massive open online course (MOOC) is an Internet-based course designed to open up education through online educational resources (e.g., videos, assignments, and exams), utilizing distance education pedagogies (networked learning methods, connectivist approaches, AI Stanford/self-paced method), and delivering scheduled instruction through accessible web-based software on a global scale to thousands of learners who participate voluntarily for either personal or professional development interests.

The tenants of this working definition that will be discussed further are the concepts of massive, openness, developing pedagogy, and delivery partnerships and platforms.

2.3.1.1 Massive

First, defining what counts as "massive" for a MOOC is subjective and is often determined and capped by the institution offering the course. Ball State University in Indiana offered its first MOOC in 2012 with the subject matter of gender in comic books (Caleca, 2013). The university originally set a goal for 1,000 enrolled students, but due to publicity about the course among comic book enthusiasts, more than 7,000 students

ultimately enrolled in the course. The University of California Irvine offered a MOOC entitled "Society, Science, Survival: Lessons from AMC's The Walking Dead" through MOOC platform company, Canvas (https://www.canvas.net/courses/the-walking-dead). The professors developed the course in hopes that thousands, if not a million people would participate (McMillan, 2013). Based on these and several more examples, as well as MOOC providers' goals of opening up education to the masses, my working definition maintains there should be, at a minimum, thousands of learners enrolled in a MOOC ($n \ge 2,000$) for it to truly meet the criteria of 'massive.'

2.3.1.2 Openness

As mentioned earlier in this chapter and described by Hilton et al. (2010), there are degrees of openness within online educational resources and courses. While MOOCs claim to be open to large masses of learners, the educational resources within the courses are not always open. Some MOOCs include the 'Four R's' of openness (Hilton et al., 2010), and students are allowed to download, save, alter, and share the course resources. In contrast, there are MOOCs that maintain the course resources and do not present them in an open manner. Another degree of openness to consider is the cost structure. While the MOOC may be open to all learners across the world, it is argued that once a monetary charge is placed on participation, the MOOC is not fully open. For the purposes of my study, I operated under the definition of openness as being free of charge and offering materials that are downloadable and customizable to learners.

For this study, I examined a MOOC that was offered free of charge to the learners and provided course materials that were free and easily accessible and downloadable.

While the MOOC also offered a 'Signature Track,' for a cost to students who were

interested in earning professional credentials for completion, I did not recruit or study student experiences on the Signature Track. I maintain the open feature of MOOCs is critical. Once there are costs to students, the level of openness decreases. While some MOOCs may offer professional credentials at a cost, they must also offer a free track and materials for learners who will not or cannot pay the fee, in order to be truly open.

2.3.1.3 Pedagogy

The pedagogical foundation of MOOCs has been primarily based on asynchronous distance education principles. Kop, Fournier, and Sui Fai Mak (2011) conducted a study of one of the earliest c-MOOCs and wrote about a need for a shift in pedagogy as new learning environments such as MOOCs continue to emerge. Also described earlier in this chapter is the shift from connectivist pedagogical strategies of c-MOOCs to the AI-Stanford and xMOOC models. Hence, MOOC instructional and learning strategies are still in the experimental stages, as acknowledged by the U of I and its stated need to research offered MOOCs, and the professors of the 'Walking Dead' course admitting their MOOC is a trial to gauge learners' interest and response to content based on a popular, currently relevant topic (McMillan, 2013).

For the purposes of this study, I examined a MOOC that was developed using instructional design strategies for effective online pedagogical practices. The MOOC offered connectivist opportunities such as learner and instructor interactions, as well as learner to learner interactions via email, discussion boards, and social media. Kop et al. (2011) described how engagement and learning were promoted using interactive tools in MOOCs where learners and instructors could share ideas, learn content together, and provide feedback. MOOCs with co-created social networks have the potential to improve

learning by connecting learners from a variety of physical locations within online virtual communities (Kop et al., 2011).

2.3.1.4 Delivery

The final tenant of the working definition is the consideration of flexibility in MOOC delivery and platforms. Companies such as Coursera, Udacity, and Canvas are still adapting to the needs of institutions, instructors, and learners within MOOCs. At the same time, new MOOC providers are emerging each day and some institutions are even investing in developing their own platforms. For instance, an article in *The Chronicle of* Higher Education indicated Stanford is recommitting to a project called 'Open edX' with non-profit MOOC provider edX in which universities are be able to develop their own MOOCs without the help of the private companies (Kolowich, 2013b). This study focused on MOOCs provided by the major platform players such as Coursera, Udacity, Canvas, Harvardx, and edX that have been in MOOC experimentation for at least one year, preferably two years. Another important feature of MOOC delivery comprises scheduled instruction where the instructor(s) and learners convene during a predetermined period of time, similar to a face-to-face course. This means that by my definition, MOOCs are not simply repositories of resources posted online for learners to work through at any time. They must have a start and end date, similar to traditional classes.

2.3.2 The Future of MOOCs

Throughout this section, I have described the origins of MOOCs, variations, specific examples of MOOC features, learning technology development, and ultimately arrived at a working MOOC definition. The future of MOOCs is clearly a point of debate.

Current research studies have shown room for improvement in regards to technology, student and instructional presence, drop-out and completion rates, and use of pedagogical strategies (Liyanagunawardena et al., 2013). Some institutions such as the New England College of Business and Finance have questioned the value of MOOCs and pushed for COOCs (classically offered online courses), as well as LOOCs (local or little open online courses) and SPOCS (self-paced online courses) (Horton, 2013). Concurrently, institutions such as Harvard, Stanford, Ball State, and the U of I are continuing to plan for and design MOOCs for the upcoming years. While the future of MOOCs is up in the air, there is potential for additional research and lessons to be learned that could impact future online learning environments and increase access to higher education.

2.4 Arguments for and Against MOOCs

2.4.1 Pro-MOOC Arguments

To review and discuss pro-MOOC arguments, it is critical to look at the issue from the different perspectives of administrators, faculty/instructors, and students. In an effort to present the various voices, information from published research journals, as well as opinion and editorial pieces found within online, print, and media sources related to learning technology and higher education are discussed. A review of MOOC literature published from 2008–2012 identified only 45 peer-reviewed research articles, and not all of them presented MOOC perspectives or arguments (Liyanagunawardena et al., 2013). Due to the lack of published research articles, recent online media articles and opinion pieces are also reviewed to gain a deeper understanding of the MOOC debate.

2.4.1.1 Pro-Administration

There is an ever-increasing argument that higher education is in crisis and universities must find a way to become more accessible, affordable, and appealing to audiences around the globe. Watson and Watson (2014) described increasing pressures on higher education institutions to transform from traditional models to a universal model for educating the masses. Bonk (2009) identified a framework called 'We All Learn' that includes ten 'openers' for education such as electronic textbooks, personal learning networks, and real-time, mobile learning and collaboration (p. 10). MIT acknowledged the call for open education and has placed all of its course materials online for learners to access as part of its Open Course Ware (OCW) project (Bonk, 2009). In addition to MIT, elite universities, Harvard and Stanford, have recognized a need for more online educational resources (OERs) and courses, which has led to the development of spin-off MOOC platform companies and non-profits. Some administrators have become interested in the OER and OCW movements as a means to experiment and investigate possible new educational models.

Despite the uncertainty of MOOCs, numerous universities have decided to enter into MOOC trials. Lombardi (2013) outlined Duke University's decision-making process for entering into a partnership with Coursera. The author pointed to the importance of administrators evaluating whether MOOCs match their institution's mission. Lombardi (2013) wrote, "Aside from their capacity to stimulate innovation on campus, MOOCs offered Duke a chance to showcase faculty, connect with alumni, and support the University's strategic goals around (1) internationalization, (2) knowledge in service of society, and (3) interdisciplinary studies—all of which were signature strengths for the

institution." Another benefit of Duke's initial MOOC was the amount of prestige, public attention, and press coverage the university received as a result of entering into the experimental education arena. Lombardi (2013) noted that at least eight different media and academic outlets published stories about Duke the day after the university announced it would offer a MOOC.

Some pro-MOOC administrators also view MOOCs as a potential means for engaging and motivating students through the excitement of learning technology, decreasing tuition costs, enabling students to graduate within the four year time frame, improving higher education accessibility, and reaching a large worldwide audience (Green, 2011, 2013; Jenkins, 2013; Lombardi, 2013). The bottom line when it comes to administrators' concerns, as Green (2013) and Jenkins (2013) pointed out, is money. The "Presidential Perspectives" survey published by Inside Higher Ed in 2011 showed 69% of the presidents surveyed across public, private, and community colleges and universities agreed/strongly agreed that "launching/expanding online education courses and programs provides a way for my institution to increase (net) tuition revenues" (Green, 2011, 2013). Jenkins (2013) wrote that money is a main determinant in administrators' MOOC interest because "Online courses enable colleges to enroll students and "deliver content" inexpensively, since they don't require classrooms, parking spaces, restrooms, or in some cases, even faculty offices." Jenkins also described administrators' fascination with 'innovation' and 'transformation.' Hence, from the administrator view, the cost-cutting, innovative technology and learning, prestige, and potential for global presence and impact are all extremely appealing arguments for developing MOOCs.

2.4.1.2 Pro-Faculty/Instructors

In considering the faculty/instructor pro-MOOC stances, it must be acknowledged that the popular yet controversial MOOC platform companies, Coursera and Udacity, were created and developed by former Stanford University professors who valued the ideal of opening up higher education to the masses. Also, non-profit edX was developed and is operated by professors at Harvard University and MIT. Former Stanford professors, Sebastian Thrun and Michael Sokolsky, developed some of the first MOOCs within the computer science discipline (Rodriguez, 2012). Thrun created Udacity with the vision that we are entering a time when education is embracing more open digital formats and must be adaptable to learners' needs (Leckart, 2012).

In January 2013, 12 prominent online education professors and instructors from across the country, including Thrun, drafted a document entitled 'A Bill of Rights and Principles for Learning in the Digital Age' (Kolowich, 2013b). Within the document, the educators stated, "online learning represents a powerful and potentially awe-inspiring opportunity to take new forms of learning to all students, whether young or old, learning for credit, self-improvement, employment, or just pleasure" (p. 1). The authors also stated that the value of online learning is that it can "serve as a vehicle for skills development, retraining, and [establishing] marketable expertise" (Seely Brown et al., 2012, p. 4).

Wiley and Hilton (2009) published an article outlining the OER and OCW movements and the importance of the digital and open changes occurring in education. Before MOOCs grew in popularity and controversy, Wiley and Hilton wrote that instructors already had the opportunity to become more open with their courses. The

authors suggested instructors openly share materials online and increase student interactions through various online tools and presences, without the reliance on university programs and structures such as libraries. Wiley's articles (Caswell, Henson, Jensen, & Wiley, 2008; Wiley & Hilton, 2009), research, and commentaries (Wiley, 2013, 2014) provide an example of an educator who believes in the need for open online educational approaches, but not necessarily MOOCs specifically.

To gain more insight into faculty's perceptions of MOOCs, *The Chronicle of Higher Education* conducted a survey of 103 respondents at institutions across the country. The results showed 73% of professors responded 'Yes' to the question: "Overall, do you believe MOOCs are worth the hype?" (Kolowich, 2013e). The survey also showed 39 percent of respondents "said they hoped to use MOOCs to increase their visibility among colleagues within their discipline" and 34 percent hoped to increase visibility with "the media and the general public" (Kolowich, 2013e). Therefore, in addition to the movement and arguments for revitalizing higher education to benefit students and reduce costs, some faculty members also view MOOCs as a vehicle for increasing their own presence and recognition of their expertise.

2.4.1.3 Pro-Learners

The discussion in this paper mentioned some of the pro-learner arguments such as greater accessibility to education, lower costs, and the flexibility of online learning.

However, these arguments have been from the perspectives of administrators and educators. There have even been instances of administrators and educators participating in MOOCs as students. For example, the dean of Macaulay Honor College of the City University of New York enrolled in a MOOC and wrote about her experiences (Kirschner,

2012). She described multiple challenges of being a MOOC student, yet admitted that she learned and ranked the course fairly high.

Much of the literature and articles representing the pro-MOOC student perspective have described adult learners enrolling in the massive courses for different personal and professional reasons. Gose (2012) presented the stories of four adult learners and their motivations and experiences. Three of the students had some commonality in that they each enrolled in MOOCs to brush up on skills they had forgotten over time, to gain new knowledge for advancing their careers, or simply because they had a life-long love of learning (Gose, 2012). The fourth story presented an international perspective in which an adult learner who lived in Mumbai enrolled in a Stanford computer science MOOC to apply the new information to his job as a pilot.

As for undergraduates' demands for a more accessible and affordable education, Adelman (2006) studied the college patterns and paths of undergraduate students since the 1970s. He used data from the National Center for Education Statistics to study the graduating high school class of 1982 and described how the paths from high school to undergraduate degree attainment have become quite complicated. He reported that "nearly 60 percent of undergraduates" attended more than one higher education institution and "one out of eight undergraduates based in four-year institutions" used community college courses as part of their plans of study (pp. xv–xvi). The quantitative data and study of undergraduate student education paths showed the combination of online and face-to-face courses from a compilation of universities and colleges. This shift from the traditional four-year approach of higher education to one of individualized plans of study opens the door for credit-based MOOCs to provide more flexible

opportunities, as more students want to develop and attain specific skills and experiences relevant to their future career goals.

2.4.2 Anti-MOOC Arguments

In this section, the arguments against the use of MOOCs are discussed. A similar approach is used to break the arguments down from the different perspectives of administrators, faculty/instructors, and students. Published data and research journal articles presenting the case against MOOCs, as well as current news, editorials, and websites that have taken a critical look at MOOCs are presented.

2.4.2.1 Anti-Administration

There is a sense that administrators who are skeptical of MOOCs are concerned about how the massive courses could potentially undermine the credibility and structure of their universities (Jaschik, 2013). A big concern seems to be how MOOCs will affect the bottom line. The *Inside Higher Ed* "Survey of College and University Chief Academic Officers" (2013) showed that 47 percent of provosts surveyed "strongly or very strongly agree that MOOCs could threaten 'the business model of my institution'" (Jaschik, 2013).

In addition to the debate about how to charge students and pay for instructors' development and teaching time, there is the cost of working with the MOOC platform companies. Amherst College turned down an invitation from edX to become a partner. edX offers some no-cost options for institutions to develop courses, but the price tag of partnership included "\$250,000 per course, then, \$50,000 for each additional time that course is offered; edX also takes a cut of any revenue the course generates" (Kolowich, 2013f). Universities and colleges that have refused or hesitated to develop MOOCs often

argue the business models are currently too unclear and MOOC ventures are too expensive and deter faculty from their main teaching and research duties.

There also is an issue of student demand and how to award course credit.

Currently, MOOC platform providers offer various business models for charging students and awarding certificates of completion or credit. Colorado State University—Global

Campus was the first to offer a MOOC for credit in the fall of 2012 (Kolowich, 2013c).

The offer was for a three credit hour course at the cost of \$89. However, no one enrolled in the course. While some administrators are jumping into MOOC experimentation, experiences such as that of Colorado State are causing several administrators to take a more reserved view of MOOCs.

Administrators are also searching for more positive data showing how MOOCs promote student learning. For now, the data shows low percentages of students completing MOOCs. In the case of San Jose State University (SJSU) in California, the institution experimented with MOOCs for two semesters through the Udacity platform and then decided to put the project on hold (Kolowich, 2013d). The university's provost described the need to 'take a breather' to review and reflect on the MOOC experiences before moving forward (Kolowich, 2013d). *The Chronicle of Higher Education* (2013) reported that preliminary data from SJSU showed 29–51% of enrolled university students passed the MOOCs, while the pass rate for non-university students was 12–45%. Duke University reported similar data. Duke's MOOC on Bioelectricity had more than 12,000 enrolled students, with 800 of those students consistently participating in the course, but only 25% of the 800 fully completing the MOOC (Lombardi, 2013). Duke and SJSU's stories, completion data, and San Jose's decision to pause MOOC development has

caused ripples of questions and skepticism throughout university and college administration. The MOOC skepticism comes as many higher education leaders are focused on completion, graduation, and drop-out rates.

2.4.2.2 Anti-Faculty/Instructors

From the perspective of most administrators, it is critical to have faculty support and buy-in before embarking on a new project. The faculty of some institutions have been openly against MOOCs. One of the most prominent examples again involves SJSU. The San Jose chapter of the California Faculty Association wrote an open letter to the SJSU administration about its concerns. The association outlined its points of contention with SJSU's MOOC venture including: the need for assessment, online pedagogy as a means to improve student performance, technology companies' intentions, a previous investment in campus facilities and community building, and faculty's role in making MOOC decisions (California Faculty Association, 2013). This public statement and interaction between SJSU faculty and administrators highlighted a need for the two parties to collaborate and make decisions together when it comes to whether or not to enter the MOOC experimentation.

Also from the faculty perspective, there are concerns about workload and adjustment to new learning technologies and pedagogies. The data from Duke University showed that while the instructors had some support from Coursera instructional designers to develop their Bioelectricity MOOC, it was still a huge time commitment. The following table shows the number of hours spent developing and delivering the Duke MOOC:

Table 2.1 Duke University MOOC Man Hours from Belanger and Thornton (2013)

Hours of instructor effort in advance of the course	210
Hours of instructor effort while course was active	210
Hours of effort on part of staff (including teaching assistant,	
instructional support, technical support and assessment team)	200
Hours of finished video	11.3
Number of published video segments	97 (12/week)
Number of graded exercises, including a peer-graded writing	18
assignment and final exam	

The amount of instructor time involved in development and delivery is definitely a deterrent to some faculty members who are considering whether MOOCs are worth pursuing.

On a more fundamental level, MOOCs have some faculty members and instructors questioning what their roles would be in a virtual space and how it would impact their approaches to teaching and student support. Associate professor and School of Education Dean at Marrimack College, Dan W. Butin (2012), wrote an essay in the *New England Journal of Higher Education* entitled "I Am Not a Machine." Butin described the importance of guiding students from novice to expert through reflective interactions within the classroom. He wrote, "Computer systems are still too linear and too literal, too dependent on problems having solutions and thus unable to deal with true ambiguity or nuance." Educators are concerned the massive size of MOOCs will not support student learning and growth. Martin (2012) questioned the quality of teaching and whether teacher and student interactions have enough depth within MOOCs. He wrote, "We need to be able to support students who are still learning how to learn, and also challenge our best students" (Martin, 2012, p. 28). As shown by these educators' arguments, not all professors and instructors believe a massive online environment with a

small number of instructors and a massive number of learners is conducive to promoting effective learning for all types of students.

2.4.2.3 Anti-Learners

From the learners' perspective, there is also concern about the challenges of navigating the enormity of a MOOC for effective mastery of the content. Returning to the dean of the Macaulay Honors College of the City University of New York and her experience as a student in a MOOC focused on the subject matter of healthcare policy, Kirschner (2012) wrote, "In a MOOC, nobody can hear you scream" (p. 2). Kirschner also described disappointment in the instructor's presence in the online videos and the challenges of engaging with classmates in the online discussions. She wrote that, "The reliance on old-fashioned threaded message groups made it impossible to distinguish online jerks from potential geniuses" (p. 2). From this viewpoint, the anti-MOOC learner argument appears to echo that of faculty/instructors who are concerned some students will lose their way within MOOCs, in turn, negatively impacting learning, motivation, and course completion.

The larger narrative has been that MOOCs are meant to open up higher education for learners all over the world. According to Veltsianos (2013), students' voices are missing in the MOOC hype and buried in quantitative data. Therefore, he developed a book of essays written by students about their MOOC experiences. Some of the students wrote that their MOOC experiences were "meaningful and empowering," while others described their experiences as "mundane or simply mediocre" (p. 2). In one of the essays, a master's degree student described his experiences in two different MOOCs in statistics, one on the edX platform and one through Udacity (Ota, 2013). Ota (2013) outlined

frustrations with the instructors' ineffective management of logistics such as failing to start the course on time and not fulfilling the advertised length of the course (p. 10). He also described difficulty following the flow of the courses, keeping up with the pacing, and earning a passing grade (pp. 10–11). By the end of the essay, Ota wrote, "I felt that my experience with both of these courses fell short of what online learning could accomplish" (p. 13). Ota acknowledged that while his experiences were frustrating, he still sees the potential for MOOCs to make a positive impact.

2.4.3 Additional Evidence Needed

Throughout this section of the literature review, I presented many of the arguments for and against MOOCs from the perspectives of administrators, faculty/instructors, and students. Based on these arguments and the current status of MOOC experimentation, I will now outline additional evidence needed for universities to consider whether or not they should develop and deliver MOOCs. Liyanagunawardena et al. (2013) concluded there is a "lack of published research on MOOC facilitators' experiences and practices" and that "data on MOOC completion rates are not readily available" (pp. 217–218). The lack of data on institutional impact makes it challenging for administrators and faculty/instructors to determine the benefits of offering MOOCs. This uncertainty is what has deterred universities from jumping into the MOOC arena.

Liyanagunawardena et al. (2013) also noted a significant gap in the literature in regards to "facilitators' experience and practices" (p. 217), as well as why individuals choose to participate in MOOCs, informant behaviors and cultural differences, MOOC pedagogies, and retention and completion, specifically why so many learners do not fully complete a MOOC. Another point of debate is whether MOOCs truly can be profitable

for a university (Korn & Levitz, 2013). For administrators focused on budgets, there has yet to be a successful proven business model for MOOCs. It is because of these uncertainties and gaps in information that some universities remain skeptical and cautious about MOOCs.

Regardless of the decisions universities make as to whether or not to jump on board with MOOCs, there is definitely a need for more research to be conducted on the different perspectives and impacts of the MOOC phenomena. As the article from Duke University indicated, it is important for each institution to revisit its strategic plan to first determine if MOOCs fit within its mission (Lombardi, 2013). Also, the case of SJSU showed the importance of entering into MOOCs with a consensus among administrators and faculty/instructors. An uncoordinated effort has the potential to land universities in the same predicament as SJSU, with preliminary data and MOOCs on hold. For universities already experimenting with MOOCs, there is much more to be learned based on the arguments and gaps in the literature presented throughout this review.

2.5 Adult Learners' E-Learning Motivations

As noted earlier, there is a gap in MOOC research regarding learners' experiences (Liyanagunawardena et al., 2013). Concurrently, there is much controversy and debate surrounding the types of people who register for, complete, or drop out of MOOCs (Liyanagunawardena et al., 2013). Who are they? What are their motivations? How are they interacting with one another within MOOC environments? In the context of the adult learners with bachelor's and master's degrees who are commonly present in MOOCs (Nesterko et al., 2014a), there could be a number of factors influencing their motivation and levels of participation in the massive online courses.

Park and Choi (2009) described distance learning as a way for adult learners "who have employment, family, and/or other responsibilities to update knowledge and skills related to their job by saving travel costs and allowing a flexible schedule" (p. 207). Park and Choi found that adult learner characteristics (gender, race, etc.) had little impact on their online course performances, while external factors such as family, employer, and financial support have the potential to "interrupt learners' participation and persistence" (p. 215). The authors also discussed the importance of designing online courses that meet adult learners' needs, keep them motivated and socially integrated, and provide content and scenarios that apply to learners' everyday lives as factors for maintaining learner motivation and increasing course completion and satisfaction (Park & Choi, 2009).

Learning theories which emerge from adult distance education literature include andragogy, self-directed learning, experiential learning, and transformational learning. The underpinning of these theories is motivation. Schunk, Pintrich, and Meece (2008) defined motivation as "the process whereby goal-directed activity is instigated and sustained" (p. 378). Andragogy, the theory that adults learn differently from children, makes the assumption that adults are motivated to learn by internal factors such as "increased job satisfaction, self-esteem, and quality of life" (Cercone, 2008, p. 145). Cercone (2008) suggested experiential learning, self-directed learning, and transformational learning are connected to andragogy. Cercone pointed out that while internal factors motivate adults, it is important the online learning environment is conducive to fostering and promoting further motivation through thoughtful instructional design that includes social interactions within the course, content grounded in reality, reflection, and opportunity for self-directed learning.

Adult learners are known to have differing educational levels and interests in their lives (Cercone, 2008; Hartnett, George, & Dron, 2011). Some adult learners need intense instruction and guidance, while others prefer to learn on their own and at their own pace. Hartnett et al. (2011) discussed self-determination theory (SDT) as the acknowledgement of the balance of internal (intrinsic) and external (extrinsic) motivators and how the various motivators can influence online course participation and experiences. SDT "argues that all humans have an intrinsic need to be self-determining or autonomous (i.e., experience a sense of agency and control), as well as to feel competent (i.e., capable) and connected (i.e., included and linked to others) in relation to their environment" (Hartnett et al., 2011, p. 22). Similarly, Cercone (2008) wrote that an adult learner "should be seen as a whole person" and that adult online education is about "sensing, visualizing, perceiving, and learning informally with others" (pp. 151–152). Adult learners' motivation and online learning experiences could potentially be connected to an area of instructional design research which investigates the development of online or 'social presence' and building virtual communities to promote learning.

2.6 Online Presences in E-Learning

2.6.1 Online Presence

With the growth of the Internet, Web 2.0 tools, and mobile devices, people are online now more than ever (United States Census Bureau, 2012). The 2012 United States Census Bureau data showed "74.8% of all households have Internet at home," compared to 18% in 1997 (United States Census Bureau). Also in 2012, "45.3% of individuals 25 and older were using Smartphones." This increasing connection to technology and constant access to information and one another is influencing how people navigate both

the real-world and online environments (Turkle, 1995, 2012). Turkle described how people have an in-person, face-to-face presence, but also virtual presences on the Internet. Online presence is defined as the identity we develop on the Internet via websites we visit, communities we join, information we share, interactions we have, and more (Turkle, 1995, 2012).

Turkle (1995, 2012) has researched the impact of real-world presence on virtual presence and vice versa since the late 1980s. In her book, Life on the Screen, Turkle (1995) wrote, "The Internet has become a significant social laboratory for experimenting with constructions and reconstructions of self that characterize postmodern life" (p. 180). She researched how young adults experienced and developed presence in Multi User Domains (MUDs) during the 1990s. She found that people's real-world circumstances influence the roles they take and relationships they form in online environments, as well as the amount of time they commit to participating in the online environment (1995). She posed a series of questions for individuals to consider in the space between real and virtual: "What is the nature of my relationships? What are the limits of my responsibility?" And even more basic: "Who and what am I? What is the connection between my physical and virtual bodies? And is it different in different cyberspaces?" (p. 231). Much of Turkle's work focused on informal virtual environments, but the concepts of computer mediated communication (CMC) and real versus online presences also have ties to online learning.

In distance education, 'social presence' is often discussed in regards to CMC and developing effective interactive online learning courses. Gunawardena (1995) stated, "Communications technologies that mediate the communication process in distance

education and training create social climates which are very different from the traditional classroom" (p. 148). Social presence is defined as the "degree of salience of the other person in the interaction and the consequent salience of interpersonal relationships..." (Short, Williams, & Christie as cited in Gunawardena & Zittle, 1997, p. 151). Richardson and Swan (2003) interpreted social presence "as the degree to which a person is perceived as 'real' in mediated communication" (p. 70).

Gunawardena and Zittle (1997) discussed "immediacy" and "intimacy" as emerging concepts in the social presence literature (p. 152). There can be high levels of immediacy when technologies such as videoconferencing are used and learners can physically see one another. However, visual cues and immediacy are lost in most elearning environments where interactions mostly occur via text in discussion boards. Hence, learners' and instructors' social presences via text-based technology tools become critical in online learning environments. Gunawardena and Zittle (1997) described the importance of developing online environments that encourage discussion and collaboration through specific facilitation and instructional design efforts. For instance, Gunawardena and Zittle recommended "moderators should start the conference with introductions and social exchanges if the system used is a listsery, or create a separate area for social chit chat in a conferencing system" (p. 164).

Richardson and Swan (2003) found that college students' "perceptions of social presence in online courses are a predictor of their perceived learning," as well as their satisfaction with their instructor (p. 79). These findings reinforce that online learners value immediate and intimate relationships, and these experiences influence students' perceptions of learning and instructor quality in the courses. Richardson and Swan (2003)

recommended that online courses "should not only present the information and materials to students but also incorporate the social aspects of learning in both the design and instruction" (p. 81).

Wei, Chen, and Kinshuk (2012) developed and tested a questionnaire with online learners participating in classes from three institutions in Taiwan (n = 522) to verify a proposed conceptual model for measuring social presence with "five main constructs including user interface, social cues, social presence, learning interaction, and learning performance" (p. 531). The following figure (Figure 2.1) shows the model.

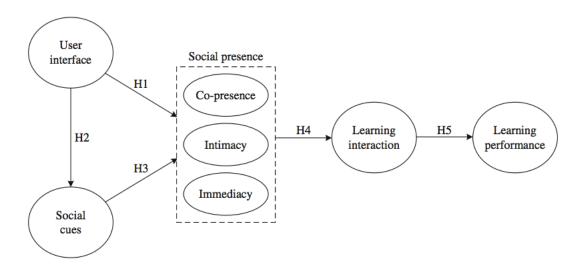


Figure 2.1 Social presence conceptual model depicted in Wei et al. (2012)

The study "evidenced that social presence has significant effects on learning interaction, which in turn has significant effects on learning performance" (p. 540). Wei et al. (2012), much like Richardson and Swan (2003), ultimately recommended e-learning courses be designed to promote learner interactions with instructors and classmates to positively impact learning. Similarly to Gunawardena's (1995) recommendation, Wei et al. (2012)

advised instructors to "invite learners to participate in course activities through guidance, encouragement, grouping, and reward" (p. 540).

Social presence research in traditional distance education courses involving tens or possibly hundreds of people could have implications for and even be amplified within MOOCs. How to establish social presence between one instructor and thousands of learners across the country in a MOOC needs to be investigated further. The early c-MOOCs were concerned with providing tools to help learners connect, while the more recent AI-Stanford MOOC models are focused on providing information and often times, do not require learner interaction (Rodriguez, 2012). In most current MOOC models, instructors present content through a series of pre-recorded videos, learners work through assignments, and while discussion boards are provided, learners are often not required to post in the boards. As MOOC providers continue to evaluate large dropout rates, an investigation of MOOC learners' experiences in terms of social presence could provide richer insights. By investigating student experiences within the latest MOOC model, we may learn more about whether or not social presence is important to MOOC learners, and if so, how they perceive it.

2.6.1.1 Community of Inquiry Framework

The previous section discussed the need for distance education courses to incorporate opportunities for social interaction to promote learning. Promoting individual social presence is one piece of larger instructional design methods used to build online communities among learners for learning and engagement (Garrison, Anderson, & Archer, 2010; Richardson & Swan, 2003). Turkle (1995) also

acknowledged the need for a sense of community in virtual environments. Turkle expanded her questions about individual online presences to the community level and posed the following larger-scale questions: "What is the nature of our social ties? What kind of accountability do we have for our actions in real life and in cyberspace? What kind of society or societies are we creating, both on and off the screen" (p. 231)? These questions point to the idea that we are not alone online. The Internet provides an even greater level of connectivity to one another than everyday face-to-face relationships and interactions. We live and work together in the real and virtual worlds, and it is through these ever developing and changing communities that we learn.

In 2000, Garrison et al. (2010) developed a process model to "connect the human issues around online, text-based communication, the teaching issues associated with the use of this mode of education, and the overall cognitive goals" of an online graduate program (p. 5). The model is called 'The Community of Inquiry' (CoI) framework, and its authors maintain there are three types of presence in a distance-education learning environment: social, teaching, and cognitive (Garrison et al., 2010). The following diagram (Figure 2.2) is a visual representation of the CoI framework.

SOCIAL PRESENCE SOCIAL PRESENCE EDUCATIONAL EXPERIENCE Setting Climate Selecting Content TEACHING PRESENCE (Structure/Process) Communication Medium

Figure 2.2 CoI Framework as depicted in Garrison et al. (2010)

As mentioned, social presence encompasses interactions between learners and instructors. Teaching presence takes into account "teacher immediacy behaviors," meaning "teachers' use of verbal and nonverbal immediacy and the impact of those behaviors on students" among other factors such as instructional design (Richardson & Swan, 2003, p. 70). Cognitive presence is focused on learners' engaging in "reflective thought" and is based on John Dewey's Practical Inquiry (PI) model (Garrison et al., 2010, p. 6). PI has four phases: "triggering event, exploration, integration, and resolution" (as cited in Garrison et al., 2010, p. 5). As the CoI framework illustrates, the three types of online presence overlap and combine to create the online educational experience. However, as Garrison et al. pointed out, the framework is not tied to learning outcomes directly, but rather the nature and dynamics of online learning (p. 8).

Early CoI research focused on using discourse analysis methods to analyze student and instructor interactions by studying online text in discussion boards and

transcripts (Garrison et al., 2010). These research methods have yet to be applied to MOOCs. While a common CoI instrument has been developed (Arbaugh et al., 2008), the earlier methods of analyzing online presence via discussion boards and interviews has yet to be applied to the study of MOOCs. By involving informants in a qualitative study of a MOOC environment, an inside look at whether social, teaching, and cognitive presences exist, and to what extent, could be examined through informants' experiences and perceptions.

2.6.2 Networked vs. Self-Paced MOOC Presences

While it has been briefly mentioned throughout this literature review, it is important to explore and discuss the concept of connectivism further. Connectivism is still being debated in the literature as to whether it is a learning theory or not (Bell, 2011; Clarà & Barberà, 2014). Connectivism could be viewed as an expansion of the CoI framework in that it is concerned with the context of networks such as those that exist within MOOCs containing thousands of learners. Connectivism is concerned with Information Age learning and the ideal that learners connect, share information, and gain new knowledge via networks with complex information (Siemens & Conole, 2011). The focus on learning through networks is what has differentiated this developing theory from models such as the CoI framework (Yeager, Hurley-Dasgupta, & Bliss, 2013).

Siemens and Downes are credited with first describing connectivism (Tschofen & Mackness, 2012). Siemens offered one of the first connectivist MOOCs (c-MOOC), and the course content, itself, focused on connectivism and was designed for students to connect and learn from one another via social media tools (Rodriguez, 2012). Tschofen and Mackness (2012) pointed out that connectivism is more focused on the collective

learning network and less on the autonomy of each individual learner. Therefore, it appears self-paced MOOCs (AI-Stanford or xMOOCs) are, in many ways, the converse of c-MOOCs in that xMOOC designs revolve more around lecture videos, quizzes, and assignments and do not necessarily focus on learners connecting via social networking tools (Rodriguez, 2012). A richer examination of the MOOC experiences and online presence of adult learners would provide greater understanding of how these learners are approaching the MOOC environment, whether they are socially engaging, or whether they are accessing course content for self-paced learning only.

2.7 Online Inquiry for Examining MOOC Presences and Experiences

2.7.1 Internet-Based Research Background

Along with the proliferation of the Internet and Web 2.0 technologies and tools, some researchers have adopted a new type of research often called 'Internet-Based Research' or IBR (Bakardjive & Feenber, 2000; Broad & Joos, 2004; Convery & Cox, 2012; Hine, 2000; Markham & Buchana, 2012; Schrum, 1995). Schrum (1995) discussed how the Internet has challenged traditional research, which was grounded in physical location and space, "As one makes the transition from seeing the computer as cold and impersonal to realizing that it can offer connectivity, certain perceptions emerge" (p. 312). That is, the Internet turned the computer into a living, breathing experience of human connectedness, regardless of physical geographical location.

As a representation of researchers' growing and organized interest in the Internet, an international professional group, The Association of Internet Researchers (AoIR) (http://aoir.org/) formed in 1997 and still exists today. AoIR's bylaws state the group's purpose is "to provide an international, interdisciplinary and interprofessional

organization for promotion of scholarly and critical research into the social, cultural, political, economic and aesthetic aspects of the Internet." The organization has also developed working ethical guidelines for conducting IBR. As IBR has grown quickly in the past ten years, discussions of IBR ethics still seem to be catching up, as will be covered in more depth later.

Typically, IBR consists of data collection from online analytics sources and communications for analysis. Convery and Cox (2012) outlined the main data sources used for IBR as:

- online surveys
- web page content
- videoconferencing for online focus groups and/or interviews
- e-conversations through social networking sites
- email
- chat rooms
- discussion boards and/or blogs (p. 50)

Data from these various online sources have been analyzed through quantitative methods, as well as qualitative. Quantitative methods have focused on number of users, quantity of posts, website visits, and other numerical indices about Internet usage and traffic (Esposito, 2013). In higher education today, the process of collecting and analyzing large amounts of online quantitative data related to education is often called 'learning analytics' or 'big data' and is used to analyze learners' Internet patterns and online learning performances (Esposito, 2013). IBR qualitative studies have used online data sources such as email text, discussion thread text, discourse from webcam chats, and other online artifacts (Bianco & Carr-Chellman, 2002). For the purposes of discussing qualitative research situated in distance education, I will use the terms 'online inquiry' and 'e-learning research' throughout the remainder of this paper. Broad and Joos (2004) used

the term 'online inquiry' to describe the methods they used for their qualitative studies of online communities. With the advent of the Internet, distance education or e-learning labels have also emerged. Thus, it could be said that 'e-learning research' also is a branch of IBR and can include quantitative and qualitative methods.

Another term that will be used throughout this paper is 'virtual ethnography.' Bianco and Carr-Chellman (2002) explained, "In an attempt to understand the culture of online learning, qualitative methodology (specifically ethnography) is a natural choice for research design" (p. 252). Virtual ethnography is a methodology that can "be used to develop an enriched sense of the meanings of the technology and cultures which enable it [the Internet] and are enabled by it" (Hine, 2000, p. 8). An example of a research question featuring virtual ethnography that Hine posed is: "How does the Internet affect the organization of social relationships in time and space" (p. 8)? Virtual ethnography is the study of the use of computer-mediated communication in the space between real and virtual environments (Hine, 2000).

Boellstorff, Nardi, Pearce, and Taylor (2012) recommended that ethnographic research of virtual worlds should have focused research questions. Virtual ethnographers should not simply log into virtual worlds and aimlessly collect data. Rather, the researchers should be interacting in the environment and conducting observations and interviews in a manner that informs their research questions. Boellstorff et al. (2012) described virtual worlds as having these characteristics: "they are *places* and have a sense of *worldness*," "shared social environments with synchronous communication and interaction," and "they continue to exist in some form even as participants log off" (p. 7). While Boellstoff et al. would not consider MOOCs to be virtual worlds, as MOOC

learners do not take on the presence or embodiment of avatars or other characters, I believe MOOCs are similar to virtual worlds in that MOOCs have a sense of worldness for learners who choose to enroll in topics that interest them to engage with the content and or fellow learners. Additionally there is the opportunity for learners to engage in synchronous discussion via various course tools, and MOOCs continue to carry on asynchronously at all hours of the day as learners log in and out of the environment.

2.7.2 From Traditional Research Methods to Online Inquiry

IBR has challenged views of qualitative research that are often tied to physical locations and face-to-face, in-person interactions and interviews (Schrum, 1995). As a result of a panel discussion at a qualitative research conference in 1995, Schrum went on to investigate the literature and perspectives of the ethics of conducting IBR. Schrum wrote "If a researcher plans to investigate electronic communities or groups of individuals who use the electronic highway as a means to their communication, then it is necessary to adapt traditional research techniques to meet the demands of this changing society" (p. 313).

There are design elements that researchers should take into account and adjust when conducting IBR. Yin (2010) stated research designs are "logical blueprints" for constructing a study (p. 75). Yin also said designs can be implicit or explicit and the degree of planning depends on the context and purpose of the study. In the case of online inquiry, multiple researchers have reported that university Institutional Review Boards (IRBs) are very concerned about protection of informants' rights, intellectual property, and copyright issues in online environments (Bakardjieva & Feenberg, 2000; Broad & Joos, 2004; Hine, 2000). Hence, it is important to have a logical planned blueprint for

gaining IRB approval to conduct online inquiry research. Design elements that should be considered and adjusted for online environments include:

- privacy
- informed consent
- role of the researcher
- informant observation
- positionality
- voice
- reflexivity

I will discuss each of these in more depth, from the perspectives of the informants and the researcher.

2.7.2.1 Online Inquiry Design Elements

Most IRBs require a research design that explains the risks and benefits of a study, as well as how the research subjects will be protected (Punch, 1994). Researchers are expected to have plans for protecting informants, including an informed consent letter and a plan for confidentiality (Punch, 1994). Guba and Lincoln (1989; as cited in Schrum, 1995) noted it is the researcher's duty to protect those who participate in research studies: "we need to consider loss of dignity, loss of self-esteem, and loss of personal autonomy as dangers to research informants" (p. 315). In regards to issues of online privacy, e-learning researchers, Kanuka and Anderson (2007), identified three ethical areas that have troubled IBR since the mid 1980s: "(a) informed and voluntary consent, (b) what is public and what is private, and (c) anonymity, privacy, and confidentiality of the data collected" (p. 24).

Gaining access to people participating in an online community can be quite challenging. Bakardjieva and Feenberg (2000) wrote that an ethnographer does not always alert informants at the very beginning of the study about their research, but in a

virtual environment, that could raise issues of the ethnographer capturing personal data without informants' permission. Thus, Bakardjivea and Feenberg recommended the researcher announce her presence and purpose of the study and gain informed consent, upon first entering the online environment. Researchers conducting online inquiry acknowledge it also is often difficult to obtain informed consent in online and e-learning environments. Kanuka and Anderson (2007) described that in traditional classrooms, a researcher could simply pass out her consent forms, but in online environments there are questions of how to gain access to informants in the first place. Gaining access to online screen names and email addresses to solicit participation and consent must be carefully considered so as not to invade students' privacy.

The informed consent also should include an explanation of how the informants' identities will be protected. With the amount of data that is collected, archived, and easily found about an individual's identity on the Internet, the concern of 'traceability' is a crucial consideration for online inquiry (Bakardjieva & Feenberg, 2000; Hine, 2000; Kanuka & Anderson, 2007). Hine noted the use of pseudonyms should definitely be included in the research design, as well as careful consideration of how the study's results, which may contain verbatim quotes from informants, are presented online. Those quotes could potentially be traced back to the informants. Therefore, safeguards must be considered and put in place to protect identities and sufficiently explained to informants through the informed consent document.

The researcher's entry into the online community could potentially impact how the informants behave, interact, and form their relationships and identities within the virtual space. It is because of this that the role of the researcher is another important design element to consider in online inquiry. Bakardjieva and Feenberg (2000) asked, "What sense does it make to ask for special permission to join a virtual community as a researcher when it is open to everyone to join as a participant" (p. 236)? It is recommended the researcher enter the online environment in a similar fashion as the informants, but Hine (2000) and Schrum (1995) suggested the researcher announce her presence and purpose to the informants, so as not to run into ethical issues surrounding data collection. Punch (1994) cautioned that deception of informants as to the researcher's role could ultimately lead to ethical issues that prevent a researcher from being able to present the collected data.

For this study, I will refer to adult learners who participate in the research as 'informants.' Boellstorff et al. (2012) pointed out that ethnographers often use the terms 'informant,' 'participant,' and 'collaborator,' to describe the research members (p. 17). The researchers stated that 'informant' "signifies that members of a culture inform ethnographers, sharing understandings about their lives through conversation and participatory activity" (p. 17). In the design of my research, I view myself as an informant, as well as the adult learners who participated in the study. This is because my experience in the first MOOC informed the design of the virtual ethnography, and the adult learners informed me about their experiences in the *Human Trafficking* MOOC.

Once the researcher has secured informants, gained informed consent, and entered into a virtual environment, the question of how to actually observe the informants arises. There is the possibility for the researcher to remain a 'lurker,' that is, to only observe, and not interact with informants (Hine, 2000). A lurker is "known to be present and their presence may be confirmed by accesses," but they leave no "observable traces" (Hine,

2000, p. 25). In this role, the data analysis and findings would be up to the researcher's sole interpretation, and the informants would not be involved in co-constructing meaning. With the many online forms of communication currently available, dialogue between informants and researchers could be much more open, and informants are able to co-construct meaning with the researcher (Bakardjieva & Feenberg, 2000). This collaborative and participatory form of research is an asset to online inquiry.

There are several ways informants could be observed through online inquiry.

This would include text analysis of informants' online writing, asynchronous e-mail interviews, webcam interviews, real-time chat interviews, and face-to-face, in-person interviews (Hine, 2000). The continuum of time becomes an issue in online inquiry as some of the informants' activities are archived in previous asynchronous communications, and possibly synchronous communications. It is recommended researchers design a study that enables them to consider the concept of the flow of time and include strategies for how to observe the informants in the different time elements (Hine, 2000).

The concept of 'positionality' becomes significant in the consideration of context of the flow of time between and in real and virtual spaces. Lincoln (1995) stated, "Positionality, or standpoint epistemology, recognizes the poststructural, postmodern argument that texts, any texts, are always partial and incomplete; socially, culturally, historically, racially, and sexually located; and can therefore never represent any truth except those truths that exhibit the same characteristics" (p. 280). A researcher should try to connect the text an informant writes during the combination of real and online time to the overall, specific context the informant was experiencing. There is much concern among some online inquiry research informants that their online words will be taken out

of context (Bakardjieva & Feenberg, 2000). Therefore, the researcher must make an effort to contextualize the online artifacts within the circumstances and flow of time they originally occurred.

Somewhat connected to positionality in this instance is that of 'voice.' Lincoln (1995) wrote that "voice not only becomes a characteristic of interpretive work, but the extent to which alternative voices are heard is a criterion by which we can judge the openness, engagement, and problematic nature of any text" (p. 283). Thus, the question in online inquiry might be whether or not to include the voices of the lurkers. While they may not actively post comments in online forums, that does not mean their perceptions of the online community and experiences are invalid.

A final design element that should be considered in online inquiry is that of reflexivity. Yin (2010) stated, "Every good qualitative researcher has both a *declarative* and a *reflective* self' (p. 264). Yin differentiated the declarative to focus on the researcher reporting what she knows and learns. As for the reflective self, Yin wrote "Your reflective self needs to admit how you learned what you know, including possible observations about your methods (of learning and knowing)" (p. 264). Lincoln (1995) said, "reflexivity is absolutely required to understand one's psychological and emotional states before, during, and after the research experience" and that reflexivity can help move to an understanding of relationships and contradictions in the collected data" (p. 283). Yin suggested the researcher should collect artifacts and maintain a record of her feelings and experiences throughout the research process to demonstrate reflexivity (pp. 147–151). In online inquiry, a researcher's dedication to reflexivity could help make

sense of the asynchronous interactions and experiences that occur in online communities and real-life spaces.

2.8 Design Considerations for Virtual Ethnographic MOOC Research

2.8.1 A Hypothetical MOOC Example

Esposito (2012) discussed many of the ethical considerations in online inquiry mentioned in the earlier section of this paper. Esposito negotiated the ethical considerations within the hypothetical case of a virtual ethnography of a MOOC. Among other topics, Esposito discussed the considerations of public versus private ownership, role of the researcher ("overt versus covert"), informed consent, and anonymity (pp. 319–323).

The following table is based on the main headings in Esposito's article and summarizes the author's recommendations for conducting MOOC research:

Table 2.2 Esposito's (2012) MOOC Virtual Ethnography Recommendations

Design Element	Recommendation	
Public vs. private ownership	Contact informants for permission	
Overt vs. covert researcher	Overt informant research	
Informed consent	Informed consent as 'public notice'	
Anonymity	Informants as authors	

Schrum (1995) outlined a similar set of guidelines for online researchers. Considering the earlier discussion of online inquiry design elements within this paper, as well recommendations from the literature, I would propose an expanded set of recommended design elements for online inquiry within e-learning.

Table 2.3 Expanded Online Inquiry Recommendations for E-Learning Contexts

Design Element	Recommendation	
Risks and Benefits	State goals explicitly to informants	
Public vs. private ownership	Contact informants for permission	
Overt vs. covert researcher	Overt informant research	
Informed consent	Informed consent as 'public notice'	
Anonymity/Voice	Informants as authors	
Positionality	Online and face-to-face triangulation	
Reflexivity	Researcher maintained record	
Final Reporting	Member-checked	

In this expanded table, the elements of risks and benefits, positionality, reflexivity, and final reporting have been included as more explicit categories to be considered as part of conducting online inquiry of e-learning and virtual environments.

2.8.2 IBR and Empirical Data

There are questions and levels of uncertainty as to whether or not data collected from virtual spaces should be considered empirical (Hine, 2000). Yin outlined four steps a researcher should follow to conduct an empirical study: "1) defining something to investigate, 2) collecting relevant data, 3) analyzing and interpreting the results, and 4) drawing conclusions based on empirical findings" (p. 49). I believe all of these steps can indeed be followed in regards to conducting research of virtual spaces.

Yin (2010) stated that an empirical study "must use newly collected data, based on a fresh set of data collection procedures—not information from existing secondary sources" (p. 49). Herein is the question of whether or not online texts and interactions should be considered empirical. Are online texts written by someone else primary or secondary sources? Hine (2000) maintained the Internet is "culture and cultural artifact" (p. 14). Hine argued computer-mediated communication (CMC) is no different than inperson, face-to-face communication. The Internet is often viewed as an object, but it also

is influenced by social interactions and the social interactions that occur in the context surrounding the experience of the Internet (Hine, 2000). As traditional research design collects empirical data in the forms of surveys, interviews, physical documents, and more, IBR collects virtual versions of these same data sources. Therefore, text, discourse, images, video, asynchronous and synchronous interactions could all be considered cultural artifacts of the Internet and are therefore empirical data sources for IBR.

To further support this stance, Prior's (2003) description of what counts as a research document will be included. Prior said determining what is and is not a document is as difficult as determining what should or should not be considered artwork (p. 1). Prior wrote, "we must consider them [documents] in terms of fields, frames, and networks of action" and that we must acknowledge the human creators or "agency" of collected documents (pp. 2–3). Prior also discussed how "the social world is made up of the 'multiple realities' of its creators" (p. 3). Consequently, while online data is empirical, informants' privacy should be considered, informed consent granted, and positionality of the collected data considered in presentation of final results.

2.8.3 An Approach to Asynchronous Online Data Analysis

In qualitative research, there are many ways to analyze data. Yin (2010) outlined a 'Five-Phase Cycle' that includes common data analysis features found across many qualitative studies: (1) compiling, (2) disassembling, (3) reassembling (and arraying), (4) interpreting, and (5) concluding. While these data analysis procedures could still be applicable to studying asynchronous online data, it is critical to collect enough data to develop a cohesive context or narrative of the asynchronous timeline of events and perspectives. Hine (2000) explained connecting events through a narrative helps readers

and viewers to understand the flow of space and time. Hine wrote "narratives that do not follow this notion of time can be confusing to read: a novel or film which makes use of flashbacks must signal these clearly to avoid confusing readers and viewers who may be expecting events portrayed in a linear sequence" (p. 95). Therefore, analysis and reporting of data collected in asynchronous environments should explain the flow of time of events and experiences that happened in connection to one another, so as to make chronological sense for the readers and viewers.

There is an "edited" nature of asynchronous communication with which to contend. There is concern people are not truly who they say they are online, they adopt fake online personas, or give false information. These are the realities of identity, the Internet, and IBR. By utilizing methodologies such as virtual ethnography, the researcher accepts that these issues of authentic identity and questions of truth exist (Hine, 2000). Hine wrote, "The intention is to sidestep questions of what identities really are and whether reality is really there, by shifting to an empirical focus on how, where and when identities and realities are made available on the Internet" (p. 118). Through virtual ethnography, the researcher embeds herself in an online environment just as the informants would do. Possible methods for researching the environment would include discourse analysis of written Internet text, analysis of posted images and videos, and technology based communication with informants such as online chat, email, and discussion posts (Hine, 2000).

Hine cautioned against using face-to-face interviews with informants in virtual ethnography. The argument is ethnographers should use the same means of communication as their informants. In contrast, an example of utilizing data sources

from both the online and face-to-face environments is Vonderwall's (2003) case study of 22 college students' experiences in a distance-learning course entitled 'Technology Applications in Education' (p. 79). Vonderwall collected data in the forms of "interviews, student and instructor email transcripts, discussion board transcripts, and two independent peer reviewers' reviews' (pp. 81–82). By collecting data from multiple sources, Vonderwall was able not only to observe the students' online activities and performances, but also gain insight into the students' online discussions and interactions through the inperson interviews. Vonderwall found a greater understanding of student perspectives of interacting with their peers and instructors, as well as collaborating in online groups by talking to each student in-person. Therefore, it appears that multiple data sources across the virtual and real-world spaces would provide triangulation for making sense of the informants' online identities and contexts versus their real-world identities and contexts, as well as the asynchronous flow of events.

2.8.4 Narrative Inquiry with Photo-Elicitation for Researching Online and Real-Life Presence

Narrative inquiry, coupled with visual research methods, have the potential to demystify the space between adult learners' online presence and real-life presence.

Connelly and Clandinin (1990) pointed out that the use of narrative methods has been increasing in educational research so as to understand administrators', teachers', and students' experiences. Narrative "is the study of the ways humans experience the world" (Connelly & Clandinin, 1990, p. 2). Narrative operates on the notion that "humans are storytelling organisms who, individually and socially, lead storied lives" (p. 2).

Narrative interviewing involves the researcher asking open-ended questions so informants will provide accounts and descriptions, rather than short, succinct answers (Kohler Riessman, 2008). In interview based narrative studies, the researcher forms relationships with informants to share information about herself, as well as listen to and interpret individuals' life stories. Chase (2005) discussed how narrative inquiry typically occurs in face-to-face environments, but some researchers are moving toward using narrative methods for studying online communications such as online groups, e-mail, and instant messaging.

Visual methods include photovoice, videovoice, photo journaling, photobiography, and more (Harrison, 2002). Visual research can be conducted multiple ways such as the researcher producing the imagery or the informants producing the imagery (Harrison, 2002). For the purposes of this study, the method photo-elicitation (Harrison, 2002) was used as informants were asked to take two photos of the places and devices they typically used to log in to MOOCs (Appendix A). Informants then describe their created photos, and the descriptions and photos can subsequently be woven into a narrative that resembles storytelling of human experiences, rather than traditional research reports of thematic findings (Harrison, 2002; Kohler Riessman, 2008). The researcher could then construct the narratives with the informants for accurate and deep understanding of their lived accounts.

2.9 Summary

In this chapter, I have discussed the background of MOOCs, including the development of a working definition of 'MOOC,' and presented arguments for and against the use of MOOCs in higher education. I also looked at adult learner motivation

related to distance education and online presence in e-learning, specifically the Community of Inquiry (CoI) instructional design framework as a perspective for understanding learner and instructor roles and interactions in e-learning environments. The developing theory of connectivism was also reviewed in the comparison of c-MOOCs and xMOOCs. The final section reviewed IBR, narrative inquiry, and visual research methods, including virtual ethnography and co-constructed narratives with informant created photos as potential methods for examining the MOOC experiences of adult learners. An examination of this literature has helped frame the development of this study with the following research questions:

RQ1: What are adult learners' perceptions of their experiences within a Massive
 Open Online Course (MOOC)?

Sub-research questions included:

- RQ1a: What motivates adult learners with bachelor's and master's degrees to participate in MOOCs?
- RQ1b: How does an adult learner's motivations influence his/her level of online presence within a MOOC?
- RQ1c: What are an adult learner's perceptions of online interactions with classmates and instructors within a MOOC?
- R1d: What does an adult learner describe as key factors for succeeding in a MOOC?
- o RQ 1e: How does an adult learner define 'completion' of a MOOC?

CHAPTER 3. METHODS

3.1 Introduction

The following study was designed to examine adult learners' perceptions of and experiences in MOOCs. I, the researcher, first acted as an informant in The Ohio State University's (OSU) MOOC titled *Technology and Ethics* via the Coursera MOOC platform. My experiences and field notes influenced the development of methods for the subsequent virtual ethnographic MOOC study. For this dissertation research, I studied the experiences of twelve adult learners with bachelor's and master's degrees within OSU's MOOC titled *Human Trafficking*. The purpose of the study was to answer the following questions:

RQ1: What are adult learners' perceptions of their experiences within a Massive
 Open Online Course (MOOC)?

Sub-research questions included:

- RQ1a: What motivates adult learners with bachelor's and master's degrees to participate in MOOCs?
- RQ1b: How does an adult learner's motivations influence his/her level of online presence within a MOOC?
- o RQ1c: What are an adult learner's perceptions of online interactions with classmates and instructors within a MOOC?

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- o RQ1d: What does an adult learner describe as key factors for succeeding in a MOOC?
- RQ1e: How does an adult learner define 'completion' of a MOOC?
 This chapter provides details of the research design and procedures, including data sources and analysis.

3.2 Research Design

For this study, I used a qualitative, descriptive design. The qualitative methods included virtual ethnography (Hine, 2000) and narrative inquiry with photo-elicitation (Chase, 2008; Connelly & Clandinin, 1990; Harrison, 2002). The first step of the study was a virtual auto-ethnographic approach with me, acting as informant, to observe how a MOOC environment functions from an adult learner perspective and to reflect on the experience. I used the experience to develop procedures for the second part of the study. The second portion of the study included the application of virtual ethnography and narrative methods with 12 adult learners to better understand their experiences.

3.2.1 Internet-Based Research—Virtual Ethnography

This study used a qualitative research design with methods from Internet-based research (IBR) to gain insight into adult learners' experiences within a MOOC. For the purposes of discussing qualitative research involving MOOCs, I used the terms 'online inquiry' and 'e-learning research.' Broad and Joos (2004) used the term 'online inquiry' to describe the methods they used for their qualitative studies of online communities. With the advent of the Internet, distance education or e-learning has also emerged. Thus, it could be said that 'e-learning research' is also a branch of IBR and can include qualitative methods. Typically, IBR has consisted of data collection from online analytics

sources and communications for analysis. Thus, online inquiry is a qualitative approach to IBR and can be used as the umbrella term under which I included the various online qualitative methods that were used (e.g., online observations/screen captures, online interviewing/Skype).

Within online inquiry, I used virtual ethnography. Virtual ethnography is a method that can "be used to develop an enriched sense of the meanings of the technology and cultures which enable it [the Internet] and are enabled by it" (Hine, 2000, p. 8). Thus, virtual ethnography is the study of the boundaries between the virtual and the real, the use of the Internet to form relationships and social communities, and the Internet's effects on people (Hine, 2000). The following diagram is an attempt to show the relationships among the qualitative terms that have been presented thus far:

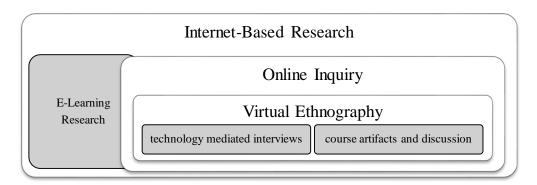


Figure 3.1 Visual Relationships of Qualitative Internet-Based Research

I used virtual ethnography to interact with MOOC students online via email, discussion boards, and recorded online video interviews. I analyzed the online interactions of research informants, as well as my own virtual interviews and exchanges with informants by using open and detailed qualitative coding of online discussion texts, course artifacts, and interview transcripts.

3.2.2 Narrative Inquiry with Photo-Elicitation

Barone and Eisner (2012) wrote that arts-based research ABR has the potential to uncover "vagueness" in education by capturing "qualities of life that impact what we know and how we live" (pp. 4–5). The intention of ABR as a qualitative methodology is to "redirect conversations about social phenomena by enabling others *to vicariously re-experience the world*" (p. 20). Within ABR, methods such as narrative, poetry, theater, artwork, and visual storytelling have emerged (Barone & Eisner, 2012; Milne, Mitchell, & de Lange, 2012). More specifically within image-based research, methods including photovoice and photo-elicitation are developing as ways to learn more about cultures, communities, and social phenomena through participatory visual storytelling techniques (Chase, 2008; Harper, 2002).

For the purposes of this study, narrative inquiry and photo-elicitation were the specific methods used for gaining insight into the lives and experiences of MOOC adult learners. Narrative inquiry is the process of a researcher establishing a relationship with informants, asking open ended questions to uncover informants' stories about lived experiences, and working with informants to construct narrative accounts through verbal, written, or performed presentations (Chase, 2008; Harrison, 2002). In this study, I established relationships with informants via email and Skype throughout the duration of the MOOC and after. For the post-MOOC interview, I attempted to ask open-ended questions, as well as maintain a conversational tone in which I also shared my experience of being a learner within the same MOOC environment as the informants.

In regards to the visual research method that was used in this study, I asked informants to take two photos of places and devices they typically used for participating

in the MOOC (Appendix A). Harper (2002) wrote that photo-elicitation "is based on the simple idea of inserting a photograph into a research interview" (p. 13). Harper described the photo-elicitation method as the process of either the researcher or informants taking and describing photos. The researcher could also potentially ask informants to respond to historical photos previously taken by a photographer external to the study (Harper, 2002).

For the purposes of this study, I asked each informant to describe their self-created and submitted photos in terms of the location and devices shown, as well as how they typically fit MOOCs into their everyday lives. Harper (2002) pointed out that the photo in photo-elicitation becomes data, but it often does not tell the whole story. It is the informants' and researcher's interpretations of the photos that tell the story.

Therefore, I used the informant-created photos and their interview responses to develop a draft narrative of each informant's experience. Then, I member-checked each narrative by having each informant read the draft of their narrative to check for accuracy and to provide feedback and suggestions for clarification and improvements. In the context of researching adult learner perspectives and presence within a MOOC, photo-elicitation helped shed light on the informants' experiences in balancing real-world life with their MOOC presence and engagement. Photo-elicitation, coupled with a co-constructive narrative method, led to even richer descriptions and understandings of adult learners' MOOC experiences.

3.2.3 Researcher as Informant

3.2.3.1 Setting

My goal was to research a prominent MOOC scenario and so, selected the setting based on meeting the following criteria: (1) delivered by a well-known university, (2) on

one of the major MOOC platforms, (3) to thousands of learners around the world, and (4) at no charge to participants. Thus, I selected the *Technology and Ethics* MOOC developed and offered by The Ohio State University (OSU) through the Coursera platform (https://www.coursera.org/course/techethics). I selected this MOOC for the first portion of the study because it focused on content that I, as an adult learner with both a bachelor's and master's degree and a background in communication, education, and technology, would potentially take for professional development and personal interest. This was meant to simulate the current trend of adult professional learners selecting MOOCs for interest and professional development (Gose, 2012). OSU's *Technology and Ethics* MOOC was scheduled to last seven weeks from May–June 2014. The course content was described on the Coursera (2015c) website as follows:

The meteoric rise of technologies used in our everyday life for profit, power, or improvement of an individual's life can, on occasion, cause cultural stress as well as ethical challenges. In this course, we will explore how these multifaceted impacts might be understood, controlled and mitigated. (Coursera, 2015c)

MOOC students took the course for free and had the option to receive a 'Statement of Accomplishment' upon finishing the required course assignments, quizzes, and activities.

OSU is a well-known 'Big Ten University' that partners with Coursera, a well-known MOOC platform provider. As of last check, Coursera's website stated they had 11,532,040 'Courserians,' 957 courses, and 118 partners (Coursera, 2015d). By selecting a prominent university and MOOC platform provider for the setting, the research would, potentially, have more meaning for other prominent universities and platform providers participating in the MOOC arena.

3.2.3.2 Informant

As the researcher, I served as the informant in step one of the study. I enrolled in the *Technology and Ethics* MOOC as a student. I watched the online course videos, completed the assignments and quizzes, posted and read discussions, interacted with classmates, and viewed the instructor's presence just as any adult participant would. Since I engaged with classmates and observed the instructor through online discussions, these engaged classmates and the instructor could possibly be viewed as secondary informants. However, they were not the focus of this study. During each log in, I took screen captures of weekly announcements, videos, assignments, quizzes, and my own discussion posts. My experience as informant was intended to inform the next steps of the study. I analyzed discussion texts from my interactions with classmates and observations of the instructor, course artifacts, and field notes including screen captures, through qualitative coding. Emerging patterns, including experiences and observations, informed decisions for the design of the subsequent virtual ethnographic study of adult learner MOOC experiences.

3.2.3.3 Role of the Researcher

As the researcher informant, I covertly enrolled in the *Technology and Ethics*MOOC by using a pseudonym and established a free online email account. Esposito
(2012) recommended a researcher enter overtly into a MOOC by announcing herself to
the students and instructor. However, there is a high likelihood the researcher's
announced presence could impact the natural flow of the course, as well as classmate and
instructor interactions. Therefore, for this first step of the study, I remained covert and

participated and observed the course by using a pseudonym so as not to influence the instructor or student interactions. As informant, my demographic characteristics were similar to the informants I targeted in the virtual ethnographic study: I was an adult learner with bachelor's and master's degrees, a full-time job, and a mother of three children. I aimed to participate in all of the MOOC assignments and activities outlined in the syllabus for the *Technology and Ethics* course. However, similar to many MOOC adult learners, my everyday life had some influence on my MOOC motivation and participation. Data that were collected in this portion of the study included: screen captures of course artifacts (syllabus, assignments, etc.), discussion board exchanges in which I was involved, and my field notes. To cultivate reflexivity, I took field notes including observations, interactions, time spent working on the MOOC, and experiences after each time I logged in to participate in the MOOC. I logged into the MOOC four to five times each week for two to three hours each visit and completed course requirements to earn a statement of accomplishment. I took notes after each of the participations. My experience provided insights into how to recruit informants and further develop interview questions, as well as utilize virtual ethnography, narrative, and photo-elicitation methods in the MOOC environment.

3.3 Adult Learner MOOC Experiences

3.3.1.1 Setting

The setting for the virtual ethnographic study also focused on a prominent MOOC scenario. I selected the setting based on the same criteria used in the first part of the study. A MOOC from The Ohio State University, offered through the Coursera platform, entitled *Human Trafficking*, was studied. OSU's *Human Trafficking* MOOC lasted for

four weeks from August to September 2014. The course content was described on the Coursera (2015e) website as follows:

Did you know that human trafficking is a form of modern day slavery? Slavery has been around since the beginning of civilization and still persists across our world today. As a human rights issue, it is important to increase awareness as a starting point down the journey toward freedom for all. (Coursera, 2015e)

The MOOC included a "general knowledge track" for registrants who had a general interest in learning more about human trafficking, as well as a "social work track" for the "social work professional" who may have been using the MOOC for professional development purposes (Coursera, 2015e).

3.3.1.2 Informants

Adult learners with bachelor's and master's degrees self-selected to participate in the study. I emailed the MOOC registrants during the first week of the course, asking those with bachelor's degrees to participate. OSU's digital learning staff members and the MOOC instructor agreed to give me 'teaching assistant' access within the Coursera learning management system for the *Human Trafficking* MOOC. This enabled me to send a mass email to all registrants through the Coursera platform, similar to how the instructor emailed the students each week (Appendix B). Of the learners who responded to my research study announcement, I purposively selected participants who were males and females of diverse ethnicities with bachelor's and master's degrees, and within the ages of 26-56. These criteria were set based on trends reported in MOOC demographic reports from HarvardX and MITx. The two MOOC providers reported students who enrolled in 17 MOOCs from fall 2012 to summer 2013 were typically adult professionals who had higher education degrees and used MOOCs as a means of professional

development or simply because of their interest in the subject matter and lifelong learning motivation (Ho et al., 2014).

As mentioned, I sent an email to all of the MOOC registrants. The email introduced me, the research purpose of gaining insight into their MOOC experiences, and the time requirements for participation (Appendix B). I originally aimed for six to eight informants. Guest, Bunce, and Johnson (2006) pointed out there are little to no specific standards regarding how many informants are needed for qualitative research studies. Guest et al. (2006) wrote that much of the qualitative literature cites the concept of 'saturation' for determining purposive sample sizes, yet saturation is often abstractly defined as the point at which new data tends to repeat findings from previous data. For instance, conducting 10 interviews could result in the same themes as conducting 100 interviews. For a phenomenological study, Creswell (as cited in Onwuegbuzie & Collins, 2007) recommended conducting less than 10 interviews and Morse (as cited in Onwuegbuzie & Collins, 2007) recommended conducting less than six interviews. Based on the recommendations in the literature and also taking into account the large amounts of data that were collected about each informant, I intended to limit the proposed study to six to eight informants. However, I ultimately agreed to allow 12 informants to participate. This is further explained and presented in the results in chapter four section 4.3.1.4.

The adult learners with bachelor's and master's degrees who showed an interest in participating in the study completed an informed consent form via the online survey program, Qualtircs. The online consent form (Appendix A) was used for: (1) informants to give permission for the researcher to observe their course participation, including

collection of their course artifacts, (2) explain the use of pseudonyms and describe how identities would be protected, (3) assure that informants' participation in the study did not affect their MOOC grades, (4) ask informants their level of consent regarding video recording post-interviews for presenting at academic conferences, (5) explain how the research findings would be shared with academic audiences in journals and at conferences, and (6) offer compensation in the form of \$20.00 Amazon gift cards for completing the study.

3.3.1.3 Role of the Researcher

I entered the *Human Trafficking* MOOC just as the informants did, operated as an overt researcher, and announced my presence to the MOOC designers, instructor, and students. As Bakardijeva and Feenburg (2000) pointed out, the direct use of communication technology between researcher and informants allows for a coconstruction of meaning in online inquiry. In addition to observing informant MOOC activities, I asked informants to take photos of two locations and devices they typically used to participate in MOOCs and to submit a brief schedule depicting a typical day in their lives (Appendix A). Based on the photos, schedules, and post-interviews, I worked with informants via email to co-construct narratives about their MOOC experiences, including their motivations and perceptions of success and completion.

As previously noted, a researcher design element that should be considered in online inquiry is that of reflexivity. Virtual ethnography has addressed the need for researchers to be reflexive (Hine, 2000). "Reflexivity is the process of reflecting critically on the self as researcher, the 'human instrument'" (Denzin & Lincoln, 2011, p. 115). A focus should be placed on "the ethnographer reflecting on the particular

perspective, history and standpoint which led this ethnographer to be giving [his/her] particular account of this setting" (Hine, 2000, p. 56). In qualitative research, especially participatory work, the researcher should work toward becoming reflexive by taking into account her own views, experiences, and relationships and how her perceptions influence data collection and analysis. Yin (2010) wrote the researcher could collect artifacts and maintain a record of her feelings and experiences throughout the research process to demonstrate reflexivity. In online inquiry, a researcher's dedication to reflexivity could help make sense of the asynchronous interactions and experiences that occur in online communities and real-life spaces. In order to develop reflexivity, I took detailed field notes and screen captures of observations and experiences each time I logged into the setting (Appendices F & I).

3.3.1.4 Data Collection

Multiple sources of data were collected throughout the study. They included demographic information of MOOC participants and course artifacts such as the syllabus and assignment instructions, screen captured observations of informants' experiences, informants' photos and schedules, researcher-conducted and recorded interviews with informants, field notes, and the final co-created narratives. The MOOC instructor agreed to share her course syllabus and assignments. My 'teaching assistant' status within the MOOC allowed me to recruit informants directly and observe informants' interactions with the instructor and classmates in the course via discussion boards. The OSU MOOC designer agreed to share the general demographic information for all of the *Human Trafficking* enrollees at the end of the course (see section 4.3.1.2).

In addition to the online data collection and analysis, I conducted post-interviews via Skype, which were video recorded and transcribed with informant permission. The video files and transcripts were maintained on my secure password-protected computer.

The interviews consisted of open-ended questions (Appendix C) about the adult learners' backgrounds, everyday lives, MOOC participation, motivation, and experiences including:

- Tell me about yourself—what is your professional background?
- Why did you decide to take this MOOC? Will it help with your career?
- What did you think about the course technology?
- How many times did you log in to the MOOC each week?
- Did you participate in the discussion boards?
- Did you complete the MOOC?
 - o If so, will you receive the certificate?
 - o If not, why did you not complete it?
- What is it like to be a student in a MOOC?
- What did you like about the experience?
- What did you not like about the experience?

The following table shows how the data collection methods and sources aligned with the proposed research questions:

Table 3.1 Data Collection Sources

Source	Data Collection	Data	Research Question
MOOC	OSU designersInstructorObservations	 Demographic information Syllabus and assignments Field notes 	• RQ1
 Photos Schedules Researcher conducted video interviews 	Raw photo filesRaw schedule documents	• RQ1a-d	
	conducted video	 Raw videos transcripts 	• RQ1a-d
Researcher experience and interactions	Observations	 Course artifacts Discussion boards Field notes 	RQ1RQ1cRQ1a-d

3.3.1.5 Data Analysis

The first step of data analysis was reviewing and transcribing all of the post-interviews (Appendices D & E) and reviewing my field notes (Appendix F). The transcriptions and field notes were coded using open, focused, and axial coding techniques for emerging patterns (Miles et al., 2013). Miles et al.'s recommended methods for descriptive analysis were also used to develop a conceptual map concerning informants' perceptions of motivation, success, and completion.

The second step of data analysis was to use the codes that emerged from the interview and field note data to analyze the course artifacts and observations. For instance, an informant described her experience in a MOOC discussion board in the

interview. Based on the interview description, I found the informant's discussion board post, analyzed, and compared the text discourse and interactions the informant had within the MOOC discussion board itself to the informant's interview comments.

The third step of data analysis was to develop the co-constructed narratives. I drafted a narrative of each informant's experience based on interviews, observations, and my field notes. Then, I sent each narrative to each informant for review. Yin (2010) described member checking as sharing raw research materials with informants for their input "to correct or otherwise improve the accuracy of the study" (p. 312). Some informants rewrote portions of their narratives, others suggested I rewrite certain portions for them, and a few informants agreed with the accuracy of the first draft.

3.3.1.6 Trustworthiness of Data and Analysis

Schwandt (1997) defined validity in qualitative research "as how accurately the account represents participants' realities of the social phenomena and is credible to them" (as cited in Creswell & Miller, 2000, pp. 124–125). Creswell and Miller identified researcher reflexivity, collaboration, and peer debriefing as validity procedures within the critical paradigm (p. 126). I followed the outlined validity procedures through reflexive journaling, collaborating with informants on emerging data patterns and the development of the final narratives, and by debriefing people external to the study through this printed report. I also worked with a colleague, external to this study, to validate my interview, course artifact, and field note codes. The results are described and supported in Chapter Four, using 'thick description' (Denzin, 1989), which provides rich details and examples from informant interviews, photos, observations, and field notes.

3.3.1.7 Limitations

The limitations of the proposed study included differences in MOOC contexts from the first step (i.e., research as informant) to the next portion of the study (i.e., adult learners as informants), the small voluntary sample size, and the short duration of the *Human Trafficking* MOOC. First, the subject matter of the MOOC in the first step (*Technology and Ethics*) differed from the subject matter of the MOOC in the next part of the study (*Human Trafficking*). This means that interview questions that were developed from my experience in *Technology and Ethics* may not have been effective for informants' experiences in *Human Trafficking*. Another limitation was the small sample size and the fact that the informants volunteered to participate and self-described/identified their demographics and levels of education. This could have resulted in a narrow, and or inaccurate, view of the adult learner MOOC experience. Finally, the *Human Trafficking* MOOC had a limited four-week duration that provided a very fast-paced timeframe for making observations and provided limited MOOC interactions among and reflection from the informants.

CHAPTER 4. RESULTS

4.1 Overview

This study examined adult learners' experiences within MOOCs. Specifically, the research looked at how adult learners' everyday lives, motivations, success, and completion were related to their overall MOOC experiences, including online presence and interactions. The central research question guiding this study was:

RQ1: What are adult learners' perceptions of their experiences within a Massive
 Open Online Course (MOOC)?

Sub-research questions included:

- o RQ1a: What motivates adult learners with bachelor's and master's degrees to participate in MOOCs?
- RQ1b: How does an adult learner's motivations influence his/her level of online presence within a MOOC?
- RQ1c: What are an adult learner's perceptions of online interactions with classmates and instructors within a MOOC?
- RQ1d: What does an adult learner describe as key factors for succeeding in a MOOC?
- o RQ1e: How does an adult learner define 'completion' of a MOOC?

This chapter presents research results using a micro to macro organizational structure. The micro level includes results from the researcher-as-informant phase as well as co-constructed informant narratives. Next, similarities and differences among adult learners' MOOC experiences are presented, as well as a rich description of the MOOC adult learning culture. Finally, results for the research sub-questions are presented via adult learners' perspectives of MOOC motivation, success, and completion. Figure 4.1 illustrates the chapter organization including how the results connect to the research questions.

RQ #1 RQ #1 RQ #1A-1E

Preliminary
Fieldwork:
Researcher as
informant

<u>Differences</u>:

- Levels of prior knowledge
- Different ages—different stages
- Development vs. enjoyment
- Social vs. solitary
- Trust vs. skepticism

Informant Experiences

Co-constructed narratives

Similarities:

- Global lifelong learners
- MOOCing around the clock
- Social justice education
- MOOC analogies

Adult Learner MOOC Culture

Thick description of MOOCocracy: a learning democracy

- Critical education consumers
- Voting and reputations
- Lurking as learning
- Instructor engagement
- Power of peer review
- Hopeful for the future

Motivation, Success, and Completion

> Adult learners' perceptions of motivation, learning, and success

Figure 4.1 Organization of research results

4.2 Preliminary Fieldwork

4.2.1 Researcher as Informant: *Technology and Ethics* MOOC

Before this research, I had never enrolled or participated in a MOOC. In order to become familiar with the MOOC environment and to develop and refine potential qualitative virtual ethnographic methods for researching adult learners' experiences, it was crucial to spend some time participating in and observing a MOOC first-hand. I identified The Ohio State University's *Technology and Ethics* MOOC as meeting the criteria for my research context: (1) delivered by a well-known university, (2) on one of the major MOOC platforms, (3) to thousands of learners around the world, and (4) at no charge to participants. This section describes the researcher-as-informant experience, resulting observations, and how my participation informed the development of methods and steps for conducting a virtual ethnography of adult learners' MOOC experiences.

4.2.1.1 Role of the Researcher

I gained approval from Purdue University's Institutional Review Board (IRB) to conduct the research. I was required to waive my right to consent in order to conduct research on my own MOOC experience, as well as obtain permission from the OSU professor and instructional designer to observe the *Technology and Ethics* course and research my experience (Appendices A & B). I chose to covertly enroll in the MOOC, set up a Gmail account that could not be traced to my personal identity, and used a pseudonym for my online MOOC presence. Since I had been in contact with the instructor and instructional designer before participating, I did not want them to notice me in the course or treat me any differently than they would treat the other

MOOC learners. I also did not want learners in this first MOOC to connect me to my overt researcher role in the second MOOC where I would be recruiting and engaging with informants in the research. I participated in the *Technology and Ethics* MOOC as any other learner would do. Personally, I met the same criteria as the informants I hoped to recruit and engage in my virtual ethnographic study design: an adult learner between 25 and 65 years old with a bachelor's degree or higher. At the time of this study, I worked full-time, was enrolled in six graduate credit hours for the semester, and had three small children at home, seven years old and younger. I was 33 years old with a master's of science degree in education. Using my own personal lens of a busy, working adult learner with higher education degrees, I participated in and observed *Technology and Ethics* in order to have a better understanding of an adult learner's MOOC experience as well as to inform my research questions, interview protocol, and overall virtual ethnographic design.

4.2.1.2 Course Context

Technology and Ethics had 15,361 enrolled learners from 173 different countries. Of these learners, there were 7,943 who visited the course at least once. The course lasted seven weeks during May to July of 2014. The content of the course focused on ethics and personal beliefs in regards to regulations and impacts surrounding the adoption and diffusion of emerging technologies. Specific content included Maslow's Hierarchy of Needs, technology and social impact assessments, a call for living your own personal beliefs, and ethics for considering new technology use and regulation. There were a total of 37 lecture videos from the instructor, four quizzes, and one final essay assignment that was graded through a peer review

process. Discussions were not required or graded. However, there were weekly discussion forums where the instructor would typically pose two or three questions for learner reaction. There were 469 learners who completed the course and earned the statement of accomplishment. The course was taught by an OSU Emeritus Professor with a background in mechanical and nuclear engineering. He had experience teaching the course face-to-face with undergraduate students, but this was his first time teaching a MOOC. He had facilitation support from one instructional designer and one senior undergraduate student.

4.2.1.3 Data Collection

The data I collected during my participation in *Technology and Ethics* focused on my experience of navigating the MOOC technology for the first time, watching lecture videos, completing quizzes and assignments, and participating in and observing online discussion forums. I logged into the MOOC three to four times each week and spent several hours during each login participating in the course, as well as making observations, taking screen captures, and writing notes and reflections. In addition to this early auto-ethnographic experience, I also began observing the instructor and my fellow learners' online presences to develop potential strategies for entering and engaging informants in the next steps of this study. I maintained an electronic journal in Microsoft Word that included screen captures and texts of my observations, perceptions, and experiences (Appendix I). By the end of the seven weeks, the journal totaled 152 pages. I used an Apple MacBook Pro for this study and utilized the built-in software program called *Grab* to take screen captures of the online environment and artifacts. I then organized my data into weekly folders of

screen captures to correspond with the dates and timeline of my observations and reflection journal. This testing of technologies and organizational strategies during this early fieldwork informed the development of the methods I deployed in the virtual ethnographic portion of the dissertation research.

4.2.2 Analysis of Experience and Observations

Once I completed the *Technology and Ethics* MOOC, I had six weeks until the next MOOC began. Because, I aimed to secure adult learner informants in the second MOOC it was imperative that I reflect on my first MOOC experience, confirm my methods for studying the second MOOC, and finalize details with IRB. I reviewed my field notes and observations for commonalities across my own experience, discussion exchanges, and observations of the MOOC environment and my fellow adult learners. The following subsections present the observed commonalities supported with collected data.

4.2.2.1 Fluid MOOC Beginning

Technology and Ethics was originally scheduled to begin on April 21, 2014. However, the professor sent an email to the enrollees that the course would be delayed until May 19 due to the need for more time to develop a course with the "most recent and significant information." At first, I found this somewhat frustrating because I had built my research timeline around the MOOC schedule. However, it was interesting to see that a month long delay did not seem to cause any online uproar or public feedback from those who registered to take the course. This was an important lesson from the very beginning—that MOOCs are fluid and dynamic with anticipated start dates that do not always time out exactly. Ota (2013) had a similar

experience when a statistics MOOC he enrolled in through the edX platform delayed its start by ten days. It also appears that the fluidity of MOOC scheduling is tied to whether or not the courses are free or connected to a university semester or credit hour time line. *Technology and Ethics* was a free course with no college credit attached. The enrolled learners were therefore somewhat at the mercy of the university and course developers as to course timeline. I wondered whether the fluid start dates and non-traditional timelines of free MOOCs would potentially impact time management, availability, motivations, and completion rates of adult learners. However, I did not ask informants in the *Human Trafficking* MOOC about class start times because *Human Trafficking* started on time.

Technology and Ethics officially began on a Wednesday at 10 a.m., CDT. The MOOC weeks ran from Wednesday to Wednesday with the professor and designer sending emails, posting announcements, and releasing new content regularly at 10 a.m. each week. During the first morning of the course, I spent several hours observing an introductory discussion thread. The professor had posted a discussion titled, 'Hi there!' with brief introductory text about himself and a call for learners to introduce themselves and take a beginning quiz. Within my first 40 minutes of observing the thread, 47 people immediately posted their introductions. I observed learners in this thread of all different ages, ethnicities, locations, education levels, and professional backgrounds. Ages ranged from 24 to 75 years old. Locations ranged from Brazil to Indiana to Switzerland to Africa. Professions included engineering, social informatics, and banking. Education levels included bachelor's, master's, and doctoral degrees, as well as students currently enrolled at each degree level. I found

evidence that supported much of the MOOC literature reported in Chapter 2 (Ho et al., 2014; Nesterko et al., 2014a; Nesterko et al., 2014b). MOOC learners in this course were indeed from all over the world with a variety of backgrounds and professions.

By the end of the seven weeks, the 'Hi there!' discussion thread was the most popular thread with 567 posts and 3,633 views.

4.2.2.2 Technology Navigation

The layout of the MOOC and Coursera platform were fairly easy, almost intuitive, to use. The left side of the screen included links to 'start here,' 'course information,' 'course community,' 'course content,' and the 'course team.' Within a few minutes of first entering the course, I was able to find the syllabus and grading requirements, weekly content, and discussion boards. As a current doctoral student in learning design and technology and having previous experience taking and developing distance-learning courses, I was already familiar with learning management systems (LMS), including their general designs and layouts. However, for adult learners who do not have prior background or experiences with online learning, I noted that they might have moderate difficulty navigating the MOOC environment, at least initially. I did not find any tutorials or scaffolds for how to navigate the technology or course. It is also important to note that the course materials as well as the MOOC environment were completely in the English language, as most MOOCs at the time of this study were. Figure 4.2 is a screen capture of the left-hand navigation menu for the course. Course designers can customize this navigation within the Coursera platform.



Figure 4.2 Course navigation—Technology and Ethics

4.2.2.3 Online Presence

When learners register for a Coursera account, they have the opportunity to write a short bio about themselves and upload a photo. I noticed that there were many learners who did not do this. In that case, their profile photo is the R and S of the Coursera logo with the outline of a duck between the letters. For learners who

took the time to upload a photo to their Coursera profiles, many wrote short three to five sentence personal descriptions. I read through several learner personal profile descriptions and many of them typically include the following information: age, location, education background, profession, interests, and something unique about themselves such as family life, accomplishments, future goals, and links to personal blogs or websites.

Due to my covert research approach to participating in *Technology and Ethics*, I chose to use a first name pseudonym and did not include a profile photo or write a personal description. Coursera does not require learners to use their last names. Figure 4.3 is a screen capture of my student/covert researcher profile.

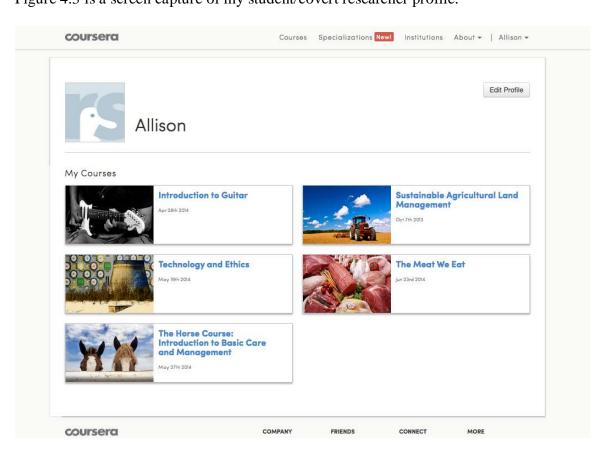


Figure 4.3 Student/covert researcher profile—Technology and Ethics

While observing and participating in *Technology and Ethics*, I took advantage of the opportunity to examine other courses that were recommended to me via emails from Coursera. When I enrolled in the other MOOCs, they immediately appeared on my profile page. I found this to be a very strategic marketing effort.

Throughout the duration of the course, I made an effort to establish an online presence. I posted in the 'Hi There!' introductory thread, similar to hundreds of other learners. I used a conversational tone and even shared some identifying information about myself and provided an answer to the professor's personal ethics question.

Figure 4.4 is a screen capture of my introductory post.



Figure 4.4 Personal introduction post—*Technology and Ethics*

I usually made one to two weekly posts to answer the discussion questions the professor posed. I also tried to respond to one or two fellow learners' posts within threads. I found that my strategy to navigate the discussion forums was to first organize the threads via the 'most popular' sorting option, 'most recent' sorting option, and by also clicking through threads that had very few posts and views. I would try to respond to learners in threads that did not have very much activity and would only subscribe to threads in which I had posted. Subscribing to a thread means the subscriber will be emailed each time there is a new post in that thread. Therefore,

thread subscriptions have the potential to quickly fill up an email inbox. Through thread subscriptions, I could track if anyone responded to me. By the end of the course, I had posted more than 17 times and had subscribed to eight different discussion threads. Three of my fellow MOOC classmates responded to my posts. One was in regards to my introductory post, and the two others were in response to my weekly content posts.

The layout of the discussion forums space was somewhat intimidating, as it was divided into various sections including 'sub-forums,' 'your subscribed threads,' and 'all threads.' As I participated in and observed the discussions, I noted that I wanted to find out more about adult learners' strategies for navigating the discussion forums: How do they decide which forums to enter? Which threads to read? Where to post their thoughts? Learners also have the option to post anonymously. I noticed hundreds of anonymous posts throughout the threads. Often times, a learner would use the anonymous feature when he or she was posting a thought that could be viewed as controversial or negative. I added questions to the *Human Trafficking* interview protocol to ask them how they navigated and participated in discussion threads, but I did not ask them about the anonymous feature because they did not use it for their posts.

4.2.2.4 Hundreds of Views, Yet Only a Vocal Few

Tied to social presence, I observed that the discussion threads often had far more views than actual posts, as evidenced by the 'Hi There!' thread which had 567 posts and 3,633 views. Figure 4.5 is a screen capture of the thread.

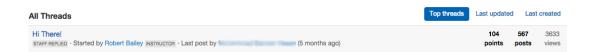


Figure 4.5 'Hi There!' thread views—Technology and Ethics

These observations led me to begin thinking and reading about 'lurking' and 'lurkers' in more traditional distance education settings. I saw that lurking was also occurring in MOOCs and even did some lurking of my own, as I read through several threads and comments and chose not to post within many of the discussions. Then, I began to wonder about the factors that influenced learners to move from 'views' to 'posts' to 'subscriptions' within MOOC online discussions. I added questions to the *Human Trafficking* interview protocol and asked informants how they selected which discussion threads to view, when to post a comment, and if they subscribed to any threads and why.

4.2.2.5 MOOC Culture: A Learning Democracy

I found the overall environment and tone of the *Technology and Ethics* MOOC to be conversational, offering a free exchange of ideas, perspectives, and worldviews and incorporating features of a democratic community. Leaners were reminded to be respectful in their conversations via the MOOC staff and Coursera 'Code of Conduct' (Figure 4.6).

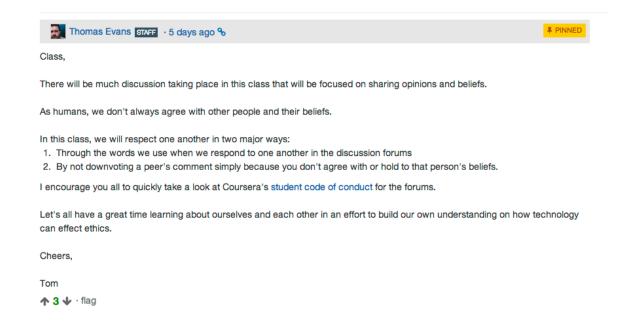


Figure 4.6 Respectful discussion—*Technology and Ethics*

When a learner did make a confrontational post, other learners would quickly respond and call for a respectful community.

Learners could also exercise their right to vote in the MOOC. I noticed the Coursera platform included a feature for 'up-voting' and 'down voting' of posts.

These were simple up arrows and down arrows within the lower left corner of discussion posts that worked much like the thumbs up, 'like,' feature of social media platforms such as Facebook. The amount of votes a post received, as well as quantity of posts made was tied to learners' course 'reputations.' I found an area of the MOOC that kept a running tally of points and ranked 'top forum posters' on a board titled 'Forum Reputations.' Figure 4.7 shows the rankings of the top five reputations in *Technology and Ethics*.

Forum Reputations							
Name	Threads	Posts/Comments	Upvoted/Downvoted		Points		
Nicola Military	11	352	142	0	111		
Circuity Name Regions	3	118	73	0	55		
the State of the S	7	75	80	0	41		
No. Com	8	161	64	5	40		
Block Stock Stock	8	158	48	1	35		

Figure 4.7 Forum reputations—Technology and Ethics

I began to track my own MOOC reputation and found myself ranked fortieth by the end of the course. I had created two discussion threads, made 17 total posts, had nine up-votes, and earned five points. In the sixth week of the course, I had a direct interaction with the learner who had achieved the highest reputation in the course. I aimed to find out more about him and his MOOC presence. Figure 4.8 is a screen capture of the questions I posted for the 'top forum poster.'

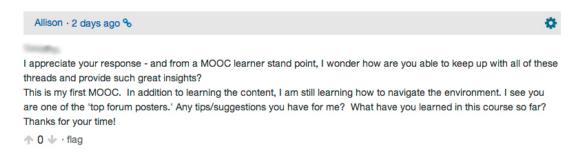


Figure 4.8 Researcher-as-informant discussion post

He shared his advice for navigating MOOC discussions, which included these steps:

(1) subscribe to threads to receive emails for threads that he had posted in so as to follow and continually engage in the conversations and (2) scroll through the forums and click on threads that sound interesting. He admitted to logging in to the course

frequently because he is a part-time writer, has free time, and uses MOOCs to research topics he is writing about.

The discussion space also included built-in sub-forums titled 'Open Forum,' 'Assignments and Quizzes,' 'Chat Room,' 'Course Material Errors,' and 'Technical Issues,' encouraging learners to post their questions and thoughts. Learners frequently posted comments for the instructor, instructional designer, and teaching assistant. Many of their posts included thoughts and feedback on the design of the course including course readings, videos, quizzes, and the final assignment. In many ways, this on-going critique of the course within the discussion threads held the facilitators and designer accountable for their development decisions.

During week two of *Technology and Ethics*, there was somewhat of an uproar from a few vocal learners who criticized the instructor's lecture videos. The focus of that week was on 'Expressing Your Ethic.' In two of the lecture videos, the professor interviewed a youth pastor about his pro-life stance and a chief executive officer of a non-profit focused on supporting the elderly living in poverty. An anonymous learner posted that he/she found the lecture videos biased in only presenting views of "white, male Christians." The learners in this thread called for more diversity in course materials. The thread totaled 154 posts and 1,359 views. The professor and instructional designer responded to the demand for adjustments and made some changes to quizzes and course videos. The discourse continued with some learners posting threads of thanks for the receptive nature of the MOOC staff. These observations of the MOOC voting and ranking features, as well as the ongoing learner

feedback, critique, and demand for accountability in course materials stuck me as unique to the MOOC environment.

4.2.2.6 MOOC-Life Balance

From the perspective of an adult learner in a MOOC that was free of charge, I found myself having to maintain an internal, focused motivation because there were none of the usual external motivators of credit hours or professional development requirements. However, as a researcher, I did have the external motivator of making observations and collecting data. Within the first week, I quickly learned to set aside dedicated time each week to participate in the course, make observations, and write reflections. I was MOOCing in the mornings and on lunch hours at my desk at work, taking time off and going to the library to MOOC, and MOOCing at home in the evenings after my children went to bed. Due to the asynchronous nature of the MOOC and learners' different time zones, there was constant activity around the clock. There were hundreds of discussion posts made in the hours between my logins and observations. Despite the asynchronous nature and time differences, the MOOC discourse continued to carry on with learners ebbing and flowing in and out of the environment at all hours.

It was through my own experience in *Technology and Ethics* that I realized the extent to which motivation (internal and external), time, and daily life activities could potentially impact a learner's MOOC presence, success, and completion. I used my smartphone to take photos of the real world locations and devices I used to participate in the MOOC. Figure 4.9 is a photo from an afternoon when I was

MOOCing at home while watching my daughter who had an illness and was napping on the couch.



Figure 4.9 Real world participation setting—Technology and Ethics

Working within my own real-world commitments, schedule, limitations, and environment, I still found ways to balance the hours of each day with my MOOC participation.

Finding and establishing time management approaches became crucial for establishing my MOOC presence, achieving success, and completing the MOOC. By the third week of the MOOC, I had formed a pattern for engaging in the course each week. This included: (1) watching all of the weekly lecture videos, (2) reading course materials related to quizzes and assignments, (3) taking online quizzes/completing assignments, and (4) reading and writing discussion posts. I developed and prioritized this pattern based not only on time, but also on which activities were going to be graded and which resources contained the most content. The lecture videos

were a great starting point as they included most of the course content. The shortest video was under two minutes, and the longest was just over 21 minutes. I found that if I used the video controls to increase the speed and turn on the closed captioning, I could get through each of the videos in half of their actual recorded time.

4.2.2.7 Completion

In order to officially complete *Technology and Ethics*, there were specific requirements a learner needed to meet. The requirements could be found under the menu item 'Grading and Course Info' (Figure 4.11).

Assignments and Points There are a total of 100 points that you can earn in this class by completing four quizzes and two writing assignments. The following list shows the quizzes & assignments and how many points they are worth. Week One - 20 points • Quiz - "Your Life...Your Ethics" - [Due July 7, 2014 - 11:59pm EDT (-0400 UTC)] Week Two - 20 points • Writing Assignment - "Points of View" - [Submission Due June 2, 2014 - 10:00am EDT ----- Peer Evaluations Due June 9, 2014 - 10:00am EDT] - 15 points • Quiz - "Your Perspective!" - [Due July 7, 2014 - 11:59pm EDT] - 5 points Week Three • No new assignments - "Note: The peer evaluations for the Points of View writing are due by the end of this week on June 9 at 10am EDT Week Four - 10 points • Quiz - "Importance of Impact" - [Due July 7, 2014 - 11:59pm EDT] Week Five - 10 points • Quiz - "Action! What would you do?" - [Due July 7, 2014 - 11:59pm EDT] Week Six - 40 points • Writing Assignment - Your choice of "Robot Caregivers" or "Designer Children" - [Submission Due June 30, 2014 - 10:00am EDT ----- Peer Evaluations Due July 7, 2014 - 10:00am EDT ----- Peer Evaluations Due July 7, 2014 - 10:00am EDT Week Seven • No new assignments - "Note: Peer evaluations for the Robot Caregivers & Designer Children writings are due by the end of this week on July 7 at 10am EDT

Statements of Accomplishments

To earn a Statement of Accomplishment, you must earn 70% of the total possible points. Since there are 100 points possible, you must earn 70 points to earn a statement.

To earn a Statement of Accomplishment with distinction, you must earn 90% of the total possible points, meaning you must earn 90 points to earn a statement with distinction.

Figure 4.10 Course completion requirements—*Technology and Ethics*

I found my MOOC engagement ultimately centered on completing any activities that had point values assigned to them in order to earn the 'Statement of Accomplishment.'

Therefore, the discussion boards became less important, as there were no points tied to discussion participation. I completed all of the quizzes and assignments, and

earned more than 90 points to complete the course with a statement of distinction (Figure 4.11).

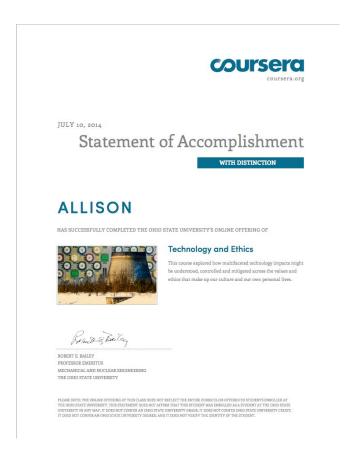


Figure 4.11 Statement of accomplishment—Technology and Ethics

I printed the statement and placed it in a file folder on my desk at work. I also chose to display the achievement on my personal LinkedIn profile page. However, I have not included the certification on my curriculum vitae. It is not clear whether or not my completion of the course would be of interest to potential employers. Yet, I did feel a sense of pride for sticking with the course for seven weeks and earning enough points to receive the statement of accomplishment.

4.2.3 How Initial Fieldwork Informed Methods

As mentioned, I had never participated in a MOOC before conducting the preliminary fieldwork. Therefore, this step was crucial in regards to understanding the technology and solidifying methods for entering the MOOC environment, securing informants, making observations, and developing an interview protocol.

Based on this experience, I adjusted my MOOC entry strategy and interview protocol from what I had originally planned for my virtual ethnographic study. I decided to send only one email to recruit informants and cancelled plans to also post a recruitment message in the discussion threads. Also, I added questions to the interview protocol about down voting/up voting, top forum posters, MOOC reputations, and MOOC-life balance. I also added two more forms of data collection: (1) two informant-produced photos of the locations and devices they used for participating in the MOOC and (2) informant-produced schedule of a typical day in their lives including what times they typically logged into the course.

4.3 Virtual Ethnography

4.3.1 Adult Learners' Experiences: *Human Trafficking* MOOC

This portion of the chapter addresses findings from the study's main research question: What are adult learners' perceptions of their experiences within a Massive Open Online Course (MOOC)? Results of co-constructed informant narratives, informant-created photos and schedules, interviews, and observations are presented to provide deeper understanding of adult learners' experiences. Sub-research questions regarding adult learners' motivations, success, and completion also are addressed through themes, supported with observations and interviews. Finally, an emergent

framework is presented to provide greater insight into the relationships among motivation, success, and completion that were revealed through data analysis.

4.3.1.1 Role of the Researcher

I submitted a second non-exempt proposal to Purdue's IRB for approval to conduct the virtual ethnographic study. I was required to obtain permission from the OSU *Human Trafficking* instructional designer and instructor to observe their MOOC and to engage informants in the study. OSU's IRB determined I did not need their permission to conduct the study because adult learners enrolled in the MOOC via the Coursera platform were not technically OSU students and therefore FERPA (Family Educational Rights and Privacy Act) regulations governing student records held by higher education institutions did not apply.

I operated as an overt researcher, in order to be transparent and gain informants' trust. I created a new Gmail email account (jamiemoocresearch@gmail.com) and used my real name for my Coursera registration and profile. The OSU instructional designer gave me 'teaching assistant' access to the course, allowing me to email the learners directly for informant recruitment. Through this level of access, I was also able to apply Coursera's user search function to directly observe informants. For example, I could search for informant Isabella and directly view whether or not she had completed quizzes or assignments, and could view all of her discussion posts. Based on my experience in the *Technology and Ethics* course, I knew that it would have been extremely difficult to find my research informants' activities amongst the thousands of enrolled learners without access to the user search function.

4.3.1.2 Course Context

The Global Report on Trafficking in Persons from the United Nations (2012) revealed that "[human trafficking] victims of 136 different nationalities were detected in 118 countries worldwide between 2007 and 2010" (p. 7). OSU Associate Professor of Sociology, Jacquelyn Meshelemiah, is passionate about preventing and educating others about trafficking. Therefore, she worked with OSU's instructional design staff to create and instruct the first-ever MOOC on human trafficking. The *Human Trafficking* MOOC was four weeks long and ran from August to September 2014. The course content and activities consisted of weekly videos, several readings, two quizzes, a public service announcement project (PSA), and weekly discussion questions. Figure 4.12 shows the syllabus and grading for the class.

Weeks and Themes

- 1. Introduction to Human Trafficking Quiz 1 opens and is due at the end of week 4 on Sept 17, 2014 at 10am EDT (-0400 UTC)
- 2. Laws and Policies on Human Trafficking Quiz 2 opens and is due at the end of week 4 on Sept 17, 2014 at 10am EDT (-0400 UTC)
- The Impact on the Victim: Biopsychosocial Consequences
 Due: PSA Assignment on Sept 10, 2014 at 10am EDT (-0400 UTC)
- Interventions and Solutions Victims to Survivors
 Due: PSA Assignment Peer Review on Sept 17, 2014 at 10am EDT (-0400 UTC)

Grades and Assignments

Assignment	Points	Due
Quiz 1	20	Sept 17, 2014 10am EDT (-0400 UTC)
Quiz 2	20	Sept 17, 2014 10am EDT (-0400 UTC)
PSA Assignment	60	Sept 10, 2014 10am EDT (-0400 UTC)
PSA Peer Review		Sept 17, 2014 10am EDT (-0400 UTC)

Figure 4.12 Screen capture of syllabus and grading—*Human Trafficking*In order to earn a statement of accomplishment, learners needed to receive 70% of the total points. For a statement of accomplishment with distinction, learners needed 90% of the total points.

The course was somewhat unique and different from many other MOOCs in that it focused on a controversial social issue and was designed to change perceptions and attitudes regarding human trafficking around the world. The course had two learning tracks. The first was for general learners with little to no prior knowledge about trafficking. The second track was intended for professionals in the field of social work. The course content and discussion threads were separated to coincide with the two levels of learning. I focused my participation and observations on the

general track. The OSU instructional designer for the *Technology and Ethics* course also served in the same role for the *Human Trafficking* course. It was Meshelemiah's first time to instruct a MOOC.

Human Trafficking had 30,207 enrolled learners from 186 different countries. There were 14,541 learners who visited the course at least once. 34% of the enrolled learners had a bachelor's degree, 26% had a master's degree, and 4% had doctoral degrees. 62% of the learners were female and 37% were male. 1,253 learners earned a statement of accomplishment.

4.3.1.3 Informant Recruitment and Selection

In order to recruit informants, I directly emailed the enrolled learners through the Coursera system. One week before the course began, I overtly emailed and introduced myself to all of the course enrollees as a doctoral candidate conducting research about adult learners' MOOC experiences (Figure 4.13).

%NAME% will be replaced with the full name of the user. %SESSION_USER_ID% will be replaced with an anonymized user ID. Edit: Rich ▼ Preview Dear %NAME%, I am a doctoral candidate in the Learning Design and Technology program at Purdue University. For my dissertation, I am researching adult learners' experiences in Massive Open Online Courses (MOOCs). The OSU designers and faculty have permitted me to conduct this research within the 'Human Trafficking' MOOC. I am in need of participants between the ages of 25-65 years old for my study and am reaching out to all of you especially those of you who have completed a bachelor's degree. Your participation in the study would be completely voluntary and would include: · my observation of your participation, including discussion posts, in this 'Human Trafficking' MOOC (this includes providing your MOOC screen name, so I can take screen captures of your discussion posts) · a video recorded interview with you through Skype, at the end of the MOOC • writing down a schedule of a 'day in your life' and how you fit in time for the MOOC (you would only do this two times, not every day) • taking and sharing two photos of the places where you physically are and the technology you use when you participate in a MOOC Your identity would be protected in this study, and you can stop participating in the study at any time. Pseudonyms would be used in place of your real name in my dissertation and any academic reports or presentations about the study. If you are interested in participating in the study, please go to this secure online survey and answer a few questions about yourself: https://purdue.qualtrics.com/SE/?SID=SV_6DPMQd3WtG0UtuZ Once I have the survey responses, I will select up to twelve of you to participate and contact you directly. Those who provide consent, participate, and complete the study will receive a \$10 Amazon gift card. If you have any questions, please contact me at: jamiemoocresearch@gmail.com Thanks! Jamie Doctoral Candidate, Purdue Learning Design and Technology Send Email **Update Preview**

Figure 4.13 Screen capture of informant recruitment email—*Human Trafficking*Instead of contending with hundreds of email responses, I requested that interested learners complete an online survey (Appendix J). The survey served as an online participation agreement/consent form and included demographic questions about the potential informants. Within minutes of sending out the mass email, I had dozens of survey responses. A total of 671 *Human Trafficking* enrollees completed my survey within five days.

I filtered the 671 responses down to 628, eliminating incomplete entries and those responses that did not meet my criteria of adult learners between the ages of 25 and 65 with a bachelor's degree or higher. From there, I filtered the data by gender and used an online random number generator to select ten females and ten males as potential informants. I also filtered the data for all Indiana learners to potentially include in my sample, in order to recruit informants within my own state. Following this, I emailed each of the 20 potential informants and received responses from ten of them with their commitment to participate.

Upon sending out the recruitment email to the *Human Trafficking* enrollees, I also received several direct emails to my Gmail account from learners either expressing their interest or disinterest in participating. Three direct emails were particularly noteworthy. First, a female from Louisiana, whom I will call Lauren, wrote saying that she was a former prostitute and survivor of human trafficking. She thought that her viewpoint could possibly provide a unique insight for my study. Second, a 70-year-old male, whom I will call Ed, living in Thailand, wrote that while his age was outside of my range of research interest, he believed his perspective was valuable for understanding the experience of an adult learner who is retired and volunteering to help human trafficking victims. Third, an Italian female, whom I will call Isabella, wrote that she has taken several Coursera courses in the past year. She hoped her MOOC experiences would be valuable to my research. I then asked Lauren, Ed, and Isabella to complete my online agreement form/survey in order to obtain their official consent to participate in the research.

Given that hundreds of adult learners completed my initial recruitment survey and showed interested in participating in the research, yet were not selected for the virtual ethnography, I worked with my doctoral advisor and Purdue IRB to quickly develop a follow-up online survey with open-ended questions (Appendix K). The follow-up survey served as a way to thank the adult learners for their interest and to provide an alternative means for sharing their views through open-ended questions about their experiences and perceptions of motivation, success, and completion. The follow-up survey received 54 completed responses. These data were not analyzed or included in this dissertation, as it was outside of the scope of the intended in-depth virtual ethnographic study. However, I mention the follow-up survey here as a possible consideration for future MOOC researchers who receive high interest from potential research informants. I plan to analyze the data at a future date for further insights into adult learners' experiences, especially in comparison to the experiences described by the virtual ethnography informants.

4.3.1.4 Informant Demographics

After recruitment and selection, I was in regular email contact with 14 adult learners of various backgrounds from all over the world. Each learner provided consent/agreement to participate via my initial online survey, including specific agreement to allow me to observe their MOOC participation in discussion boards, quizzes, and assignments. Each learner also consented to participate in a video-recorded Skype interview, after the MOOC concluded. I also asked learners, via the online survey, to indicate their level of permission in regards to recording their video images. Options for the survey item, "Researchers may record my..." included: (1)

my image/face and present the video at academic conferences; (2) image/face, but blur it for presentation at academic conferences; (3) record my voice only for presentation at academic conferences; and (4) only use text/typed quotes from the interview for presentation at academic conferences. Table 4.1 shows the demographics and video recording consent levels of the adult learner informants.

Table 4.1 Demographics of Virtual Ethnography Informants—Human Trafficking

Pseudonym	Gender	Ethnicity	Age	Education level	Location	Observation?	Skype interview?	Level of image permission
Anne	Female	Caucasian	47	Bachelor's degree	Muncie, IN	Yes	Yes	Can show video, but blur image
Blake	Male	Caucasian	28	Bachelor's degree	Sandy, UT	Yes	Yes	Yes
Claudia	Female	American Indian	31	Master's degree	Peace Corps Moldova	Yes	Yes	Can show video, but blur image
Elizabeth	Female	Caucasian	30	Bachelor's degree	Snohomish, WA	Yes	Yes	Yes
Isabella	Female	Caucasian	48	Master's degree	Beijing, China	Yes	Yes	Yes
Ed	Male	Caucasian	70	Bachelor's degree	Chiang Mai Thailand	Yes	Yes	Yes
*Fernando	Male	Caucasian	56	Bachelor's degree	Guatemala City	Yes	Yes	Yes
Joseph	Male	Caucasian	29	Bachelor's Degree	Yale, MI—moving to the Philippines	Yes	Yes	Yes
*Lauren	Female	Caucasian	38	Some college	St. Amant, LA	Yes	Yes	Yes
Lynn	Female	Caucasian	26	Bachelor's degree	West Lafayette, IN—moved to Indianapolis	Yes	Yes	Yes
Mimi	Female	Ethiopian- American	27	Bachelor's degree	North Brunswick, NJ	Yes	Yes	Yes
Regina	Female	Caucasian	50	Master's degree	Evansville, IN	Yes	Yes	Yes
Sean	Male	Caucasian	28	Master's degree	State College, PA	Yes	Yes	Can show video, but blur image
Torrence	Male	Multi- Racial	25	Bachelor's degree	Detroit, MI	Yes	Yes	Yes

^{*} Fernando and Lauren did not complete the interview portion of the study.

I worked with the informants to co-construct pseudonyms that were representative of their backgrounds, ethnicities, and personalities. It is also crucial to note that while Fernando and Lauren did provide consent, repeatedly emailed with me, sent in their photos and schedules, they did not complete the interview portion of the study.

4.4 Research Question 1: Adult Learner Perspectives of MOOC Experiences

For each week of the *Human Trafficking* MOOC, I maintained email contact with each of the 14 informants, observed their online interactions, took screen captures, and also participated in the course myself. I developed an overt Coursera profile (Figure 4.14) and was transparent in my interactions with informants and course staff.

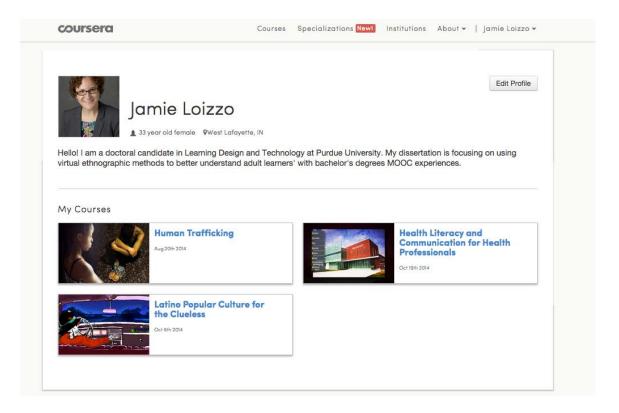


Figure 4.14 Overt researcher profile—*Human Trafficking*Since OSU granted me 'teaching assistant' access to the MOOC, I was able to use the Coursera 'User Administration—Dashboard' to search for each of the research

informants to monitor their activities. I was able to see whether or not they completed quizzes and assignments and could track their discussion board posts. In order to experience the course along with the research informants, I completed all of the course activities and received a statement of accomplishment. It was through this continued researcher-as-informant approach that I was able to continually converse with informants and further develop and refine informed interview questions and conversations based on the course context and experiences.

4.4.1 Informant MOOC Engagement and Completion

The adult learners participating in the study had various levels of engagement and completion within the MOOC. Some (n=3) of the informants completed some of the course activities and participated in the discussion board. Others (n=3) did not participate in the online discussions, and some (n=7) of the learners did not complete the course. As mentioned, I tracked and observed each learner's participation in the course, including their completion of quizzes, development and peer-assessment of the PSA assignment, number and content of discussion posts, and whether they earned the statement of accomplishment for the course. Table 4.2 displays informants' MOOC engagement and completion activities.

Table 4.2 Engagement and Completion of Research Informants

Pseudonym	Quiz 1	Quiz 2	Public Service	# of	Statement of
			Announcement	Discussion	Accomplishment
				Posts	
Anne	Yes	No	No	1	No
Blake	Yes	Yes (2 attempts)	No	0	No
Elizabeth	Yes (2 attempts)	Yes	Yes	8	Yes
Claudia	Yes	Yes	Yes	23	Yes
Isabella	Yes (2 attempts)	Yes	Yes	1	Yes
Ed	No	No	No	0	No
*Fernando	Yes	Yes	No	4	No
Joseph	Yes (2 attempts)	Yes	Yes	7	Yes
*Lauren	Yes	No	No	26	No
Lynn	Yes	Yes (2 attempts)	Yes	1	Yes
Mimi	Yes	Yes	Yes	6	Yes
Regina	Yes (2 attempts)	Yes	Yes	4	Yes
Sean	Yes (4 attempts)	Yes	No	0	No
Torrence	No	No	No	1	No (un-enrolled)

^{*} Fernando and Lauren did not complete the interview portion of the study.

To summarize, 12 of the informants completed quiz #1, 10 completed quiz #2, seven completed the PSA assignment, 11 posted in the discussion board, and seven informants earned the statement of accomplishment.

4.4.2 Co-Constructed Informant Narratives

Through their day-in-the-life schedules, photos, and post-interviews, each informant described their experiences with the MOOC, as well as reasons for their levels of engagement and completion. I worked with 12 of the 14 informants to co-construct narratives of their experiences in the MOOC with particular attention to details of each learner's background, motivation, perceptions of success and completion, and overall individual experiences. After analyzing the data, I wrote brief narratives and emailed them to the informants. The informants then read the documents, made adjustments, and emailed their confirmation of accuracy and feedback for needed changes. I did not have the opportunity to co-construct narratives with Fernando and Lauren, as they did not participate in the interviews and were unresponsive by the end of the study. In the following sections I share the co-constructed narratives. The narratives are meant to share rich, detailed descriptions of adult learner experiences, as these details are often overlooked in large quantitative studies of MOOCs.

4.4.2.1 Anne

Anne is a 47-year-old Caucasian female living in central Indiana. She has a bachelor's degree in political science and has homeschooled her children for the past 25 years. Anne is considering her next professional/career move, once her children leave home in the near future. She learned about the *Human Trafficking* MOOC through the Coursera website. Anne was motivated to enroll in the MOOC because she is interested

in volunteering in the anti-slavery movement. She hoped the course would provide some resources and insights for her future role as a volunteer. Anne often takes several MOOCs at a time and loves the opportunity to connect with people from all over the world to learn more about their different perspectives. Most of Anne's MOOC participation consists of watching the videos and reading through the materials. Anne often watches the videos on her laptop around the house, while she eats breakfast, folds laundry, and exercises (Figure 4.16). She said, "I'll take my laptop wherever I'm exercising, or in the kitchen, while, I'm cooking dinner or folding laundry."



Figure 4.15 Anne's photo of a home location where she participates in MOOCs Anne sometimes takes the quizzes, but she often does not do the assignments. Anne typically comments only a couple of times in the discussion board within MOOCs in

which she has a high level of interest, but she does spend time reading many of her fellow learners' discussion posts. Anne views MOOCs as a hobby much like reading for enjoyment. She feels successful in a MOOC when she learns something new and valuable and defines completion as watching all of the videos and finding new resources that she can use. Anne did not complete the *Human Trafficking* MOOC, but she did watch the videos, read some of the instructional material, and did make a post in the discussion boards. She admitted to making the post because she knew I was observing the boards. Anne loves to learn and hopes to see MOOCs continue. Anne said, "I really love MOOCs, in general, and this one because there are people from all over the world. I get a perspective that I can't get just in Indiana or even reading a book by somebody." She even gave a presentation on free educational resources to a group at her local church and recommended that the group members sign up for MOOCs through Coursera. Anne has already enrolled in up to twenty MOOCs and plans to continue to enroll in MOOCs for enjoyment.

4.4.2.2 Blake

Blake is a 28-year-old Caucasian male in Utah with a bachelor's degree in music composition. He is currently working on a master's degree in divinity and works full-time as an office clerk at a credit repair attorney law firm. Blake is also in the National Guard. Blake has signed up for multiple MOOCs and often enrolls in more than one at a time. He has an interest in MOOCs that are focused on the social sciences because he finds the information coincides with his graduate studies and is useful for his work in the National Guard. He said, "I take the ones that have to do with psychology or sociology because those help a little bit with my work in divinity. So, it's mutually reinforcing."

Blake's sociology interest led him to the human trafficking course to gain a broader knowledge of the subject. He is very busy with work, school, and the National Guard and often listens to MOOC lecture videos while doing data entry at work. Blake works from 5 a.m. to 1:30 p.m. during the week and works on his graduate studies during the afternoons, evenings, and weekends. Blake fits his MOOC activities into his evenings and weekends at home, as time allows. Blake recommended that learners who are new to MOOCs start out with courses that highly interest them and not to take too many at one time. He completed the two quizzes in the *Human Trafficking* course, but he did not submit the public service announcement assignment or post to any discussions. Blake intended to complete the course, but he had other commitments that demanded his time. He said, "I ended up with some sketches [for the assignment], but I didn't complete it. At the time, I was doing an internship as well, so that ended up taking precedence."

Blake described taking a more solitary approach to participating in MOOCs. He typically does not read or participate in the discussion boards, but he often downloads and reads course materials, listen to the lecture videos, and take the quizzes, if time allows. Blake believes he is successful in a MOOC when he learns something new and develops new skills. He believes MOOC completion occurs when a learner completes all of the course requirements. When Blake earns a statement of accomplishment for completing a MOOC, it gives him a sense of satisfaction and fulfillment. He had not shared any of his MOOC certificates on his resume for future employers, as of the time of this study. Overall, Blake was pleased with his experience in the human trafficking MOOC—he noted that he was able to gain a new perspective on the issue. However, he believed the course could have been longer than four weeks. Blake plans to take more

MOOCs in the future and would like to see more universities offer a larger variety of courses.

4.4.2.3 Claudia

Claudia is a 31-year-old American Indian female with a bachelor's degree in gender as a form of expression and a master's degree in higher education administration. Claudia was born in El Salvador and raised in New York. In the past year, she joined the Peace Corps, a United States organization with goals to promote peace by helping other countries with basic human rights, needs, and developing community infrastructure. Claudia did not have the opportunity to study abroad during her undergraduate and graduate programs and decided to take this opportunity to travel and help in other parts of the world. Claudia's role in Moldova with the organization she's supporting is partially to help women in crisis, which can oftens include victims of human trafficking. Claudia learned more about the *Human Trafficking* MOOC through a Peace Corps Facebook post from a colleague. She explained that Peace Corps volunteers such as herself are often looking for professional development resources to utilize in their volunteer efforts. Claudia enrolled in the MOOC to gain deeper knowledge of trafficking and to find resources she may be able to share on a website she has been developing for the organization she was supporting. She said, "We help women in crisis and preventing potential victims of trafficking. So, it seemed like a course I wanted to try. I learned quite a bit, so it was good for me." This was Claudia's first time to take an online course. She said, "I think one of my hesitations [for taking an online course] was the lack of being in front of people and talking and having a conversation." Claudia participated in all four weeks of the MOOC and did not drop out. She spent time at her host home

(Figure 4.16) and job reading through most of the course materials each week, watching the videos, and reading and posting in the discussion forums. She described her photo as, "That's where I'm going to be living for the next two years, and it is actually her [the host's] living room. She converted her living room to my room, and she gave me a lock and everything, which is Peace Corps policy. I have what would be a small living room table…"



Figure 4.16 Claudia's desk in the dining room of her host family's home in Moldova Claudia was satisfied with her overall experience in the MOOC, but described the discussion forums as lacking that kind of back and forth, meaningful conversation that occurs in face-to-face courses. However, Claudia valued the opportunity to read the personal stories of human trafficking survivors. She found the stories motivational and

the discussion boards as a reminder of the complexities of humanity. Claudia did not have direct interaction with the instructor, but she was content to move through the course in a self-paced, self-directed fashion. She indicated that putting in the time to study and interact were important to being successful in a MOOC. Claudia earned the statement of accomplishment at the end of the course. She planned to include the accomplishment on her resume and said it would demonstrate her professional development, could serve as a conversation starter during an interview, and showed that she deeply valued having an awareness of social issues such as human trafficking.

4.4.2.4 Ed

Ed is a retired 70-year-old Caucasian male living in Thailand. He dropped out of high school and joined the army when he was 17 years old. He completed his general education diploma (GED) and bachelor's degree in systems management, during his time in the army. He spent much of his professional life as a computer programmer and computer consultant. Ed tried his hand at professional photography and then he applied for his volunteer visa and moved to Thailand to teach English to young children. When Ed was unsatisfied with the organization that he originally worked for in Thailand, he began looking for other volunteer opportunities in the country. Currently, Ed volunteers with a variety of organizations to help Burmese migrants along the Thai-Burma border. Ed described that there is a high rate of human trafficking along the border and that is why he was interested in learning more about trafficking prevention. He said, "There are a myriad of Burmese migrants on the Thai-Burma boarder that really need help. They're in positions where they're vulnerable to human trafficking, slavery, and all kinds of things. So, I started trying to find ways to help them." Ed had recently taken a MOOC

about meditation, based on a friend's recommendation, and then found out about the Human Trafficking course through Coursera's additional MOOC suggestions. Ed has a strong Internet connection in Thailand and enjoyed spending time in the morning at his home computer in his living room participating in the meditation MOOC. He was not able to fully participate in or complete the *Human Trafficking MOOC* because he became very busy with his volunteer activities and had to travel during the second week of the course. Ed was still able to download the course materials and planned to read them when he has more free time. He hoped the course would be offered again and contacted the instructor to find out. He said, "I couldn't find her email address, so I sent her a tweet. I hate tweets. I asked her if she was going to repeat the course, and she, at this point has no plans, but that could change." Ed is a firm believer in staying active in retirement, advocating for others, and volunteering. He plans on taking MOOCs that interest him in the future, but only when he has time to fully participate. Ed believes that MOOC enrollment would drop but completion rates would be higher if learners had to pay a fee. In his experience, Burmese migrants are less likely to participate in MOOCs due to their situation; they earn less than three dollars a day, often work 12 to 14 hours, and seldom have computer access.

4.4.2.5 Elizabeth

Elizabeth is a 30-year-old Caucasian female living in the Seattle area of Washington. She has a bachelor's degree in History/Political Science with a minor in World Literature. Elizabeth had a full-time career for several years after college and now works and volunteers part-time in order to stay home with her two-year-old son. Elizabeth and her husband are passionate about advocacy work and both volunteer their

time for various non-profits focused on social issues. It is through this work that Elizabeth became interested in efforts to prevent human trafficking. She said, "[human trafficking is something that has come up a lot in the area that I live in. Seattle is one of the largest human trafficking ports in the Unites States. So, just having that awareness, as well as the work we do with [a non-profit organization], it was a good match at the time for me to sign on and take it." Elizabeth signed up for the *Human Trafficking* course, after she had completed a MOOC about vaccinations. She was somewhat disappointed in the Human Trafficking MOOC because the content did not meet her expectations for learning more about the legal issues concerning trafficking. Elizabeth completed the quizzes, most of the readings, and posted in the discussion threads eight times. Elizabeth valued learning from the different accounts of trafficking described in the discussion boards and sees the potential of MOOCs as a global forum. She said, "I think that it's important to have dialogue with others because they bring their own perspectives into it." Elizabeth would typically sit down at her dining room table and log into the MOOC a couple of times each week after lunch, when her son would take his afternoon nap. Elizabeth would also watch the lecture videos while she did chores around the house such as loading the dishwasher and folding laundry. She defines success in a MOOC as covering the course material and learning something new. She is not focused on earning a letter grade or continuing education credits. Elizabeth views completion as meeting all of the course requirements outlined in the syllabus. She did complete the *Human* Trafficking MOOC and earned a statement of accomplishment. Elizabeth planned to keep the statement in her Coursera course records and could see showing it, as needed, in professional situations as proof of professional development. Elizabeth is ultimately

excited for the growth of MOOCs and sees their potential for becoming continuing education programs.

4.4.2.6 Isabella

Isabella is a 48-year-old Caucasian female living in Beijing, China. Isabella has two master's degrees in the humanities. She is originally from Italy and could be considered a global citizen. She has lived in Germany, India, and Japan due to her husband's career moves. While in India, she and her husband adopted a daughter. During their global moves and experience with international adoption, Isabella had become increasingly aware of human trafficking. Her awareness and wanting to learn more about the issue led her to enroll in the OSU Human Trafficking MOOC. Isabella is unable to work due to visa issues with the various countries in which she has lived. Therefore, she spends much of her time learning about the various countries' cultures and languages in which she is living, raising her daughter, and caring for their home. Isabella loves learning and has taken several MOOCs over the past year. She usually takes up to four different MOOCs through the Coursera platform at one time. Isabella described when she first found MOOCs, "When we were in Germany, by chance, one day I was reading an article. I found the Coursera link, and out of curiosity, I began to search and have never left the website. I find the idea and the concept behind it amazing, and I hope that it's just the beginning." When Isabella and her family first moved to China at the time of this study, they had to wait more than a month for their container of belongings to arrive. However, she had her laptop and Internet access and was happy to continue connecting to MOOCs during the time of transition. Isabella spends a couple of hours each morning and evening watching lecture videos, reading course materials, and

observing discussion boards. Isabella and her family do not own a television, and she prefers to spend her free time learning (Figure 4.17). She said, "It's a choice that we live without television. So, in the evening, I always have time for reading. It's like a hobby, basically."



Figure 4.17 Isabella's bedroom in China where she often participated in the MOOC She enjoys being self-directed in her MOOC education and does not necessarily feel the need to connect with the instructors and classmates, unless she is particularly passionate about a topic or discussion thread. She said, "Such courses give an opportunity, but then, it's up to each student to make the best out of it." Isabella values factual MOOC discussions from a variety of global perspectives. She completed the *Human Trafficking*

quizzes and assignments to earn a statement of accomplishment. Isabella posted one time in the discussion threads, when she needed technical support because she was not able to view the lecture videos due to firewall issues in China. Isabella views MOOC success as completing a course and expanding knowledge on a topic of interest. Isabella enjoyed her overall experience in the *Human Trafficking* MOOC, but she thought the quizzes were too easy. Isabella maintains her statements of accomplishment on her Coursera records page but does not feel the need to add them to her resume at this time. She views MOOC completion as personally enriching and plans to continue to take multiple MOOCs at one time. Isabella hopes that Coursera continues to offer MOOCs well into the future and is very passionate about having global access to education.

4.4.2.7 Joseph

Joseph is a 29-year-old Caucasian male with a bachelor's degree in computer networking. At the time of this study, Joseph was in a state of transition. He had just ended his job in Michigan and was preparing to move overseas to the Philippines to help lead men's bible studies and youth ministries. He said, "I just left my job this week and started to pack up my room, and everything is very chaotic." Joseph found out about the class by doing an Internet search for human trafficking. His awareness of trafficking was raised in his previous international travels and he wanted to expand his knowledge on the subject. Joseph said, "I've leaved a lot about human trafficking over the last few years, and it's something that I want to actually get involved with preventing and helping those who have been trafficked." The OSU *Human Trafficking* course was Joseph's first MOOC. He did not realize there were more than 30,000 students enrolled in the course.

discussion forums. He found the most difficult part of participating was making time for the course each week. After working 10-hour shifts at his job during the week, he was too worn out to participate in the MOOC in the evenings. He found himself spending time on Sunday afternoons and evenings watching the videos and reading. Joseph said, "I had to force myself to sit down in front of the computer whenever I could and just do what I can to learn what I needed to learn, watch the videos and everything. It was more of just making that time." Joseph was satisfied with his overall experience in the course, but he wished there had been more and lengthier videos from the professor and more structure and direction to the course. He defined MOOC success as completing all of the course requirements outlined in the syllabus and earning the statement of accomplishment. Joseph was not quite sure what he would do with his statement of accomplishment other than print it out and file it away in his portfolio with his college diploma.

4.4.2.8 Lynn

Lynn is a 26-year-old Caucasian female living in a city in central Indiana. She has a bachelor's degree in sociology and recently started a new position with an immigrant and refugee service corps. She was on the first day of the job at the time of the interview for this study. Lynn had taken several MOOCs over the past nine months and learned about the *Human Trafficking* course when it popped up in her Coursera suggested course list. She had an interest in the course based on her prior volunteer work with a group of bike riders who traveled to different churches and community groups for a human trafficking educational program. She signed up for the course to expand her knowledge on the subject. Lynn enjoys taking MOOCs to learn new things and to

interact with people from all over the world who are interested in similar topics. She usually logs into her MOOCs in the evenings, as her schedule allows, and mostly on Saturdays. Lynn lives in a community house, and she goes to her bedroom for a quiet study space to focus on her coursework. She completed *Human Trafficking* and earned a statement of accomplishment. Lynn spent time reading through her fellow learners' discussion posts and made one post. She likes to read the posts of those who are more knowledgeable than her in a subject and only comments when she feels like she has something valuable to contribute. Lynn said, "I only posted once or twice, and it was a response to another person's initial comment, and just sharing personal experience as far as what we see in our own communities, and things like that." Lynn described that even though there have been thousands of learners in the MOOCs she has taken, she does not necessarily notice the massive size. She explained, "Even if you are doing your peer review or something, you're only reviewing five or six other people. So, it kind of really seems rather small and like it's just for you." Lynn defines success in a MOOC as mastering the content and completing it. She earned a statement of accomplishment for Human Trafficking; she usually prints out her certificates and puts them in a folder. Lynn was satisfied with her overall experience in the MOOC, but thought the lecture videos were too short. Lynn loves to take MOOCs on topics she is passionate about and that provide a deeper understanding of what is going on in the world. She enjoys learning and feels a sense of pride when she completes a MOOC.

4.4.2.9 Mimi

Mimi is a 27-year-old Ethiopian American female living in New Jersey. She has bachelor's degrees in sociology and psychology and works in the corporate social

responsibility department for a nationally known company that manufactures health and infant-related consumer goods. Mimi also is the co-founder of a non-profit organization aimed at preventing human trafficking in her state. She learned about human trafficking while studying abroad in Spain during her undergraduate degree program. Mimi's nonprofit organization is focused on helping human trafficking victims, as well as educating others about human trafficking through works of art. She found out about the OSU Human Trafficking MOOC through a friend who was already taking Coursera courses. Mimi immediately signed up and shared a link to the course on her social media sites to encourage others to do the same. Mimi said, "I remember posting an Instagram post like, 'You complain about not having free education. This is an amazing opportunity for you to learn about something. It's a plethora of different types of courses that are offered so there's no way that you can remain ignorant about something." She has been considering whether or not she should go to graduate school to pursue a master's degree and viewed the MOOC as an opportunity to refresh her study skills and determine if she were truly interested in returning to school. Mimi described, "I have my bachelor's, and I am considering more schooling. I think for me right now the pressure of a regular master's program, as in the regular two-year program, is too much. So, I'm figuring that out." Mimi completed all of the quizzes and assignments, read through some of the course content and discussion, and posted six times in the discussion threads. She also established a relationship with the instructor through email, and the instructor shared a link to a public service announcement developed by video professionals for Mimi's nonprofit organization within the course materials during the fourth week of the MOOC. Mimi had a deep appreciation for the free access to an online course that connected her

with others with different perspectives from around the world. However, she became very busy with work demands and traveling and realized that if she decides to pursue graduate school she will have to do it during times when she is less busy with her career and non-profit work. Overall, she enjoyed her experience in the MOOC and cherished the interactions she had with other learners and the instructor. However, Mimi did miss the personalized nature of directly connecting with others in a face-to-face class. She said, "To be honest, I'm not an online person. I'm not an online class learner because I like the classroom, the physical engagement." Mimi defines success in a MOOC as meeting individual goals. She felt that she was successful in accomplishing her goals of refreshing her study skills and learning new information on human trafficking that she could share with her non-profit teammates. Mimi views MOOC completion as meeting all of the course requirements. She earned the *Human Trafficking* statement of accomplishment and planned to share it on her resume to demonstrate professional development. Mimi is interested in taking more MOOCs during seasons when she is not too busy with work and her other volunteer efforts.

4.4.2.10 Regina

Regina is a 50-year-old Caucasian female living in southern Indiana. She is a wife, mother, and world history and economics teacher at an alternative high school. Regina recently completed a master's degree program in Liberal Arts. At the time of this study, Regina stated she had completed seven or eight MOOCs and that after completing her master's degree, MOOCs filled the time in her day that previously had been devoted to completing her degree coursework. She typically signs up for MOOCs that involve subject matter she can bring into her classroom. Regina was interested in the *Human*

Trafficking MOOC because she wanted to learn more about it and to locate resources she could use in her own classroom. Regina wanted her students to know that modern day slavery exists even though it is not usually covered in traditional history textbooks. As Regina is busy teaching during the day and grading and doing homework with her daughter during the afternoons, she has time for MOOCs mostly in the evening before going to bed. She has a private upstairs, attic-like room where she watches the lecture videos and reads. Regina said:

I tried to look at the material on a daily basis. Usually, it's right before my bed time, when I've got the house quiet, and I can sit and either take notes or reflect on what it is I'm looking at. The particular subject matter of this one, I wanted to be really careful not to be doing any of it in front of my daughter because she's 10. So, this is something that I don't want her to know a lot of details about at this time.

Regina read several of the discussion threads in the *Human Trafficking* MOOC.

However, she was somewhat guarded and almost skeptical of the posts from the MOOC participants who described themselves as trafficking victims. Regina appreciates it when her fellow MOOC learners support their posts with credible citations and sources.

Regina said she feels successful in a MOOC when she learns new information and expands her knowledge. She completed the *Human Trafficking* MOOC and earned the statement of accomplishment. She prints out her statements of accomplishment from MOOCs, frames them, and puts them on the wall in her classroom as an example for her students of lifelong learning. She recommends that learners who are new to MOOCs act as though they are in a real class and take it seriously. Regina was satisfied with her experience in the *Human Trafficking* MOOC, and described learning how to identify protective factors in her community to prevent human trafficking and how to notice signs

of trafficking in her students. By the end of the trafficking course, Regina was already taking two more MOOCs. She hopes to see MOOC developers create and deliver better lesson plans that include longer lecture videos, clearer peer-review grading criteria, and even more resources within the environments for more effective learning in the future.

4.4.2.11 Sean

Sean is a 28-year-old Caucasian male working on his doctoral degree in biological anthropology at a university in Pennsylvania. He also has bachelor's degrees in Spanish and anthropology and a master's degree in anthropology. Sean took a MOOC about epidemics from his university last year and really liked it. He enjoyed learning with and from other learners all over the world. Sean admitted to signing up for more MOOCs than he actually had time to complete because he has so many interests. The OSU *Human Trafficking* MOOC caught his eye on Coursera's website. He had an awareness of human trafficking from the 2010 movie, *The Whistleblower*, about a United Nations peacekeeper who discovered a sex trafficking ring. Sean also sees MOOCs as a way to supplement his graduate education and believed the topic of human trafficking was closely tied to his efforts to earn a graduate certificate in public health and a doctoral degree in anthropology. Sean completed the quizzes in the human trafficking course, but was unable to finish the public service announcement assignment. He did not post in the discussion board due to time constraints. He explained:

I would watch all the videos on the weekend, and then, if there was any homework, I would also try to do that on the weekend. Basically, I did the MOOC on the weekend. I did everything affiliated with participating fully, except for the final PSA project. I just ran out of time and got too busy with real school (laughs).

At the time of the MOOC, in addition to his doctoral courses, Sean also worked part time in a lab and had an internship. He watched the lecture videos and read through some of the course content and discussion boards. Sean tended to download the video lectures and listen to them on his iPod while he worked in a campus biology lab. He also logged into the MOOC on his laptop in his home office in the evenings and on the weekends (Figure 4.18).



Figure 4.18 Sean's home office where he participated in the MOOC

Sean believes MOOC success and completion are tied to each individual's expectations and goals. His goal for *Human Trafficking* was to learn more about the topic due to his personal interest. Therefore, he felt successful in meeting his goal. He was satisfied with his overall experience in the course, but he did not feel like he advanced his knowledge of human trafficking very much. Sean sees the value of earning a statement of accomplishment from a MOOC. He earned one from the epidemics MOOC and included

it on his curriculum vitae (CV). Sean questioned the value of a statement of accomplishment. He asked, "How much effort or merit do you hold in having that digital certificate of completion?" Sean would like to see MOOC certificates become a respected section on CVs for faculty members, similar to research, publications, and teaching. Sean had already moved on to taking another MOOC at the close of the human trafficking course and would like to see MOOCs continue in the future.

4.4.2.12 Torrence

Torrence is a 25-year-old multi-racial male living in Michigan. He has a bachelor's degree in criminal justice. He has a full-time job as a loss prevention manager for a major retail store and is the father of a four-year-old daughter who recently started kindergarten. Torrence found out about the *Human Trafficking* MOOC from Coursera's suggested course list. He had previously signed up for multiple MOOCs but did not have the time to complete any of them. He would typically go to a coffee shop or somewhere quiet away from home to log into the courses a couple of times week. Torrence is interested in MOOCs that fit his educational background in criminal justice and found the human trafficking course to be a natural fit. He discussed, "I do want to go back to grad school, eventually. It's just that money and time at the current time aren't feasible. So, I was looking for an option. Human trafficking kind of fits into my background and educational aspirations." He had intended to complete the MOOC, but life circumstances got in the way. A powerful storm hit Michigan during the second week of the course, and Torrence lost power and Internet access at his home for several days. A tree also fell on a rental house he owns in another Michigan town, and he had to do some travelling to attend to the property. Before the storm hit, Torrence had made one post in the Human

Trafficking discussion board and had completed some of the course reading. Ultimately, he had to un-enroll in the MOOC. Torrence is interested in pursuing a master's degree in the next couple of years and has been considering his options as to areas to study and which graduate schools would be a good match for him. He sees MOOCs as a way to continue his education and to begin to narrow down what he wants to study in a graduate program. Figure 4.20 shows a coffee shop where Torrence typically logged into the MOOCs in which he was participating. He finds locations such as coffee shops more peaceful than trying to study at home. Torrence explained, "There's a lot of foot traffic in and out of the house. We all work. So it's very hard to be productive when you have that many bodies in and out all the time."

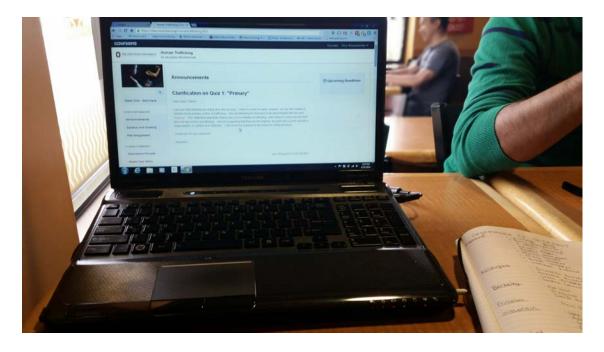


Figure 4.19 Coffee shop where Torrence typically studies

By the end of the human trafficking MOOC, Torrence had already enrolled in another MOOC on violence and was completing the requirements to earn a statement of

accomplishment for the first time. He defines MOOC success as gaining a deeper understanding of the content and completing the course requirements. Torrence said:

When I do it [take a MOOC], I intend to do it well. If I messed up one question on a quiz, and I knew the answer, I still went back and retook the quiz later. I think it's important to do well in terms of making sure I know the knowledge behind it and not just saying, 'Oh, I took this class here, so I have some base knowledge.' But, actually understanding the content.

Torrence was not sure what he would do with a statement of accomplishment, but he believes earning the statement gives him more credibility to speak about a topic.

Torrence is interested in taking more MOOCs, as his schedule allows. He specifically hopes to see more humanities-based MOOCs offered in the future.

4.4.3 Commonalities Across Adult Learner MOOC Experiences

I conducted Skype interviews with each informant within ten days after the end of the *Human Trafficking* MOOC. The interviews were recorded and transcribed, with informants giving varying levels of consent for sharing the video recordings in research presentation settings (see Table 4.2). The interviews occurred at all times of the day, as the informants were all over the world. For instance, when Isabella and I skyped, it was 9 a.m. Eastern Standard Time for me and 9 p.m. in Beijing for her (Figure 4.20).



Figure 4.20 Screen capture of Skype interview with Isabella

I followed open and axial coding procedures, as well as discourse analysis for examining the interviews. I also triangulated findings from the interviews with my observations of informant activities in the MOOC along with informants' photos and day-in-the-life schedules. This section presents the commonalities that I found across informants' MOOC experiences including themes related to: (1) Well-educated global lifelong learners, (2) MOOCing around the clock—Multi-tasking in personal and public spaces at all times, (3) Social justice education for volunteerism, and (4) MOOC analogies for accessible on-demand education.

4.4.3.1 Theme 1: Well-educated global lifelong learners

Eight of the informants who completed this research study had bachelor's degrees. Four of the informants had master's degrees. This is consistent with Coursera data for the entire *Human Trafficking* enrollment, as 69% of enrolled learners reported having a

bachelor's degree or higher. The informants in this study were adult learners from all over the world including the United States, China, Moldova, and Thailand. This is also consistent with Coursera data that showed enrollees in *Human Trafficking* came from 187 different countries. Several of the informants, such as Isabella (e.g., an Italian who has lived in multiple countries), could be considered 'global citizens.'

I also found that some MOOC learners were living in a state of transit while the course was in session. For instance, Lynn shared that she had just moved to begin a new job: "I just started today a new position, and I'm (laughs)... these last few weeks have been crazy, but I'm an AmeriCorp member, and I've been serving with the immigrant and refugee service corps. And, I just moved to my host site location today." Joseph was in the midst of leaving his job and home in Michigan to work with a ministry in the Philippines. Joseph described, "I just left my job this week, and started to pack up the room, and everything is very chaotic! (laughs)." Claudia was in the early stages of adjusting to life in Moldova, as a Peace Corps volunteer. Mimi was traveling for work and reserved a conference room in her New York City hotel for the Skype interview with me. Isabella and her family had just moved to China, and they were still waiting for most of their belongings to arrive. She said:

I'm so lucky, Jamie, that I need my connection and my computer, and it doesn't matter where I am, even here at home with nothing. And right now, I mean, it's the eighth day (without our belongings), and I'm not happy with that. And today, I was on the phone with the relocation company and asking when does it come, when are they going to release our container? But, it's amazing that I'm here, and I don't need anything. I just need my computer, an Internet connection, and it works.

Many of the informants also shared a common appreciation for lifelong learning.

Ed, a 70-year-old man living in Thailand, contacted me directly to participate in my

research, even though his age placed him outside my original demographic criteria. He said, "If working means being involved and all that, I'm retired. But, I'm very busy, and I'm very busy because I firmly believe that people who retire and go sit on the porch, die quickly. And, there's things I haven't seen and done yet, that I'm not ready to go." Mimi also expressed a passion for reading, writing, and continued learning. She found it exciting to be a part of a class, again. She had not participated in a formalized class environment since her undergraduate degree:

...I've been out of school for four years now, right? So, and I like to learn. I like to read, but there was something about saying that I have a class. There's something about the experience of logging in, looking at that dashboard again. I hadn't seen a dashboard since undergrad. So, something about all of that really excited me. I really enjoyed that and...there was an excitement about even having to stay up late for homework.

Regina, an alternative high school teacher, described the importance of being a role model of lifelong learning for her students. She posts her Coursera statements of accomplishment in her classroom as an example of lifelong learning for her students.

Overall, the theme, 'well-educated global lifelong learners,' emerged from post-interviews with informants, as well as observations of their MOOC activities. Informants held higher education degrees and lived all over the globe. Some of them were even in the process of moving from one country to another during this study. There was a sense that the well-educated informants valued education and the opportunity to continue their learning for a lifetime.

4.4.3.2 Theme 2: MOOCing around the clock—Multi-tasking in personal and public spaces at all times

Data from the informant-created 'day-in-the-life' schedules and photos, my observations, and post-interviews reinforced that the MOOC environment is an asynchronous one with global learners participating at all times of the day, as their schedules allow. Each informant cautioned me that his or her days were not typical and that they fluctuated based on work, home, volunteerism, and school priorities. The interviews and photos portrayed MOOC learning as occurring predominantly in personal spaces, during times such as early mornings, lunch hours, evenings, and weekends. As an example, Appendix L is the schedule Fernando sent to demonstrate a day in his life in Guatamala City, and Figures 4.21 and 4.22 show the two photos Fernando sent to illustrate where he would typically log into a MOOC: his dining room table and the workbench in his garage.



Figure 4.21 Fernando's laptop on his dining room table in Guatemala City



Figure 4.22 Fernando's laptop on his workbench in Guatemala City

While Fernando did not complete the research interview, he indicated, via email, that his daily schedule fluctuated, but he generally tried to spend time in the mornings and evenings logging into MOOCs and reading the latest news reports. Anne's schedule and the photo of her laptop on top of her exercise bike at home (presented in her narrative) also depicted learning around the clock in personal spaces, much like Fernando.

Elizabeth, a stay-home-mom and part-time employee in Washington, described multi-tasking as a strategy for keeping up with MOOCs. She said, "You know, I've got a two year old, so he naps on a daily basis still. Gives me some time to get work done."

She described logging onto her laptop at her dining room table a few times a week, while

her son napped. Elizabeth would sometimes watch MOOC videos, while completing household chores, "Sometimes, if it's a longer video, this one did not have long videos, if it's a course with a longer video, I'll fold laundry or empty the dishwasher or something, while I'm watching. But, pretty much just sit[ting] at my dining room table, I watch videos. I do have Coursera on my phone. They do have an app."

Sean, a full-time doctoral student with a part-time job, also described multitasking as a strategy. He said:

I would get on at night during the week, but for the most part, it was on the weekends - Saturday or Sunday morning, as I'm drinking coffee and like catching up on emails, you know. So, that's when I would mostly do it. Also, when I'm doing lab work. Something that was kind of fun was that I could have my, it was a Coursera app, which I recently discovered, and I would have that on my smartphone, and have the course videos playing with my headphones on, as I was in the lab. So, that was also kind of nice.

Blake talked about an experience similar to Sean's. Blake worked full-time, went to school part-time, and would find ways to fit MOOCs into his days. He described:

Well, with the videos, it's really easy. I download them, and I listen to them while I'm at work. Since pretty much all my work involves just data entry, it makes it really easy. That helps the time go by a lot quicker, and it saves me a lot of time because then I don't have to watch the videos later on, you know, on my own time. As far as the readings go, I do those when I get home, just before I take the tests.

Through their submitted daily schedules and the post-interviews, it became very clear that informants in this study had very busy lives and found ways to fit MOOCs into their schedules at all hours of the day in locations that were both personal, such as their homes, and public, such as coffee shops. Informants included MOOCs in their schedules, as time allowed, and when other life priorities were less demanding.

4.4.3.3 Theme 3: MOOCs for social justice awareness, advocacy, and volunteerism/professional development

Six of the informants described connections to volunteerism and professional efforts to prevent human trafficking and were seeking to learn more about this as a global issue. Each of the six either volunteered or served in advisory and development roles for non-profits or other organizations at local, state, national, and international levels for human trafficking prevention and education. These informants learned about the *Human Trafficking* MOOC in a number of different ways. Claudia, a Peace Corps volunteer living and working in Moldova, explained how one of her friends in the organization shared a link to the MOOC through their Facebook group. Claudia said, "This was information that I thought would be good for my organization. We help women in crisis, and like, preventing potential victims of trafficking. So, it seemed like a course that I wanted to try."

Outside of her full-time job, Mimi founded a non-profit organization in her state. She said, "...the reason why I took this MOOC course is because, um, my good friend and I have an organization that brings awareness to sex trafficking in the United States. So, having this opportunity to even delve a little deeper to understand the global dynamic of it, um, and I do a lot with just women empowerment...." Ed said a friend first pointed him to a Coursera MOOC on mediation, but then, Coursera included *Human Trafficking* in its follow-up suggestions for courses Ed might like. Ed said trafficking is prevalent in Thailand and he volunteers to help in a variety of ways:

There are a myriad of Burmese migrants on the Thai-Burma border that are really—they need help. They're in positions where they're vulnerable to human trafficking, to slavery, to all kinds of things. So, I started trying to find ways to

help them. My latest analysis of that is, as a one-man-band, I can't do much. But, you know, if everybody lights a candle (laughs), it's a pretty bright beach (laughs).

Joseph found out about the MOOC through an online search for human trafficking education programs. He was looking to learn more about trafficking, before he left for his new work in the Philippines: "I know the location I'm going to is one of the highest parts in the country with trafficking. I won't be in Cebu City, directly. I'll be just outside in the suburbs, but we will be working with those who are at risk of being trafficked."

Through my researcher-as-informant experience in the *Human Trafficking* course, I noted the MOOC was somewhat unique in that it focused on advocacy around a social issue. I observed the instructor's passion for the topic, and noted that the instructional design of the course incorporated advocacy materials. In addition, the discussion board spurred a global conversation about trafficking among survivors, general learners, and social workers. Based on these observations, I incorporated a question into the interview protocol that asked the informants about their thoughts on utilizing MOOC platforms for advocacy around social justice issues. All twelve of the interview informants responded favorably to the idea of using MOOCs to increase awareness of and education about social justice issues.

Elizabeth and her husband serve on an advisory board for a non-profit organization with efforts aimed at human trafficking prevention. She discussed how she could see the benefits of using MOOCs for raising awareness and professional development in areas of social justice:

Thirty thousand people—that's a lot of people that care about learning more about a topic like this, either because they have careers that are in those fields, because

they have experiences with it themselves, whether they're people like me that are lay people that just want to understand it better, in terms of volunteering and advocacy. That's a huge number of people who really care about this topic. And, I think that there's so much value in that, in bringing a huge group of people together that are all going to sit together and say, 'We want to stand up for this.'

Sean wondered whether MOOCs for social justice would only be advocating to learners who already care about the issue. He said, "...I guess the people that are taking it are self-selecting, and so, they might be people that already know a little bit about human trafficking." Claudia stressed that it is important for the instructor in a social justice MOOC to present the issue in a factual way and for learners to respect one another's views:

...I guess it can get complicated when people don't, particularly, might not agree with what's actually being taught, but I think around the world most people would agree that human trafficking is not okay. But, if it was like, maybe, LGBT [lesbian, gay, bi-sexual, transsexual] issues, maybe other countries would just be like, "Why? There's other bigger issues out there."

To summarize, the majority of the informants in this study had ties and interests in anti-trafficking efforts. Their connection to the subject matter and passion for preventing human trafficking led many of them to the MOOC. The informants described that MOOCs have the potential to open up global discussions about critical social justice issues and that MOOCs could be used as a platform for advocacy and volunteerism development.

4.4.3.4 Theme 4: MOOC analogies for accessible on-demand education

Discourse analysis of the interviews showed that many informants had developed analogies to explain their views of MOOCs as free, on-demand education. Isabella compared MOOCs to libraries, "I was thinking, and how I, for example, choose the

courses, and it's basically the same approach I would have if I were in a library, walking among shelves, and I would just pick the book that I say, 'Okay, I think I am interested in it.' It's the same approach." Anne also presented the 'MOOCs as library' analogy: "To me, it's like a library. You have all these things you can choose from, and you don't have to commit. So, you can try it and see if you like it or not."

Sean described MOOCs as similar to on-demand video streaming services, "It's like signing up for a Netflix queue, where you're like, 'This one, and then, I'll watch this one, and then, I'll watch this one.' And, you just don't have time for it all! (laughs)" Ed equated MOOCs to buffets in Thailand: "It's like a buffet on a timeline. Over here, we have buffets on conveyer belts, and you sit at this place. It's almost like a sushi bar. You sit there, and the food comes by you. Okay? So, it's a matter of what are you in the mood for and how's the timing?"

Results of discourse analysis also showed that several of the informants described MOOCs mostly in terms of reading, watching, and entertainment. Anne said, "It's a hobby, so I really enjoy *putting a class on* and learning something." Blake and Sean also described listening to MOOC video lectures on their iPods, as they did other tasks at work. Isabella shared that her family does not own a television. She watches MOOC videos, reads course materials, and views discussion threads during her free time, instead of watching television.

4.4.4 Differences Across Adult Learner Experiences

While there were some similarities across informants' experiences, there were also some differences. This section presents the differences that emerged across the adult learners' MOOC experiences, including: Levels of prior knowledge, Different ages—

Different stages, Learning for development vs. enjoyment, Social vs. solitary learning approaches, and Trust vs. skepticism of MOOC identities.

4.4.4.1 Theme 1: Levels of prior knowledge

The adult learners in this study had different levels of prior knowledge regarding human trafficking. As described earlier, some of the informants had extensive backgrounds and connections to the topic through their volunteer efforts and professions. Therefore, some of the learners had high levels of prior knowledge. Meanwhile, other informants had only a general awareness of human trafficking issues and wanted to learn more.

Lynn and Joseph are examples of learners with prior knowledge of the subject matter. Lynn had previous experience sharing human trafficking information with others through an informal community education program where she traveled with fellow volunteer educators who biked from place to place. She described, "I was a driver for a bike ride that we talked to different churches and community groups for a week about human trafficking, and so, I just wanted to be better educated." Joseph had first-hand knowledge of the subject matter through his international travel and volunteer experiences. He said, "I've dealt with human trafficking. I've learned about human trafficking over the last few years, and it's something that I want to actually get involved with preventing and helping those who have been trafficked." His background with trafficking also appeared in the development of his PSA assignment for the course. His assignment included a photo and message from his experiences (Figure 4.23).



Figure 4.23 Joseph's PSA Assignment connected to prior knowledge Joseph described his PSA assignment as connected to his prior knowledge:

I created a poster that I would feel would best serve in international airports or any of the international hubs that they have around the world, of a little girl who was begging on the street. I had seen the girl personally, when I was in the Philippines last. ...I covered the aspect of forced begging and how, you know, if they go home without their quota, they're beaten, they starve, they don't have water, and eventually, as they get older, they'll be sold into the sex trade.

On the other end of the spectrum, some of the informants described themselves as having less experience and only a general awareness of human trafficking. Blake explained that he hoped the MOOC could help him deepen his knowledge on the issue so that he may apply his learning to his work with the National Guard. He said, "I was hoping to get kind of a broader idea of how it happens in our society. Like, you think: 'U.S.—free country, no slavery,' but that's not really true. And so, I was really interested in finding out: How does this happen? Why does this happen? What can be done about it?" Sean connected his prior knowledge and awareness of trafficking to his brief exposure to

the topic, as it was depicted in a popular movie. He described, "...I saw the movie with the woman from The Mummy (laughs). It was about human trafficking, and I really liked it. And, I was taken aback by the reality of human trafficking, and so, this course also appealed to me because of that, too." As shown by this theme, the informants represented different levels of prior knowledge, from a high level of familiarity with the topic through professional and volunteerism experience to only a general awareness of human trafficking, with the hope that the MOOC would deepen their knowledge on the subject.

4.4.4.2 Theme 2: Different ages—Different stages

The ages of the informants in this study ranged from 25 to 70 years old. Across this span of 45 years, the informants described themselves as being at different life and learning stages. Each learner had a bachelor's degree or higher and described lifelong learning interests, yet there were still differences in their timelines and goals. Some of the informants were searching for and planning the next steps along their educational paths, while other informants were already pursuing an advanced degree.

Mimi, Anne, and Torrence all turned to *Human Trafficking* to help them to decide their future education plans. For example, Mimi explained she was considering pursuing a master's degree, and she hoped the MOOC would help her determine if she was ready to take on another degree program. She said:

I have my bachelor's, and I am considering more schooling. I think for me right now is the pressure of the regular master's program, so I'm figuring that out, and I think these past about four years, five years, have really helped me see what I want to hone my skills in because I think the pressure of just coming out of undergrad and going to grad school with like your parents are like, 'Are you going to grad school?' (laughs) And for me, it's just like, 'Well, I don't know

what I want to do my grad school in. I don't want to spend money just for the sake of spending money.'

Torrence was in a similar situation and also considering graduate school. He explained:

I ... kind of went back and forth on whether or not to stick with the criminal justice field or go into something else. I definitely want to stay within either the criminal justice realm or the sociology realm. Haven't really broken it down any further. Before, I wanted to go for like a law enforcement administration type degree, but I don't know if I want to stay in that realm or kind of make myself a little bit more marketable with having a graduate degree in sociology and maybe study something a little more, a little more specific, I guess.

Anne was also at the crossroads of potentially making another life/career transition and had hoped the MOOC would help her find ways to join the anti-slavery movement. She explained her circumstances:

When I'm done homeschooling, then I'm trying to figure out what I'm going to do with my time. And, I would really, if I could find some way, I don't really have marketable skills (laughs). But, I would really like to work, or volunteer, or do something somewhere in the anti-slavery movement. So, um, so that's why I signed up for this class.

At the time of this study, Sean and Blake were already pursuing advanced degrees. Sean was in his second year in a biological anthropology doctoral program. Sean viewed the *Human Trafficking* MOOC as expanding his learning beyond his structured doctoral degree program. He said, "I'm getting a grad certificate in public health with my anthropology PhD, so I thought that was a nice segue. And also, it was not as directly related to my stuff, my current research. So, it was a nice break, almost, kind of fun." Blake was in his second year of a master's of divinity degree program. Blake described how MOOCs support his master's degree work; "I take the ones that have to do with psychology or sociology because those help a little bit with my work in divinity. So, it's kind of, it's mutually reinforcing." The differences in informants' ages (25–70 years old)

and educational stages (graduates, current students, and considering graduate school) emerged as a theme as informants described how their current stages in life and educational paths influenced their MOOC goals and experiences.

4.4.4.3 Theme 3: Learning for development vs. enjoyment

While some of the informants enrolled in the MOOC to deepen their understanding of human trafficking and to gain information they could share within their volunteer organizations and professions, others stated that they took the MOOC for their own personal interest and enjoyment. An example of this is illustrated by a comparison between the experiences of Claudia and Lynn. As previously discussed, Claudia was a Peace Corps volunteer in Moldova and enrolled in the MOOC to learn more about human trafficking so that she could better help with her organization's women's shelter. Claudia described how she was able to leverage resources that the MOOC instructor provided to support her work:

It definitely gave me the resources, and I do plan on using them for building the website for my organization, right now. The current website is not very...it's informative, but it looks very basic. So, what I want to do is improve the website, and I'm going to add a resource list and resource page where I want to use a log of the links to all these studies and things that are out there.

Lynn was not necessarily looking for professional development, continuing education, or professional resources. Instead, she shared with me that she takes MOOCs in her free time for fun and that she does not want MOOCs to add stress to her life:

There's only been one [MOOC] that I did not finish. I turned in my first assignment, and the MOOC was called *How to Change the World*. Which I thought was great, but I turned in my first assignment, and one of the peer reviews was just absolutely so harsh that I decided: 'Oh, this is going to be way more stressful. You know, I'm taking this for fun and to learn. And, I don't need

something that's going to add a whole lot of stress because I'm so nervous about how my peers are going to review me.'

Anne had a perspective similar to Lynn's and viewed MOOCs as a fun hobby. She said her purpose is to learn something new and not to earn statements of accomplishment: "I like having the extra resources, so I can go read some books or look up what else that guy they interviewed has done or something. I like having the kind of, if you want to learn more, here's that. But, I don't push myself. I don't stress out over it." Ed talked about how he finds the social science MOOCs interesting and that he would never take a course that is not enjoyable for him. He said, "I have no idea what the perfect MOOC would be. I guarantee it's not going to be Calculus (laughs)! Yeah, they've got a calculus course with an opening start date, and I'm like, 'Yeah, okay (laughs)!"

There was a difference in informants' purposes for enrolling in *Human Trafficking*. Some informants viewed the MOOC as a means to gain professional development for their work and volunteerism efforts with anti-trafficking organizations. In contrast, some informants described participating in MOOCs as more of a hobby and for enjoyment. Informants pursuing MOOCs for enjoyment chose not to invest much time in courses that added stress to their lives.

4.4.4.4 Theme 4: Social vs. solitary learning approaches

Learners in *Human Trafficking* were not required to participate in the discussion board. There were no points tied to either quantity or quality of discussion posts.

However, the instructor posted discussion questions for both the general and social worker tracks each week, and learners could choose to participate or not. As shown earlier in Table 4.2, informants in this study had various levels of engagement in the

discussion boards. Blake, Ed, and Sean did not post at all, while Claudia posted 23 times, and Lauren contributed 26. Anne posted one time, but she admitted that it was because she knew I was observing her. The remaining informants posted an average of six times. During the post-interviews, I asked the informants about their approaches to MOOC participation. The two different approaches (i.e., social vs. solitary) emerged from the interviews and were supported by my observations of discussion board activity.

Informants that fell more on the more social end of the MOOC engagement spectrum, described excitement and appreciation for connecting with other learners on a global scale. Claudia shared that she appreciated the diversity of learners' comments, "I would post something that interested me. If someone said something that I hadn't thought about, and I thought it was a unique perspective, like it had escaped my mind, like I will write and say like, 'Oh wow, I had never thought about it that way." She is multi-lingual and also engaged with Spanish speaking learners, as seen in Figure 4.24.



Hola a todos.

No soy mexicana, pero he visitado muchas veces. Soy salvadoreña y crecí en NY. Pero como dice Beda, la corrupción en nuestros países existe. Y que la pobreza y otros problemas siempre da paso a la vulnerabilidad de comunidades.... y que aunque hagan leyes, quiero señalar que si hay un comercio establecido que mantiene demanda- infortunadamente puede continuar el trafico de personas. Y si, la educación sobre el tema es clave... preso este es un tema social y aunque se discuta en familia- afecta a todo mundo... Muchas personas caen víctima de esta situaciones porque no tienen una conciencia social (por falta de education, porque en realidad no saben... y es ignorante de la realidad). No creo que es un tema que se debe discutir solo en la privacidad de nuestras casas... mis padres nunca me han hablado de este tema... les he pregunta a mis tias en El Salvador y ellas no tienen ni idea de como sucede el trafico de personas. La conciencia social es super importante para combatir este problema- a la mano con mejores oportunidades de trabajo, educación, etc. Felipe creo que comento algo similar sobre el tema.

Figure 4.24 Claudia's Spanish language discussion post

Claudia said:

I was always attracted to the Spanish-speaker ones, as well, because I wanted to see what the conversation was like and what was going on, and it was mostly about Latin American countries and what's happening there. So, I responded in my Spanish, my Spanish is not as great (laughs), but it was just kind of nice to get feedback, as well.

As discussed earlier, this was Joseph's first time to participate in a MOOC. He posted seven times in the discussion board and described how he spent time reading through other's posts. Similar to Claudia, Joseph valued the discussions, "It's like, 'Wow! There's a lot of people.' Just seeing the amount of people all over the world, too, who were interested in this topic and wanted to do something about it, that's just an amazing thing to see."

In contrast, some of the informants did not spend much time in the discussion boards. Instead, they chose to spend their time watching the videos, reading the articles, and occasionally skimming through discussion threads. Blake stated, "I take a pretty solitary approach to my MOOCs. I rarely do visit the forums. I usually just do the readings, and the lectures, and the quizzes." Anne took a similar approach to her MOOC participation. She first watched the videos and read through the course documents. Then, if she had time, she read through some of the discussion posts. She described that she only posts when she really cares about a topic, "I find I do it, like, I might comment a couple of times, if I'm really crazy about a course."

Isabella stated the discussion forum was not her purpose for participating in the MOOC. She said, "When I take a course, I know that I am interested in the topic. I mean, the forum is an important part, but definitely it doesn't play the most important role in my learning experience." Sean did not post in the *Human Trafficking* discussion forums. He

said, "Partially, it was because it was not required, as far as I remember or saw. And two, I didn't want to necessarily dedicate time to it, and I didn't really have any personal experiences to contribute, and that's what seemed to be most of it." However, Sean shared that he posted to discussions in a previous MOOC on epidemiology because he had more to contribute on the topic.

While the discussion board was a focal point of the *Human Trafficking* course design, informants in this study took different approaches to participating. While, there were informants who actively engaged in the forums and appreciated the global discussions, others took a more solitary approach, focused on course readings and lectures, and spending little to no time in the forums.

4.4.4.5 Theme 5: Trust vs. skepticism of MOOC identities

Human Trafficking had a unique, specific discussion forum that the designers incorporated into the course, titled 'Share Your Story' in which the instructor encouraged learners to discuss their personal connections to trafficking (Figure 4.25).

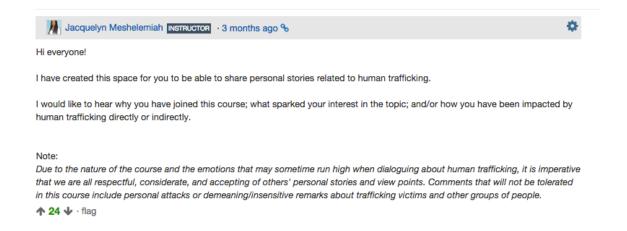


Figure 4.25 Share Your Story—discussion forum

I observed that Lauren was one of the learners who shared her sex trafficking experiences with other learners in the discussion boards. She made several posts and had exchanges with other learners based on her experiences. Lauren and I exchanged emails for the four weeks during the course and one week after the course. She described herself as a former prostitute with trafficking experiences and insights. She contributed the most posts (26 times) of all the informants in this study. She shared her story and examples of sex trade websites with other learners in the course. Unfortunately, she did not participate in the post-interview for this study. However, I was able to observe that she took a very trusting approach to participating in the course and was very open while sharing her experiences and engaging with others.

The 'Share Your Story' forum proved to be somewhat controversial among informants in this research. Learners who were more socially engaged in the discussion boards described an appreciation for learning from trafficking victims, while learners who took a more solitary approach to the MOOC and did not engage in the discussions were somewhat skeptical about the credibility of the online identities of the supposed victims and their truthfulness. Discussion from Elizabeth and Isabella presents these two opposing views. Elizabeth spent some time reading through several of the posts from human trafficking victims. She viewed the discussion boards as part of the MOOC educational experience. Elizabeth said, "We have the opportunity to ask questions of people who have experienced this and—not put ourselves in their shoes because I don't know that there's any way that we could—but, certainly to gain a perspective of the experience." Isabella was a little less trusting and more guarded about engaging with self-identified human trafficking victims in the MOOC environment. She wanted her

fellow learners to support their stories and identities with factual information. Isabella said:

I was more interested in pieces of information, like facts. I was always disoriented by these, um, 'I'm a Survivor,' and then I don't know. Because I always ask myself, 'What kind of need do these people have to post the story?' Yeah, like such a confidential story in that way. Whereas, I did like [the post] - there is a grandmother who's granddaughter was kidnapped, and she has even a website and basically, her job is spreading knowledge, raise awareness, and I appreciate that, but that was a fact. I mean, she told dates and places, plus there is this website.

Similar to Isabella, Regina was skeptical about fellow learners possibly misrepresenting themselves and instigating negative interactions in the discussion boards. She said, "I tend to avoid Trolls (laughs). Online as it is, you know, if they're a little trolly, I just kinda go find somebody else to interact with." She also expected fellow learners to provide factual sources to support their discussion posts:

I did notice some posts that, you know, the stories were so sensitive that there were times that people didn't, um, they weren't identifying citations. They weren't telling their sources. They were telling some personal stories and some of the personal stories, it was like, 'I'm not sure that this isn't just—it could just be a person trying to get attention.'

Some informants viewed the 'Share Your Story' discussion forum as an opportunity to learn from fellow learners who had experience with human trafficking. However, there were some informants who were uncomfortable with the forum and did not trust that their classmates' stories were truthful or credible. This difference in informants' perspectives led to this theme of informants' perceptions (skepticism vs. trust) of online identities.

4.5 MOOCocracy: A Learning Democracy

The overarching purpose of this research was to gain a better understanding of adult learners' MOOC experiences through qualitative methods. Thus, by using the anthropological approach of virtual ethnography, I was able to gain a more detailed perspective of adult learner culture that is not necessarily explained by quantitative research. My participation and observation in both the *Technology and Ethics* and *Human Trafficking* MOOCs, as well as observations and engagement with research informants, provided an in-depth, vibrant view of the complexities of a MOOC culture. Based on data collected and analyzed in this study, I propose that the adult learner MOOC culture comprises a dynamic learning democracy. To encapsulate the spirit of this result, I created the term 'MOOCocracy'—a MOOC learning democracy. In the subsequent sections, I present the data that support this cultural description in the form of six themes:

- Theme 1: Critical education consumers—Frequent MOOCers
- Theme 2: Voting and reputations—MOOCs meet social media mentality
- Theme 3: Lurking as learning
- Theme 4: Instructor engagement is nice, but not expected
- Theme 5: The power of peer review
- Theme 6: Hopeful for the future
 - 4.5.1 Theme 1: Critical education consumers Frequent MOOCers

Ten of the 12 informants in this study had previously enrolled in a MOOC, and eight had already completed a MOOC. Many also took multiple MOOCs at the same time. Nine of the informants were concurrently enrolled in one to two other courses while

enrolled in *Human Trafficking*. Claudia, Joseph, and Mimi were the only three informants who had not taken multiple previous courses. *Human Trafficking* was their first MOOC experience. Lynn described her frequent MOOC participation as follows: "Well, this is one of the shorter courses I've taken. So, it actually, I've been on that schedule, I've been taking MOOCs for probably eight or nine months now and participating in at least one, if not two, at a time."

Isabella shared in her initial emails that she takes three to four MOOCs at a time. She uses a calendar to keep track of her weekly MOOC schedule, including deadlines for quizzes and assignments. During our email interactions, Isabella would point me to other MOOCs that were going on at the same time as examples of different MOOC designs, approaches, and learner populations. Isabella would take MOOCs from universities all over the world to see similarities and differences in how they structured their courses. She said:

You can see, for example, that courses organized by universities in Asia, and I took one from Tokyo because I was curious to see that one from Hong Kong, and now a second one from Hong Kong—they are very, very different from courses structured by universities in the UK or in the States. That is also one thing that, but it's a plus. Like, I say, 'Okay! I like that topic, and I also want to see how it's organized.'

As many of the informants were enrolling and participating in a variety of MOOCs from a variety of institutions, they would often compare their experiences in *Human Trafficking* to other courses in which they had participated. Anne described, "I don't think the *Human Trafficking* MOOC, it doesn't feel typical for me. For, you know, I've done quite a few now. I don't know, maybe 15 or, you know, 20—and this has been,

it felt a lot different than the others. So, I don't feel like this is necessarily typical of most." Similarly, Elizabeth said:

Coming out of it, I really, I didn't love the formatting. I didn't like the very short videos right at the beginning. And then, here are all these other places that you can go to get more resources. In all the courses that I've taken through Coursera, through a MOOC, have been more that lecture style, where it's longer lecture and then, here's a couple of other resources. This, I felt like they were trying to leverage resources that were already out there, but they were not doing it in a real organized fashion, and it wasn't really user friendly. And they kind of ended up all over the place, thematically, because they were trying to leverage all these outside resources, rather than creating a cohesive curriculum internally.

When I asked informants how they would rate their *Human Trafficking* MOOC experience on a scale of one to five, with one being completely disappointed and five being completely satisfied, many of their ratings and responses were tied to their critique of the course design. For instance, Blake said, "I'd say about a three. The information was really good, but I really think it should have been a lot longer." Joseph gave the experience a four and tied his rating to the course design. He said, "I think there could have been more in the class, more interaction, more videos, more documents that could have been sent our way." Lynn rated her experience as a four and also tied her satisfaction level to the course design, but also to her own performance. She discussed, "I kind of wish the lectures and maybe like the presentations, like the slide shows and things, would have been a bit more in-depth or dove a little bit deeper, which I'm sure I did not read all of the readings. So, I'm sure that's where a lot of it came from. But I would have enjoyed that if it would have been an option."

The majority of the informants in this study were enrolled in multiple MOOCs at one time. When I asked them about their satisfaction with *Human Trafficking*, they often compared the course design to the design of other MOOCs they had previously taken or

were currently taking. Across the majority of informants' experiences, it appeared that within the MOOC marketplace, they were becoming critical consumers as a result of their frequent MOOC enrollments.

4.5.2 Theme 2: Voting and Reputations—MOOCs Meet Social Media Mentality

Another facet of the MOOCocracy culture is the ability to up-vote or down-vote comments posted in the discussion board. I first noticed the voting feature in the *Technology and Ethics* MOOC and later in *Human Trafficking*. While voting appeared to be a standard for the Coursera platform, informants described different perspectives on exercising their right to vote in the MOOC environment.

Sean found the voting option somewhat in bad taste in regards to the human trafficking subject matter. He said:

I felt like it would be rude to vote people's comments either way. Especially because this is a sensitive topic, you know, and a lot of the things that people were posting were personal experiences and stories about their life or somebody who they know, and I was like, 'Why would you vote up or down somebody's traumatic story about that?' It struck me as a little odd. And, I guess that's probably the same as all MOOCs, you can vote up or down.

When I asked the informants if they ever down-voted a fellow learner's comments, each informant said they never down-voted. However, there was often eager discussion of the positives of casting an up-vote. Anne said she used her up-vote to show support, "It's the mom in me again, sometimes, I vote something up because I think that person needs to be validated. (laughs) They sound like they need encouragement! (laughs) And I want them to know I read, somebody read your thing and thought it was good." Claudia described casting up-votes in a similar fashion. She said, "Sometimes, I would write and

sometimes, I would just give the thumbs up. Or if I just agreed ... but there was no point in me kind of like repeating why that was a good point—I would just put the thumbs up."

As I first noted in *Technology and Ethics* and later observed in *Human Trafficking*, the Coursera platform ranks learners on a 'Forum Reputations' board based on points earned from number of discussion posts made and number of up-votes received. Lauren had more than 100 up-votes on her discussion thread comments. She was ranked in the top ten on the 'Forum Reputations' board. Many of Lauren's discussion posts consisted of her sharing her story of formerly working as a prostitute. While she did not participate in the post-interview for this study, she emailed me throughout the four weeks and wrote that she was interested in finding ways to connect with others and volunteer for human trafficking prevention efforts. It is not clear whether or not she was aware of her 'reputation' ranking in the MOOC.

When I asked informants about the 'Forum Reputations' ranking board, none of the informants knew it existed. Regina described that she observed other learners posting comments as if they wanted attention and up-votes. She said, "It just seems like people will say things to be, to get up-votes, and to be popular, you know. And I wonder if they're retired, and that's why they have so much time to post. (laughs)" Mimi shared that she found herself concerned with whether or not her discussion posts were gaining any attention. She described it as a social media mentality:

There are times when I would do a post (laughs) - it's funny how this social media world, you know, makes you keep track of how many people are looking at your post or commenting (laughs). So, it's funny how I had that same mentality when it came to if I posted something, and I would go check and see how many people looked at it or commented.

The informants had mixed views of the up-voting and down-voting features of the MOOC environment. However, they were all aware the voting system existed. None of the informants admitted to casting down-votes. In general, they viewed up-votes as a means for showing support. The voting system appeared to be another feature of the democratic MOOC environment in which learners have the power to exercise their approval or disapproval by casting votes.

4.5.3 Theme 3: Lurking as Learning

With thousands of learners enrolled in the *Human Trafficking* course, I observed that the learners both came together and dissipated very quickly, as they were only connected for the four-week duration of the course. As described earlier in this chapter, MOOC learners approach participation in different ways—from social involvement to solitary participation. I observed that within the discussion boards, there were consistently vocal and opinionated learners, yet there were thousands of learners who remained anonymous and never shared their voices.

Analytics from *Human Trafficking* show that 7,007 learners browsed the forums. However, not every learner made a discussion post. As typical of most MOOCs, thousands of the enrolled learners did not visit the forums, hundreds of others only *viewed* the forums, while a minority of learners actually posted in the forums. My observations in the *Human Trafficking* course showed that while a discussion thread may have a small number of posts, it could potentially have hundreds of 'views.' Figure 4.26 is a screen capture that illustrates differences between the number of posts versus the number of views in a thread.

86	144	902
points	posts	views
50	46	403
points	posts	views
39	30	371
points	posts	views
13	12	117
points	posts	views
9	106	371
points	posts	views
20	172	995
points	posts	views

Figure 4.26 Screen capture of posts vs. views in discussion threads

Based on this observation, I added a question to the post-interviews to find out how informants navigated the forums and how they decided which discussion posts to spend their time viewing. All of the informants in this study viewed the *Human**Trafficking* discussion forums at different points throughout the four weeks. Joseph said he read, "Anything that caught my eye with their titles. It's like, 'Huh, I'm going to read that one." Isabella used the search function to find specific discussions about topics she was interested in learning more about. She said, "I searched about adoption. I read the posts by Indian students because I wanted to see how they see the issue in their own country. Just pieces like that, but it's not that I have a complete picture." Elizabeth described how she used the Coursera discussion sorting tools such as "Top Forum Threads' to view different posts. She said, "Typically, what I would do is I would go through to see where the most responses had shown up, and also, where there was the most of those little thumbs ups because those were the really valuable points that people feel like they want to call out and give a kudos to. That's typically how I did it, and then,

I would just read through the topic lines." Elizabeth also mentioned reading the posts based on location. She read posts from people in Boston, where she grew up, and Dallas, where she went to college.

While this type of online learner behavior is often described as 'lurking,' many of the informants perceived viewing the discussion threads as an effective way to learn about human trafficking, others' experiences, and perspectives from other parts of the world. Some of the informants described factors that prevented them from posting such as not having anything new or interesting to contribute, not wanting to offend others, and an inability to effectively put their thoughts into written words. Claudia explained why she tended to be a viewer/lurker, "I would come in late to a conversation. I would wait a couple of days because I always realized that if I write something now, someone else is going to say something really interesting later on." Mimi described how she sometimes found it difficult to move from being a viewer/lurker to becoming a poster in a discussion:

Honestly, there were some that I really wanted to delve deep in to, and I'm a writer. I love to write, but sometimes, there are just certain things that I would rather, that come out more in my, my conviction comes out more in my speaking than in my writing. So, it was tough. I found that to be hard because I would get excited about the question, and as a writer, like, and I'm sure you write a lot - I don't know if you've had those times where there's so much that you want to say, but the resistance of like trying to get a nice flow together, I was just like, 'Forget it!' (laughs)

Twelve of the informants in this study posted less than 10 times in the discussion board. While these informants chose to minimally engage in posting, they did describe spending time reading through several discussion posts from their fellow learners. This was consistent with my observations that a discussion thread may have dozens of posts, yet hundreds of views. This type of activity is often described as 'lurking.' Informants

described lurking behavior, yet they also discussed what they learned from reading others' discussion posts.

4.5.4 Theme 4: Instructor Engagement is Nice, but not Expected

Within the MOOCocracy, there is a sense that the instructor is present and important, yet not the focal point or dictator of their experiences as adult learners. I observed the *Human Trafficking* instructor's online presence in a number of ways: introductory weekly emails and announcements, weekly videos, discussion thread posts and interactions, emails and announcements to remind learners to have civil discussions or to clarify a point, and within the Coursera, 'Meet the Team' page. The instructional designer's and teaching assistant's online presences were also visible via the 'Meat the Team' page and discussion posts.

When asked if they noticed the *Human Trafficking* instructor's presence, the participants in this research study all stated that they noticed her in the weekly videos and some of the discussion threads. No one mentioned her weekly announcements or the 'Meet the Team' page. Discourse analysis of post-interview transcripts showed that only one of the study informants called the instructor by her name. The informants would refer to Jacquelyn as "she," "her," or "the instructor." For example, Ed said, "I couldn't find her email address, so I sent her a tweet. I hate tweets, and I asked her if she was going to repeat the course, and she, at this point has no plans, but that could change." Sean was the only one to use Jacquelyn's name in his description of her presence in the course:

Jacquelyn, I think was her name was, the instructor, or Jackie. She would comment on a lot of people's comments that they would leave in the discussion forum. Often, they were personal stories related to trafficking, rape, abuse,

whatever, sensitive subjects like you were mentioning. So, it was kind of cool to see people being willing to bring that up and relate it to the course, and um, and then, see her come as, Jacquelyn, a professional, comment on them, as well. That was kind of cool.

The informants did not expect the instructor to be responsible for their learning. Isabella and Anne noted that it is nice to sometimes connect with an instructor in a MOOC, but whether or not they have that connection did not influence their motivation to participate. Isabella said, "I mean, if it happens, I appreciate that, but it's not something that I look for and I try to switch on. No." Anne stated that she's resigned to not having the one-on-one instructor interaction. She explained:

You know, when it's something I'm really interested in, it would be really cool to actually be able to go up after the lecture, like in the old days. At school, you could go up and ask a question about something, and so, would that be neat? Yeah. But, I guess I'm resigned to not having that. It doesn't keep me from taking the courses.

Mimi was the only informant who had direct interaction with Jacquelyn, and the relationship grew from Mimi initially emailing Jacquelyn before the course began to confirm the start date. Mimi described herself as a relational person and how she valued building friendships with others. She was very excited to develop a relationship with the instructor outside and inside the MOOC. Mimi said:

I was really impressed by our professor, like you can tell this is really her passion, and again, [with] as many people as there were in that class, like I would see her comment on people's posts. I remember even one time when I was emailing her, she emailed me and said, 'Hey, someone posted about Ethiopia and something, and you should check it out.' So, that to me, was like, 'Wow! She remembers me!'

While Mimi was the only informant to describe a direct relationship with the instructor via email, the remaining informants did not appear to have directly connected with the teacher. The informants seemed accepting of the fact that they were one of thousands of

learners and would need to take responsibility of their own learning. Most of the informants could recall seeing the instructor in the course, but were resigned to the fact that the instructor would not be able to engage with each individual student.

4.5.5 Theme 5: The Power of Peer Review

The *Human Trafficking* MOOC included a peer review grading process for the PSA assignment. In this study, seven of the learners participated in the peer review process. Peer review appears to be a somewhat accepted and common way for grading projects within MOOCs. Elizabeth described a respect for the peer review process in MOOCs as a "way to leverage the resources for grading because there's no way a single person can grade 30,000 [assignments]." The peer review process gives learners the power to critique and grade their classmates' work based on criteria established in a rubric created by the instructor. In *Human Trafficking*, each learner who submitted a PSA assignment was then randomly assigned five classmates' PSAs to grade based on the rubric. Then, each learner received five reviews of her submitted assignment. The five peer review grades were averaged together for a final grade.

Common threads from the informants' interviews related to peer review were the learner's responsibility to provide fair peer reviews and what it means to effectively take on the role of reviewer to critically examine assignments from all over the world. Anne did not participate in the *Human Trafficking* peer review process because she did not submit a PSA assignment. She said the assignment was too difficult for her and was disappointed that she then could not view the work of other learners. However, Anne experienced the peer review process in a different MOOC. She described a tension she feels in taking on the role of reviewer, "I don't mind getting them reviewed by other

people, but I am uncomfortable reviewing. (laughs) And the mother in me wants to find all the good things, and I want people to feel good about that they actually put time in this. And so, I'm not very critical."

Elizabeth discussed the difficulty of grading PSAs that were in other languages from places she did not know and finding a way to be fair in her assessments. She described her thoughts during the peer review process, "And you're like, 'Well, how am I supposed to give this an objective grade? I don't even know what it says? There's a lot of writing on it, but I don't know what it says." Joseph also described his internal thought process and attempt to thoughtfully take on the role of reviewer:

I had some nice assignments to look over and was like sitting there and trying to really get into that: their project, reading what they said, especially if I had one that was a bumper sticker. So, it's like, 'Okay, I really gotta go on what you wrote in your little comments section here to figure out how to go on this.' Just you know, really going into the, using my humanities class that I took back in college to critically think about the project, and try to do my best in fairly grading it.

Some of the informants comfortably took on the role of reviewer. Claudia explained how she would point out needed changes in her critiques, "They were really creative, and some of them were really good. Because I look at things critically, I will always say, 'Oh well, I would change this or I would do that,' but they were like such minor changes that I would do that, they probably thought about or didn't do anything." Regina and Mimi each reviewed more than the required five PSAs, which is allowed in the Coursera platform. Regina is a teacher by profession and experienced in the reviewer and grading roles. She described holding peers accountable for copyright issues:

I reviewed six other public service announcements, and it was kind of like the same, some people were in the same boat I was, where they did Power Points, but a lot of them had copyrighted images in there. I think three of the six that I

looked at, and you know, I could just type in a description of what the picture was and up popped somebody else's website, and they hadn't done any attribution or citations or anything like that.

Mimi also seemed comfortable with taking on the role of reviewer. She said:

I did about seven. I really, really enjoyed just doing it. Like, I enjoyed looking at it. I enjoyed critiquing. I enjoyed just being like, I remember watching the first one, and I'm just like, 'Woah. This is amazing.' And then, some were just like okay. But, I enjoyed that part—being able to learn, engage, and then, critique.

Theme Five addresses the peer review process, based on informants' experiences. Informants understood the instructor could not grade the thousands of submitted PSAs and described peer review as a common practice in several of the MOOCs they had taken. Some of the informants described the peer review process as a way to learn from others' work. Overall, they described the responsibility and power incumbent upon them when taking on the role of reviewer and the need to grade fellow learners' work in a fair manner.

4.5.6 Theme 6: Hopeful for the Future

While MOOCs are still in experimental stages, I observed an adult learner culture that is respectful of the experimental learning environments and hopeful for the future of accessible education for the masses. Isabella, who takes up to three MOOCs at any given time, said:

I find the idea and the concept behind it amazing, and I hope that it's just the beginning. I hope that the whole project behind it can only get better, and um, more known because I know that people who have the chance to take a Coursera course, um, are fans. Absolutely. But, many people don't know anything about this kind of opportunity.

Elizabeth shared a similar outlook as Isabella. Elizabeth said:

I just think there's a lot of potential here, and I'm so excited that you guys are doing the research. You're actually the second research that I've participated in

on the topic of MOOCs because I think... (pauses to talk to son)....I think there's so much potential here that if we could figure out how to do it—wow! What an opportunity for continuing education, for providing education to people who can't afford traditional college.

Ed was the only informant who discussed the sustainability and business model development for MOOCs:

One problem that I notice is that, there's a mindset, particularly amongst the young who have probably never earned anything at all, that if it's on the Internet, it's free. And ... they never think about, well, where does it come from? You know? Somebody, I don't remember who, said, "There ain't no free lunch." (laughs) Maybe the thing is that the people need to pay some stipend to participate in one of these things. I would not be surprised that that in and of itself would increase the completion rate.

At the same time, Ed noted that people living in Thailand and Burma who are living in poverty, make very small wages, and would not be able to afford to pay for MOOCs that charged an enrollment fee. Overall, the informants in this study described a respect for MOOC providers and the ideals of opening up higher education and making it more accessible. The general sense from informants was that they see potential in MOOCs and hope the courses covering a variety of topics continue to be developed, improved, and offered to the masses.

4.6 Research Questions 1a-1e: Perceptions of Motivation, Success, and Completion
Data sources for research questions 1a-1e included MOOC observations,
informant observations, and interviews. I specifically incorporated questions into the
interview protocol regarding informants' motivations, definitions of success, and
definitions of completion. I then intentionally coded interview transcripts for
descriptions of motivation, success, and completion. Through my observations and the
coding process, I also noted that informants discussed barriers that prevented them from

reaching success and completion. The following sections present informants' perceptions of MOOC motivation, success, completion, and barriers.

4.6.1 Motivation

This section provides richer detail about the motivators for MOOC participation that my informants described in their post-interviews. The two biggest motivators for informants in the *Human Trafficking* MOOC were an interest in the content and a desire to expand their overall learning and specifically their knowledge of trafficking issues. Torrence, for instance, expressed an interest in expanding his current understanding of trafficking and to build upon his background and prior learning in the field of criminal justice. He said, "[It was] just something that interested me. In any of my coursework in school, we didn't cover anything like sex trafficking or get into that. So, knowledge of that is kind of what motivated me to do that." Isabella described a personal interest in learning more about trafficking. She explained, "I'm an adoptive mother, and we adopted when we were in India, and I was used as a spy on the market of illegal adoptions." Isabella also connected her motivation to learning for enjoyment. She said, "I choose courses that I find interesting. I don't take more than four at a time because then I know that I wouldn't be able to even enjoy them."

Another commonality found across informant experiences was their motivation for volunteerism and professional development. As presented in an earlier section in this chapter, many of the informants had enrolled in *Human Trafficking* because they were working with various organizations and efforts to prevent trafficking. Therefore, they turned to the MOOC for further development to help with their volunteer and professional work. Mimi said:

As far as what I do—because the reason why I took this MOOC course is because my good friend and I have an organization that brings awareness to sex trafficking in the United States. So, having this opportunity to even delve a little deeper, to understand the global dynamic of it, and I do a lot with just women empowerment and um, yeah, I write.

Blake also described how he enrolls in MOOCs that could potentially support his professional development. He explained, "I take pretty much any class that has to do with like psychology or sociology or things along that line. I think a lot of it will be useful for me down the road with my work in the National Guard." Regina also described the importance of developing an understanding of human trafficking in regards to her profession. She said:

The human trafficking is interesting, particularly because I'm at an alternative high school and those kids have, every one of them has a different story as to how they've gotten where they've gotten, and some of those stories aren't, all that happy. So, it's kind of one of those things that I think teachers, that we, that we really need to be aware of.

Several of the informants stated that they enroll and participate in MOOCs purely for enjoyment. Anne and Isabella both take MOOCs as a hobby and for fun. Anne said she likes to learn via MOOCs and she does not put pressure on herself to complete them. She said, "I don't push myself. I don't stress out over it." Lynn also described that she finds learning fun, and like Anne, she does not want her MOOC involvement to become a point of stress in her life. Isabella's family does not own a television. She enrolls in MOOCs that are interesting to her and participates in the courses during her free and leisure time, instead of watching television.

Another motivation for enrolling in *Human Trafficking* that the informants expressed was information retrieval. Blake, Sean, and Ed each downloaded the videos and readings. While Ed did not complete the MOOC, he said that he downloaded the

course materials and planned to go back to them for future reference. Claudia noted that part of her new role with the Peace Corps in Moldova was to develop a website. She planned to include human trafficking information on her organization's site and hoped the course would provide her with credible resources she could use. Claudia explained how MOOCs can help with information retrieval:

Well, I really wanted [was] to get a lot of resources. There's a lot out there, a lot of books, a lot of journals, a lot of articles—and I do trust that if there is a course and there is a professor behind it that the professor has chosen particular readings that will be, you know, brand new perspectives. So, at least, you don't have too much searching on your own, where you might just come across something that looks legit and it's not.

The next motivator described by the informants relates to career planning. At the time of this study, Anne, Torrence, and Mimi were contemplating what to do next in their careers and which educational options to pursue. Anne hoped the *Human Trafficking* MOOC would provide her with information on how to get involved in careers related to trafficking prevention. She described a time of transition in her life. Her children were growing up, and Anne's time homeschooling her children was ending. She hoped to get involved in anti-slavery efforts as the next phase of her career. Mimi discussed that she was considering whether or not to go back to school for a master's degree and that the MOOC was a good way for her to experience what it was like to work full-time and take a class concurrently. Torrence was grappling with which master's degree to pursue and enrolled in the MOOC as part of his growing interest in sociology as a potential career path.

Making global social connections was another motivator for enrolling and participating in MOOCs from institutions around the world. Anne said:

Oh, I really love MOOCs in general, and this one because there are people from all over the world. I get a perspective that I can't get just in Indiana....That's a great part of the discussion forums is you hear, you know, people in Africa or eastern Europe or whatever, and they all have their opinions and ideas, and that's really neat to see things from their perspective.

Mimi discussed another form of motivation through a social connection. She described how her newly developed relationship with the *Human Trafficking* instructor motivated her to maintain engagement with the course:

If I fell off, I probably would have just fallen off, but part of me, just because that first engagement [with the instructor] that we had, I felt like there was a sense of, I guess, not belonging, but a desire to really continue. Then, when I saw her part for the class, just her engagement—it was just encouraging. It was like really inspiring, actually.

One instance of competition as motivation appeared in the interviews. Regina took a MOOC on world history, which is a course she teaches in her profession. She described feeling an internal sense of competition to test her knowledge and expertise and to score highly in the course. She said, "I felt very competitive to get that one. (laughs) You know, there's a different kind of motivation for that particular one." Regina wanted to freshen up on her world history knowledge in the MOOC, but she also wanted to demonstrate that she is an expert in the subject matter.

Through my post-interview coding for mentions of motivation, I was able to identify the main reasons informants had for enrolling in *Human Trafficking* and MOOCs in general. The motivators included: content interest, expanding their knowledge, professional/volunteerism development, enjoyment, information retrieval, career planning, social connection, and competition. Informants mentioned content interest and learning new information the most often and social connection and competition the least often.

4.6.2 Success

The literature (Ho et al., 2014; Liyanagunawardena et al., 2013) has shown low rates of completion for MOOCs and a possible disconnect between learners' views of completion and success and the views of the MOOC providers. Therefore, I wanted to discuss these concepts of success and completion with the informants. I asked each informant: "How would you define 'success' within a massive open online course?" I then transcribed and coded their responses and present the factors for success that emerged. I propose that these factors should be considered when designing a social science MOOC for adult learners.

All of the informants described that they feel successful in a MOOC when they understand the material and gain new knowledge of the subject. Their views of success were quite direct and simple. For instance, Joseph said, "I think success would be understanding the material, and just getting what you can out of that course." Similarly, Blake explained, "For me, if I learn stuff, that's pretty much good enough for me. That's really all I'm in it for is to learn more information, learn new skills."

Some of the informants made clear distinctions between success and completion; that is, they described success as learning new information without necessarily completing the course. Anne described, "...but just for me, on a personal basis, if I learned something that I wanted to learn about, then, it's a success for me - even if I didn't finish a course, even if I didn't do the assignments." Ed stated that since he has retired, he is no longer driven to earn credits or certifications. Therefore, he described MOOC success as learning about content that can support his volunteer efforts. He stated, "If I learn something. Like, I learned some things about the way the United Nations was

organized, and how UNHCR worked from the course I took on International Law. It was very, very useful to me, but I never took the last quiz because I didn't care. (laughs)"

Much like Ed, Elizabeth made the distinction between success and completion. She said:

I think I probably come at it from a unique perspective in that I'm a stay at home mom, and I take courses that interest me because they interest me. Because I believe that you should never stop learning, and so for me success is: Did I actually cover all the material?—because with a toddler that's not always easy. And then, success is, did I actually learn something from it? I would say that is a unique perspective in that I'm not looking for a grade out of it. I'm not looking for a GPA. I'm not looking for continuing ed credits. I'm not looking for any of those more typical academic accouterments that come from taking a class. I want to learn something about something I'm interested in. If I can finish the material, and if I've learned something, then it's a success.

Another component of success that informants mentioned numerous times was gaining new resources from the MOOC, which relates to one of the primary reasons for enrolling in the MOOC, as described earlier. Claudia viewed it a success because she was able to download materials from the course and use some of the resources on her organization's website. Mimi described being able to utilize the course materials with her team members in their non-profit anti-trafficking work. Blake, Sean, and Ed were also successful in downloading course materials for their personal libraries. Regina described how the course led her to order a new book about trafficking to learn more beyond what the course had to offer.

Enjoyment is another theme that appeared across informants' definitions of MOOC success. Anne, Isabella, Elizabeth, Sean, Lynn, and Ed shared that they participate in MOOCs in their spare time to learn new information as a hobby. Sean discussed how success is tied to personal motivation and how enjoyment is often a goal for taking MOOCs:

I think that that depends on the individual learner because it depends on what your expectations are going in, and it depends on what you as an individual want to get out. For me, I didn't set high expectations of what I would get out. I knew that I wanted to learn more about the subject and enjoy my time there. And I got out of it what I wanted, so that was, that was it. I think it's different individually for everybody.

In addition to enjoyment, some of the informants described MOOC success as expanding their worldviews, becoming informed citizens, and being able to apply what they learned to their lives and communities. Claudia described the value of gaining perspective from trafficking victims with whom she never would have interacted, if it were not for the MOOC. She said, "For me, it's learning new information and getting a different perspective. Um, and that's definitely something that for me, at least, it happened. I think it broadened my idea of what I think trafficking is because, like I said before, I couldn't even imagine trafficking."

Regina described success in relation to applying what she learns in MOOCs to her own life. She explained that success is:

How much takeaway that I have, how much better I understand what the current events are. Can I speak with authority to my legislator? Do I have something here where I can write a letter to my congressman? And I think that I do. I think that was one of the benefits of this particular MOOC.

The final success factors mentioned - new relationships and recognition - can be seen specifically in Mimi's experience. She described herself as a "relational person" and felt successful in the MOOC because she was able to make a connection with the instructor and other learners. Mimi's relationship with the instructor, in turn, led to the instructor sharing a professional PSA that Mimi's non-profit organization had developed to inform the others about human trafficking. The instructor shared the PSA during the final week in the course materials (Figure 4.27).

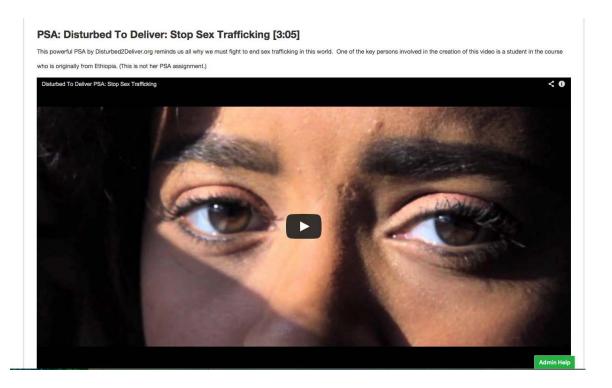


Figure 4.27 PSA from Mimi's non-profit shared in week four

Mimi described MOOC success based on the factors of acquiring new resources, developing new relationships, and gaining recognition for her non-profit organization. She discussed:

Success is based on what you went into it thinking and wanted to get out of it. So, if it was, like for me, because I was involved in that work and bringing awareness to it, there were certain things that I learned, or I read that I can honestly say it benefitted me in how I can teach my team about something like this. Or even, I have so many resources now that I can go back to when talking to my team about this or that. And also success for me was, um, just the relationship I was able to build. And then, even like getting our PSA to be seen by, I don't know if 30,000 people saw it, but just to be able to have that.

Mimi's experience and perception of success as forming new relationships and acquiring recognition for her organization appeared unique compared to the other informants. Most informants described the main components of MOOC success as understanding the material, gaining new knowledge and new resources to use, and learning for enjoyment.

Mimi, Elizabeth, Anne, and Sean pointed out that success is what each learner personally wants to get out of the course. Therefore, MOOC success could be said to be defined on a learner-by-learner case, based on personal goals for individual participation and learning in the course.

4.6.3 Completion

Ten of the 12 informants included "satisfying course requirements" in their definitions of MOOC completion. For example, Blake said, "It means to complete it by watching all the lectures, doing all the readings, and if there are tests and quizzes, doing those. So, I think that's a pretty traditional approach to what's completing it." Joseph defined completion as, "Completing the class! (laughs) Getting the quizzes, getting the, uh, PSA in and graded for the other people. That's what was outlined for us as to what we needed to do for the class, and it felt like that was completion." Elizabeth pointed out that MOOC completion does not include attendance like a traditional college course. She explained, "I don't think that you can look at it in terms of like a college class where you have to attend 80% of your courses because it's out there, its on video, you really don't have an excuse for not completing all of the course material. So from that perspective, completing all the material, to me, is part and parcel of completion." By his own definition, Ed did not complete the course. However, he also took a more traditional view of what constitutes MOOC completion. He explained:

Well, I'm an old soldier, okay. And so, I've got a long history of rules and regulations, and probably one of the reasons I'm good at programming. I mean, if you put the plus before something, it works differently than if you put it after. You know? To me, completion is compliance with the way it was set up in the course. Uh, as you're probably aware, Coursera has this, uh, certificate program where you can get, accumulative credit. And for people that are really interested in certificates and completion and stuff, I think that probably fills a need.

As outlined in the syllabus, upon completing the course requirements, learners earn a Statement of Accomplishment in the Coursera platform. As Ed alluded to, some informants equated the statement of accomplishment with completion. Sean also mentioned earning the certificate in his discussion of completion. He said:

This is going to be partially up to the individual. Like, how much effort or merit do you hold in having that, um, digital certificate of completion? But, I often wonder can I put that on my CV? Will that matter when I'm job-hunting later? Or, um, will anyone care? Will I use this material ever? I wonder that, too. Um, so, I don't know. I think partially, it's individually based. I put the last one on my CV, and if I had completed this one, throughout, and got the certificate, I would put that on my CV, too. Um, and also, it depends on if it's related to your career or not, I guess.

I also asked each informant who completed the course how they would use their statement of accomplishment. The responses are discussed in a subsequent subsection.

Personal satisfaction was also a factor that emerged in regards to completion.

Lynn was not necessarily focused on earning credit or the statement of accomplishment.

Instead, she described taking MOOCs for fun, to expand her knowledge, and to find out more about topics she cares about. Lynn did not focus on meeting course requirements as part of her definition of MOOC completion. Instead, she said:

It's something that I feel proud of. I mean, it's something that's completely personal and just for me. I don't have to do it for anyone else or to get any sort of, you know degree. It's just for me, and it's something that I enjoy. So, when I've completed something, and I see that I now know something that's a new topic, or I now have a deeper understanding of things going on in the world that I'm passionate about. It means a whole lot to me.

Gaining new content knowledge was also important to many of the informants in terms of completion, as many of them were involved in anti-slavery movements and wanted to gain new knowledge for volunteerism and professional development. Mimi

first defined MOOC completion in terms of meeting course requirements, but she also grappled with a more complex view of completion in terms of learning and applying new content knowledge. She expanded her perspective to include learning beyond traditional completion requirements:

You can complete it and not really have learned anything. So, I think for me, it's a mix of both. You did it, but maybe you walked away not with everything, but I think you walked away with something new that you didn't know. I'm sure that when they created this, and I don't know what their research was, but just to know that there are some people that just want to like [learn something new]. Because I know that I've seen some of the courses that they offer that are very simple, very like "What? You offer this?" So, whoever created this knows that there's just a level of just wanting to know something, and that is enough because not everyone is taking it to get graduate degrees (laughs).

As previously mentioned, several of the informants typically enrolled in multiple MOOCs concurrently. While the majority of the informants defined completion based on course requirements, Anne had a different perspective. She compared MOOCs to libraries of resources for viewing, downloading, and engaging at various times and levels. To Anne, completion was more connected to gaining new resources, watching video lectures, and enjoyment. She defined MOOC completion as:

For me, it's to watch all the video lectures. In my head, that's what it is. But, I really do appreciate the extra, I mean, I like having the extra resources, so I can go read some books or look up what else that guy they interviewed has done or something. I like having the kind of, if you want to learn more, here's that. But I don't push myself. I don't stress out over it.

Regina valued completing MOOCs by meeting course requirements. She described that MOOCs helped her to bring new content into her profession of teaching at an alternative school. She expressed how reading books, participating in MOOCs, and keeping informed helps her serve as an example to her students and become an authority on a variety of topics. As an example she said:

When I talk about world music in class, and they [Regina's students] ask me, you know, 'Why do you know so much?'—I can go (points over shoulder to a statement of accomplishment in frame), "Tadaaa!" or I've got a wall of books, and I'm like, 'Because I've done this and this is where authority comes from to be in the classroom with you is that I keep going [continued learning].'

Furthermore, Regina described that she encourages her students to take MOOCs to become knowledgeable lifelong learners.

4.6.3.1 Statement of Accomplishment

Seven of the informants earned a Statement of Accomplishment for completing *Human Trafficking* by earning 70% of the total possible points. I asked each informant what they do with their MOOC completion certificates and received a variety of responses. While informants seemed hopeful for the future potential of certificates for learners who could use them when applying for jobs, there was an overall sense of uncertainty as to how to use the statements and what they mean. Claudia stated that she includes her completion certificates on her resume as an indicator of professional development, but also to demonstrate her perspective on social justice issues. She said: "I feel like adding that in, like, if they ask me I can actually explain why that's important and talk about what human trafficking is. So, it's a way in to starting a conversation." Mimi also planned to include the certificate on her resume. As shared earlier, Sean questioned how potential employers would perceive the certificates and whether they could count in the academic promotion and tenure process.

Lynn, Elizabeth, and Joseph talked about keeping their completion certificates filed away. However, they could see potentially including them on their resumes if they applied to jobs in the future. Ed did not have a need to share his statements of accomplishment with others, as he planned to maintain his retirement status and would

not need to enter the job market. Isabella explained that she keeps her statements of accomplishment online in her Coursera course records, as she only takes MOOCs for personal fulfillment, much like reading a book. Blake also keeps his certificates in the Cousera system and does not display them. He said, "I just look at them, smile, feel like I did a good job, and that's about it. (laughs)" Regina was the only informant who physically displayed printed copies of her certificate. She described printing her statements, "I can tell you exactly what I do with them. I print them out, and I put them in an 8x10 frame, and I put them on the chalkboard of my classroom, and I say, "This is an example of lifelong learning."

In my role as a researcher-participant, I also completed the MOOC with a high enough score to earn a Statement of Accomplishment (Figure 4.28).



Figure 4.28 Statement of accomplishment—Human Trafficking

I chose to share my certification on my LinkedIn page, but I did not include it on my curriculum vitae for reasons similar to Sean's. At the time of this study, I had not discussed my certifications with potential employers.

4.6.4 Barriers to Success and Completion

Throughout the discussions of motivation, success, and completion, several of the informants described barriers that prevented them from being successful or completing MOOCs. In regards to the barriers to success, for example, an adult learner may enroll in a MOOC with specific motivations and intentions, but she may never participate in the course due to interfering barriers. Or an adult learner may have motivation to enroll and participate in the MOOC and to be successful in terms of gaining new knowledge and resources, forming new relationships, and so on, but may not actually complete the course due to the described barriers. Informants described the barriers between motivation, success, and completion to be similar.

The biggest barrier informants discussed was time. The informants in this study included full-time employees, parents, volunteers, and graduate students. They all led busy, full, and productive lives, but with similar goals of lifelong learning. Even though Ed was retired, he was very active in his community and volunteer organizations. He did not have time to fully participate in or complete *Human Trafficking*. He explained:

What happened in this case was the MOOC started the week I was in Cambodia. So, I came back, I was a week behind in a four week course. And then, all of a sudden, out of, I guess it's not really out of the blue, but all of the sudden, I ended up being the secretary of this little Rotary Club and was spending a lot of hours trying to figure out what that was about, what the previous secretary didn't do and why not and what needs to be done to correct it and so forth. So, I mean, it was just. It was really bad timing in this case. Had I known that was going to happen, I would not have signed up for the course.

Blake also discussed time as a roadblock to completing MOOCs. He often enrolls in courses that interest him and is successful watching some of the lecture videos, going through the readings, taking quizzes, and downloading course materials. However, his graduate school studies take priority. He said, "Sometimes, I get really into the MOOC I'm doing, but then, I have to force myself to stop because I know that I have other homework that is for an actual grade that is going to impact an actual degree. So, I have to tear myself away from Coursera and go work on that."

When I asked informants what advice they would have for a new learner entering a MOOC for the first time, many of their responses focused on overcoming the time hurdle. For instance, Sean advised:

I would say that if you are brand new, and you're not sure how much time you want to dedicate to it, maybe go into it just as a first attempt. Because if you take them all through Coursera, you can take them as many times as you want. So, maybe go in the first time and just see how much you could realistically do—even if you don't participate in it enough to get your certificate of achievement or whatever, after the first attempt. Let's say you watched half of the videos, did half of the assignments, you can do the next half the second time around, if you like. So, I mean, there's no harm in trying it. Just tackle it and see what you can do.

Closely related to time is the obstacle of life circumstances. Torrence began the MOOC with intentions of engaging in and completing it. In the first week, he read some of the materials, took the first quiz, and made a discussion board post. However, circumstances beyond his control shifted his priorities for the remaining weeks of the course. A severe storm hit Michigan during the beginning of the MOOC. Torrence described:

So, we lost power for some days. I also own a house in Kalamazoo. A tree fell on it, so between trying to juggle, and we kinda got some flooding at work through the ceiling, so between juggling that and being without power for like five, six

days at home and then, trying to juggle responsibilities as a landlord, kinda was a little overwhelming.

Some of the informants who signed up for multiple courses at one time, referred to here as 'frequent MOOCers,' discussed how they were simply unable to participate in and complete all of the courses in which they enrolled. They often chose to officially complete the MOOCs which truly interested them and for which they had time. Blake said, "When I first started out, I just found all these classes that sounded really interesting, and so, I signed up for like 12 of them. And, I ended up only completing four or five just because it was so much work." The frequent MOOCing experience and perceived barriers appear connected to the informants' analogies of MOOCs as libraries, a Netflix queue, and a buffet. That is, a learner may have motivations and intentions to learn more about multiple topics, but the ability to balance multiple courses at one time becomes impossible. Isabella explained that she learned, early in her MOOC experience, that she could not manage several courses at once. Consequently, she signs up for only a few MOOCs at one time and uses a weekly planner to manage her MOOCing schedule.

Another factor that emerged as a barrier was the instructional design of the MOOC. Each informant described expectations they had for the design of the course. For instance, several of the informants believed the *Human Trafficking* lecture videos were too short. Many of them were expecting a more lecture-based course, as opposed to a discussion-based course. Elizabeth discussed how the design almost prevented her from completing the MOOC:

I was really disappointed in just the formatting. I didn't feel like it brought out any more education than I had already had. I just, there were a lot of pieces of it that really challenged just my ability to even finish the course. By week three, I was like, "Oh gosh. I don't even know if I want to finish this course because I'm

just not getting anything out of it." So, I was, I was very disappointed in it. I really had hoped for a lot more, especially from the University of Ohio. You know, that's a well-known state school with a well know [anti-] human trafficking program.

Similarly, Anne described course design as a barrier. She also discussed time, frequent MOOCing, and lack of interest as factors that prevented her from completing certain MOOCs. She said, "Either it's [the MOOC] too difficult, and it's way over my head. Or it's too easy, and I already know all of this. Or, for me, because I usually have several going on, it's just I'm choosing to not do this one because these other ones that are going on at the same time are more interesting to me."

The 'open' in MOOCs is often tied to accessibility with the intent to knock down barriers, such as limited financial resources, that prevent learners from pursuing educational experiences. Adult learners can take MOOCs for free, excluding those that charge for college credit and professional certifications. While the free aspect is meant to make MOOCs accessible, Torrence posited that the lack of learners' financial investment in a MOOC could potentially be a barrier to reaching success and completion. He said, "I think that's like another part to it, like you're not as invested, like as if this were a college course that you were paying for. You don't have that, that financial obligation like, "Oh, I have to complete this." Oh, I can just go, click, un-enroll. It's not as big of a deal."

The final barrier noted in the post-course interviews related to when the MOOC was not enjoyable. Anne, Lynn, Elizabeth, Isabella, Regina, Ed, Sean, and Blake discussed taking MOOCs to not only learn new information, but also for fun. Isabella described the courses as a hobby. Anne and Lynn both discussed stopping their participation in courses when the courses were too stressful and no longer enjoyable. For

instance, as presented earlier in the chapter, Lynn stopped participating in a MOOC when she had a negative experience during the peer review process of an assignment.

Therefore, the motivation to take a MOOC for enjoyment can be reduced, or eliminated altogether, when a learner no longer views participation as pleasant, thus preventing him/her from achieving success and completion.

4.7 Summary

This chapter presented the results of the virtual ethnographic study of adult learners' MOOC experiences including: preliminary fieldwork experiences, co-constructed informant narratives, rich description of the adult learner MOOC culture, and informants' perceptions of MOOC motivation, success, and completion. Data from the MOOC context, observations, field notes, and interviews were presented to support the results. The next chapter will discuss the implications, importance, and limitations of the study, as well as suggestions for future research.

CHAPTER 5. DISCUSSION

5.1 Overview

The year 2012–2013 was touted as "The Year of the MOOC" in media reports (Pappano, 2012). MOOC developers promoted their vision for opening up education to the masses through their online platforms (Selingo, 2014). However, data from several large MOOCs showed that thousands of learners who enrolled in the courses already had access to education and held bachelor's, master's, and even doctoral degrees (Ho et al., 2014; Nesterko et al., 2014a; Nesterko et al., 2014b). Concurrently, thousands of MOOC learners were not completing the courses, and data showed multiple MOOCs with completion rates lower than 15% (Ho et al., 2014). This study aimed to gain a richer understanding of the adult learners' MOOC experiences, specifically adult learners' views of MOOC motivation, success, and completion. The qualitative, Internet-based research (IBR) method of virtual ethnography was used to gain deeper insight into adult learner experiences. I interviewed twelve adult learners between the ages of 25 to 70 with bachelor's and master's degrees, residing in locations around the globe. I observed their experiences for four weeks in The Ohio State University's (OSU) Human Trafficking MOOC via the Coursera platform. The overarching research question guiding the study was:

RQ1: What are adult learners' perceptions of their experiences within a Massive
 Open Online Course (MOOC)?

Sub-research questions included:

- RQ1a: What motivates adult learners with bachelor's and master's degrees to participate in MOOCs?
- RQ1b: How does an adult learner's motivations influence his/her level of online presence within a MOOC?
- RQ1c: What are an adult learner's perceptions of online interactions with classmates and instructors within a MOOC?
- RQ1d: What does an adult learner describe as key factors for succeeding in a MOOC?
- o RQ1e: How does an adult learner define 'completion' of a MOOC?

 The study resulted in co-constructed narratives of adult learner experiences, as well as themes from interviews, observations, and researcher reflexive journaling. In this chapter, I discuss the commonalities and differences observed across adult learner experiences, the adult learner culture within social science MOOCs, and present an 'Adult Learner Social Science MOOC Experience' conceptual framework encompassing informants' perceptions of motivation, success, and completion. Discussion, conclusions, implications for the design of social science MOOCs, limitations of the study, and future research recommendations are also covered in this chapter.

5.2 Discussion of the Findings

5.2.1 Commonalities and Differences Across Adult Learner Experiences

A number of commonalities and differences, across adult learner MOOC experiences, emerged from interviews and observations conducted in the study. Table 5.1 summarizes these themes.

Table 5.1 Commonalities and Differences among Adult Learners' MOOC Experiences

Theme	Commonalities	Differences
1	Well-educated global lifelong learners	Levels of prior knowledge
2	MOOCing around the clock—Multi-	Different ages—Different stages
	tasking in personal and public spaces at	
	all times	
3	MOOCs for social justice awareness,	Learning for development vs.
	advocacy, and volunteerism/professional	enjoyment
	development	
4	MOOC analogies for accessible on-	Social vs. solitary learning
	demand education	approaches
5		Trust vs. skepticism of MOOC
		identities

Commonality themes 1 (well-educated, global lifelong learners), 2 (MOOCing around the clock—Multi-tasking in personal and public spaces at all times), and 4 (MOOC analogies for accessible on-demand education) provide rich detail regarding the attributes of adult MOOC learners. The informants in this study all had a bachelor's or master's degree and lived in locations around the world. They were well educated and many of them viewed MOOCs as a way to expand their knowledge on subjects to help with their careers, volunteer efforts, or for personal interest and enjoyment. Informants logged into the MOOC at a variety of times throughout each week and in a variety of personal locations such as their kitchen tables, while exercising or folding laundry, home offices, living rooms, and in their bedrooms. Several of the informants mentioned trying

the Coursera app on their mobile phones so they could watch the lecture videos in a variety of locations. Informants compared taking MOOCs to choosing a book to read from a library, choosing a food to eat from a buffet, and selecting and ordering videos from a Netflix queue.

These commonalities among the informants' perceptions suggest adult MOOC learners tend to have a deep passion for lifelong learning and value on-demand, accessible MOOCs that can fit into their already busy lives. Informants expected MOOCs to provide content on topics that interested them for professional development, personal development, and enjoyment. These findings are supported by the developing MOOC literature. A recent quantitative study (Macleod, Haywood, Woodgate, & Alkhatnai, 2015) evaluated learner participation patterns across six MOOCs, each offered two different times from 2012–2014, from the University of Edinburgh, via the Coursera platform. Macleod et al. (2015) reviewed 150,000 survey responses and the IP (Internet Protocol) address activity of the 600,000 people who enrolled in the MOOCs. Their findings, specifically related to adult MOOC learner attributes, support theme 1 from this study. That is, Macleod et al. (2015) found that MOOC learners are truly from all over the world with the most enrollees in the University of Edinburgh courses coming from the United States, United Kingdom, India, Canada, Brazil, and Spain. The researchers discussed how the data did not match the MOOC media hype or mission of offering "access to higher education courses for the disadvantaged" (p. 57), as 70% of the enrolled learners in these MOOCs were employed and had bachelor's or master's degrees. The study also showed learners' primary reason for enrolling in a MOOC was to "learn new

things" (p. 57). The informants in my study also described wishing to expand their current knowledge on topics that were interesting to them.

Commonality theme 3, MOOCs for social justice awareness, advocacy, and volunteerism/professional development, is somewhat unique in this study in that within the *Human Trafficking* MOOC, several of the informants had a motivation and passion for raising awareness of social justice issues. They strived to become more educated about human trafficking in order to apply the information to their volunteer efforts in the Peace Corps, ministry, National Guard, non-profit organizations, teaching, and their local communities. The literature (Ecclestone, 2013; Jobe, Östlund, & Svensson, 2014) discusses the potential of MOOCs for professional development in areas such as the library sciences and teacher development, yet there are currently no mentions of MOOCs for volunteerism development or social justice education. All of the informants in this study described an appreciation for MOOCs in the humanities and social sciences. They also deemed MOOCs as a powerful platform for facilitating global discourse about social justice issues such as human trafficking.

Five themes, related to differences across informants' experiences, illustrate that the MOOC learner experience is still, at its core, an individual and unique one.

Informants' experiences were varied, complex, and described by informants as being influenced by their levels of prior knowledge, ages, motivation, learning approaches, and views of the online presence of both fellow classmates and the instructor. Informants' levels of prior knowledge ranged from novices, who had basic awareness of human trafficking, to experts who were working and volunteering for human trafficking prevention organizations and efforts.

There appeared to be a connection between theme 2 (Different ages—Different stages) and theme 3 (Learning for development vs. enjoyment). The informants in this study were of different ages, ranging from 25 to 70 years old. At the younger end of the spectrum, some of the informants were in college pursuing graduate degrees or determining whether or not to pursue graduate school. Informants in the middle of the age range were working full-time, part-time, or staying home to care for their children. At the upper end of the spectrum, informants were settled into a career, looking to make their next career move, not working, or retired.

Despite their different ages and stages, informants at each age level described learning for development or enjoyment as reasons for taking MOOCs. For instance, 31-year-old Claudia enrolled in *Human Trafficking* as a means of professional development in her role as a Peace Corps volunteer working in Moldova. Similarly, 70-year-old Ed took the course with intentions to learn more about trafficking to help with his volunteer efforts in Thailand. Enjoyment was also a reason for taking the course, regardless of age. For instance, 26-year-old Lynn and 48-year-old Isabella both took MOOCs as a hobby. Therefore, the connection across these two themes is that no matter the age or stage of a MOOC learner, informants predominantly had two reasons for enrolling: personal/professional development or enjoyment.

This result is relevant to the current media reports and research discussion about the purpose of MOOCs. One of the main debates and concerns about MOOCs is how to award credit that will be recognized by higher education institutions (Kolowich, 2013c). However, the informants in this study, across different ages and stages, predominantly were not interested in receiving college credit for *Human Trafficking*. As discussed, the

informants were more interested in expanding their knowledge on the topic for professional development and/or enjoyment. Based on my results, it would appear that the adult learner population is not necessarily motivated to enroll and participate in MOOCs for college credit. Colorado State University—Global Campus reached the same conclusion when it offered a MOOC for credit at the cost of 89 dollars and no one signed up (Kolowich, 2013c). However, it is important to note that Torrence, Mimi, and Anne were interested in potentially pursuing graduate degrees in the social sciences and hoped their experiences in MOOCs such as *Human Trafficking* would help them make decisions about which graduate programs and degrees to pursue. Therefore, MOOCs could be an entrance or access point for adult learners considering their next academic degree commitments.

In 2014, while I was collecting data for this study, Selingo published a book entitled, *MOOC U: Who is Getting the Most out of Online Education and Why*. Selingo interviewed and presented the stories of three adult learners enrolled in the University of Virginia's *Grow to Greatness* MOOC. Selingo's participants took the MOOC in order to gain insights, tips, and sound entrepreneurship information they could each apply to growing their own businesses. Selingo wrote, "The current menu of MOOCs is perfect for those who need to learn a skill for their job or are fascinated by the world and want to learn more about it. But MOOCs fall far short for those students who need to form the building blocks of a college education" (2014, p. xx). Similar to the participants in this study, the learners in Selingo's book did not appear to be interested in earning college credit.

Another connection emerged between theme 4 (Social vs. solitary learning approaches) and theme 5 (Trust vs. skepticism of MOOC identities). Informants such as Claudia, Mimi, and Rebecca described being socially active in the *Human Trafficking* MOOC. They read several discussion board posts and posted comments of their own. Those informants who were more socially engaged shared an interest in learning more from fellow MOOC classmates, and they specifically mentioned broadening their worldviews by engaging with learners from other countries who had first-hand knowledge and experiences with human trafficking. These socially engaged informants appeared to trust the posts and information provided by their fellow learners in the discussion boards.

In contrast, informants such as Blake, Isabella, and Anne chose to take a more solitary approach to participating in *Human Trafficking*. They read through several of the discussion board posts, but they chose not to engage in the discussion. These same informants also expressed skepticism of the information and stories shared by their fellow learners in the online discussion. It would seem the informants' learning approaches and levels of online presence within the MOOC were connected to their levels of trust of their classmates' online presences. The socially engaged informants were more trusting of others' posts, while the solitary informants were less trusting. Of course, there are additional factors that influenced informants' levels of social engagement such as time available to participate in the course and reasons/motivation for participation.

In a mixed methods case study, Ke (2010) used the Community of Inquiry (CoI) model as a lens to examine the perceptions of social, cognitive, and teaching presence by adult learners across 10 distance education courses from a Hispanic-serving university in

the United States. As part of the research, Ke interviewed 16 adult learners about their experiences in online discussion boards and found perceptions were mixed. Similar to my study, some of the learners in Ke's research mentioned roadblocks to their online discussion participation including lack of interest in "superficial posts" from their peers, the inability to explain themselves effectively in written word, as well as lack of time due to the demands of their daily lives including jobs, childcare, and home responsibilities" (p. 815). Ke noted adult learners did not typically form CoIs and often did much of their learning individually and off line. The results led Ke to arrive at the question: Should instructors "tone down the role of online discussions?" (p. 818).

Building on Ke's question regarding whether discussion board posts should be required in traditional distance education courses, this is also an important question to ask of MOOC environments. As discussed previously, interviews and observations from the *Human Trafficking* MOOC showed that informants' perceptions of the online discussions were mixed. The decision of how much to utilize and require posting to the discussion board in a MOOC appears to be a complicated design decision, given thousands of learners from all over the world with different purposes and approaches to taking the course and varying levels of trust of online identities. In this study, informants tended to access the discussion board, read through several posts, and engage in the discussion as little or as much as they wanted depending on their interests, perceptions and trust of fellow learners, and the time they had to commit to the course. This is just one of the many multifaceted cultural and social dynamics observed in the *Human Trafficking* course, which I discuss in the next section.

5.2.2 MOOCocracy: A Learning Democracy

The anthropological nature of a virtual ethnography leads to a richer understanding than that obtained through statistics typically collected from MOOCs. The researcher-as-informant experience and observations made during OSU's *Technology* and Ethics MOOC guided me to a preliminary understanding of MOOCs, based in the social sciences, as having a fluid, dynamic, and democratic culture. My entry into *Technology and Ethics* was fluid from the beginning, as the course was delayed and did not start on time. Myself and fellow MOOC learners seemed to accept the delay and still joined the course when it became available. Ota (2013) had a similar experience, describing how an edX statistics MOOC delayed its start by ten days and ran for two months, instead of the one month it was originally advertised to run. Hence, the very timing of MOOC entry and duration appears to be fluid and changeable due to the nature of the online environment and stakeholder deadlines.

I explored the realization of a MOOCocracy culture further by engaging in discussion with the informants in *Human Trafficking* about their perceptions of up-voting and down-voting in discussion forums, reputations, discussion board interactions, the peer review process, and their overall thoughts on MOOC environments. The themes that emerged from interviews and observations of informants in the *Human Trafficking* course included:

- Theme 1: Critical education consumers—Frequent MOOCers
- Theme 2: Voting and reputations—MOOCs meet social media mentality
- Theme 3: Lurking as learning
- Theme 4: Instructor engagement is nice, but not expected

- Theme 5: The power of peer review
- Theme 6: Hopeful for the future

This section discusses these themes, compares the results to recent MOOC research literature, and proposes interpretations of the social democratic learning culture of social science-based MOOCs.

Adult learners in this study assumed the characteristics of critical education consumers. That is, the informants were often critical of the design of the MOOC environment, the instructor, and their peers. The informants made many suggestions as to how MOOCs could be improved to better support their interests, motivations, online engagement, and overall learning. I first observed this in the *Technology and Ethics* MOOC, when learners vocally, via the discussion board, called for the instructor to adjust course materials to present a larger variety of viewpoints of the course content. A similar event happened in the *Human Trafficking* course, when vocal learners posted discussion threads questioning the instructor's organization of the course. The learner feedback in this MOOC was that the lecture videos were too short, there was too much reading, and the course was structured differently from other MOOCs they had experienced.

Similar to the general tone of the discussion and feedback in the *Human*Trafficking forums, informants described their experiences as being tied to the design of the course. The informants would often describe their satisfaction or dissatisfaction with the course in terms of its design, more so than in terms of their own personal learning performances. Their perceptions of the course were often informed by other experiences and expectations developed through their enrollment and participation in other MOOCs.

Many of the informants in this study were what I call "Frequent MOOCers." Ten of the

12 informants had previously taken a MOOC, and nine of them were concurrently enrolled in other MOOCs at the time of this study. These informants appeared to be frequently evaluating and comparing the institutions, instructors, and the designs of the multiple MOOCs in which they had enrolled. They would then tie these similarities and differences in the instructional environments to their own perceptions and experiences of learning within the *Human Trafficking* course. Hence, one facet of the adult learner MOOC experience appears to be that of a consumer critically comparing and selecting educational experiences from multiple institutions that appealed to their individual expectations for a well-designed online educational environment.

It is important to consider that the informants' critical examination of instruction and instructional design might not necessarily be a function of the MOOC culture, but rather simply a function of the informants being adult learners with pre-existing and developing views of what constitutes effective course design and instruction. In general, adult learners tend to be vocal about their learning preferences and needs and typically seek out relevant educational experiences (Ausburn, 2004; Ross-Gordan, 2003). Of course, learner feedback and critique of course design also occurs in smaller distance education courses, as well as in face-to-face courses. However, within MOOCs, the amount of feedback that the instructor receives is amplified and thus, more noticeable due to the number of learners vocalizing their views and critiques of the course design.

In an article in *The Chronicle of Higher Education*, Young (2013) made the comparison between "hard-core gamers" in the video gaming world and what he called "hard-core learners" in the MOOC world. Young's description of hard-core MOOC learners supports the finding of frequent MOOCers in this study. Young reported that in

2013 "...nearly 100 students using Coursera, the largest provider of MOOCs, have completed 100 or more courses. And more than 900 or more students have finished 10 or more courses, according to the company." Those numbers have undoubtedly grown since Young's report. Young (2013) also interviewed adult MOOC learners who provided tips for beginning MOOC learners who were joining new courses. The top tip that emerged was focused on the instructional design and facilitation of the MOOC. The interviewees stressed that MOOCs with ambiguous goals and expectations were unsuccessful. As previously mentioned, informants in this study also discussed how a sound and effective course design was connected to a positive MOOC experience.

Another theme that emerged in this study, which ultimately led to the conceptualization of MOOCocracy, a social learning democracy, was that of voting and reputations—MOOCs meet social media mentality. The Coursera platform had a 'Forum Reputations' ranking board embedded within its discussion forums. MOOC learners earned 'reputations' and were ranked on the Forum Reputation board. The learner reputations were based on up-votes, down-votes, and total number of discussion posts. I noticed this reputation ranking system during my own experiences in *Technology and Ethics* and incorporated questions about up-voting, down-voting, and the Forum Reputation board into the interview protocol for the *Human Trafficking* virtual ethnography.

Informants were familiar with their democratic right to vote in the discussion boards. While all informants said they never down-voted, Anne and Claudia described casting up-votes when they found a fellow learners' comments interesting and to show support for posts they appreciated. Sean found the voting system to be in poor taste

within a MOOC focused on the sensitive subject matter of human trafficking. Mimi discussed how the voting and ranking reminded her of social media platforms where you can 'like' posts. She found herself concerned with how many votes her posts in human trafficking received and found herself checking in on the MOOC, much like she would her Facebook or Instagram accounts. In regards to the forum reputations, none of the informants were aware of the Coursera reputation ranking system, nor had they seen the Forum Reputation board. Therefore, the adult learners in this study did not necessarily seem concerned with the 'reputation' they were building or perceived to have within the MOOC.

Deciding whether or not to participate in MOOC discussion boards appeared to be connected to learners' levels of online social presence. Online social presence can be viewed as the degree to which a learner chooses to engage and interact with others via computer mediated communication (CMC) (Gunawardena, 1995; Richarson & Swan, 2013). This study showed that while some informants did make discussion posts, the majority chose to lurk and only read the discussion posts of their fellow learners.

Observations confirmed this finding, as there were *Human Trafficking* discussion threads with dozens of learner posts, yet hundreds of views. However, Joseph and Claudia pointed out that the *Human Trafficking* discussions were often one-direction. That is, a learner would make a post and often not receive a response from anyone else in the course. Hence, the informants did not appear to feel a sense of being a part of an interactive online community with back and forth dialogue. This could be due to a number of factors: the sheer volume of discussion board posts made each day, the ease

with which learners could get lost in the threads, and/or the lack of organized spaces within the discussion for community development.

All of the informants in this study described spending time lurking in the discussion threads. A lurker is often described as a "silent member of a community" (Sun, Pei-Luen Rau, & Ma, 2014). The informants were each able to recall portions of posts and conversations they read. This is where the theme of lurking as learning emerged. Even though the informants were lurking, they were reading and learning from the perspectives and experiences of other learners from around the world. In a review of the literature on lurking, Sun et al. (2014) found opposing research with some authors considering lurkers to be "free-riders," while others described "lurking is not only normal but also is an active, participative and valuable form of online behavior" (pp. 110–111).

Informants identified specific reasons for lurking such as lack of time to engage in discussions, joining conversations late, and not knowing how to put their thoughts into a coherent discussion post. Informants also described specific approaches to their lurking such as managing their time to read only forum posts that received the most votes and comments, reading threads from their geographic areas, and reading threads that had very little activity.

While several of the informants in this study chose not to establish a social presence in the MOOC, they still described learning from lurking. This aligns with research studies that showed lurkers still felt they were members of the online community (Sun et al., 2014). In actuality, lurking could be described as a viable form of social learning. Lurking can be connected to Bandura's (1977) description of vicarious learning. Bandura wrote "observation enables people to acquire large, integrated patterns of

behavior without having to form them gradually by tedious trial and error" (p. 12). In this study the adult learners who lurked in the MOOC described and viewed themselves as engaged in social learning.

Returning to the CoI framework (Garrison et al., 2010), I asked informants about their thoughts on instructor presence in *Human Trafficking* and within MOOCs in general. All of the informants were able to describe 'seeing' the instructor in the lecture videos and within the discussion threads. However, none of the informants mentioned instructor presence in the form of the emails and announcements the instructor sent each week. Only one of the informants called the instructor by name, while the majority of informants referred to the instructor as 'her,' 'she,' 'the teacher,' and 'the instructor.' The theme that "instructor engagement is nice, but not expected" emerged when informants described that they were resigned to the fact that MOOC instructors are essentially one person communicating with thousands of students. Therefore, the learners in this study valued the instructor and her presence, but they did not necessarily expect individual attention from her. Mimi was the only participant who established a direct relationship with the instructor. Mimi and the instructor communicated through direct email, outside of the course environment.

Ross, Sinclair, Knox, Bayne, and Macleod (2014) described three roles of the MOOC instructor: "the distant 'rock star' lecturer, the co-participant or facilitator within a network, and the automated processes that serve as proxy tutor and assessor" (p. 58). Based on my observations and interviews with informants, it appeared the *Human Trafficking* professor functioned in each of these roles in various capacities. She was the 'rock star' of the course in that her name and face were on all of the course materials and

communications, yet the majority of the informants in this study did not call the instructor by name and spoke of her as a distant presence in the course. Within the discussion board and course description, the instructor described her approach to the course as one of a facilitator of discussion and learning. As a tutor, she also shared information or clarified ideas and misunderstandings in the discussion threads.

There is much debate over how teachers can establish presence and effectively facilitate MOOCs (Ross et al., 2014). However, in this study the majority of informants were resigned to the fact that the human trafficking course was indeed massive, and the instructor was busy. Informants Mimi, Anne, and Claudia described an appreciation for traditional, face-to-face classroom environments in which they could ask the instructor questions. Yet within MOOCs, the informants did not expect instructor interaction but rather expected to take responsibility for their own learning.

Another feature of MOOCocracy that emerged across informant interviews, observations, and my own participation in *Human Trafficking* was the power of peer review. In the course, learners who submitted the final PSA assignment were randomly assigned PSAs from five of their fellow learners to grade via a rubric. This type of assignment would be difficult to grade via an electronic grading system, as it was very creative and subjective. Seven of the 12 informants submitted PSA assignments and participated in the peer review process and mostly expressed positive experiences. A theme that emerged across interviews was that the peer review process is not one the informants took lightly. The informants described taking the duty very seriously in order to make fair and valid judgments about their peers' work. They also expressed the challenges of taking on the grader role to critique others' assignments. For instance,

Regina took the role of grader very seriously and closely adhered to copyright guidelines in the assignment requirements by pointing out to fellow learners when they used images that violated copyright rules. Claudia and Mimi described how the peer review process furthered their own learning because they were able to learn more about perspectives on human trafficking from learners in other countries. Elizabeth noted that geographical and cultural differences were challenging in the peer review process; her PSA was situated in a Seattle context but her peer grader misunderstood Elizabeth's geographically connected PSA content.

Peer assessments are another area of controversy in MOOC design. While peer review is one way to incorporate grading and assessment into courses with writing assignments, it is also an area of subjectivity. Suen (2014) pointed out the many discrepancies that can occur with peer grading in MOOCs. Some of the discrepancies include: a wide range of variability in scores across peer graders, inconsistency of ratings on assignments of similar quality, differences in raters' approaches regarding leniency and rigor, and more (Suen, 2014, p. 322).

To remedy some of these issues, *Human Trafficking* used a system similar to the Calibrated Peer ReviewTM (CPRTM), developed at the University of California—Los Angeles (Suen, 2014). Suen described the CPRTM process as a way "to evaluate the accuracy of the ratings provided by each student rater and assign weights to their ratings according to their relative degree of accuracy. The final rating score for the submission would be a weighted average of the rating scores from peer raters" (pp. 319–320). The PSA scores of the learners in *Human Trafficking* were averaged based on the five different scores received from their peers. Informants in this study seemed to be sensitive

to the fact that peer review in MOOCs is controversial. They valued the use of peer review in the massive environment and took their roles of raters seriously, developed strategies for making ethical judgments and grade decisions, and viewed peer review as another opportunity to learn from others around the world.

All 12 informants expressed overall positive views of the experimental nature of MOOCs for expanding higher education opportunities. This is where the theme of "hopeful for the future" emerged. Isabella particularly discussed that as she moved from location to location around the world, she developed an appreciation for Coursera and MOOCs because all she needed was a laptop and Internet connection to continue her lifelong learning. Sean, Blake, Claudia, Anne, Elizabeth, Regina, and Lynn all planned to continue taking MOOCs to enhance their current degree programs or for enjoyment. As Torrence was beginning to explore graduate school and continuing education options, he was the only informant to mention consideration of possibly earning professional credentials or an official representation of his MOOC learning through a certificate program such as Coursera's 'Signature Track.'

Mimi and Ed valued MOOCs and access to online education, but they planned to take future courses only when their schedules allowed. Joseph, who was in transition moving to the Philippines, was unsure whether he would continue taking MOOCs. Elizabeth and Regina expressed hope for MOOCs to continue improving in regards of their design, global learning, grading, potential for continuing education credit, research, and overall access to education. While there was much hope for the future of MOOCs, Ed was the only informant who discussed the business challenges and implications of how MOOCs will be sustained over time, if they remain free of charge.

The informants' positive views and outlooks for the future of MOOCs appeared to be connected to their roles of critical education consumers. As platform providers and higher education institutions continue to experiment and search for MOOC business models, it is important to note that the adult learners in this study did not discuss or mention whether they would be willing to pay for their MOOC enrollments. However, there was a sense of appreciation among the informants for free access to education for their graduate and lifelong learning endeavors.

Burd, Smith, and Reisman (2015) recommended that higher education institutions consider a 'brandMOOC' model for students who have finished or are working on a higher education degree (p. 47). The brandMOOC approach would "promote awareness of and could increase applications to a postgraduate program in which an institution has research excellence." In addition, the authors suggested, "students who successfully complete a MOOC could be targeted to receive information about associated graduate programs" (p. 47). This brandMOOC approach could potentially impact learners such as Torrence, Anne, and Mimi who took MOOCs to explore graduate school options.

However, the strategy would not necessarily impact learners such as Blake, Sean, Isabella, Ed, Lynn, and Regina who took MOOCs as a hobby. While this section on adult learner culture provides a somewhat macro-level view of the social science MOOC environment, it is also vital to gain a more micro-level perspective of adult learners' experiences.

Hence, the next section discusses facets of the individual adult learner experience.

5.2.3 Motivation, Success, and Completion: An Initial Conceptual Framework of the Adult Learner Social Science MOOC Experience

While the social science MOOC learning environment is complex and dynamic (as described in the previous MOOCocracy section), the adult learners' experiences within the environment are also multifaceted. To better understand adult learners' perceptions of motivation, success, and completion within a MOOC, I specifically addressed the following research sub-questions:

- o RQ1a: What motivates adult learners with bachelor's and master's degrees to participate in MOOCs?
- RQ1b: How does an adult learner's motivations influence his/her level of online presence within a MOOC?
- o RQ1d: What does an adult learner describe as key factors for succeeding in a MOOC?
- o RQ1e: How does an adult learner define 'completion' of a MOOC?

 The results for these questions will be discussed in this section as well as summarized via a proposed conceptual framework of the adult learner experience in a social science MOOC. This discussion and conclusions were informed by observations and interviews from the *Human Trafficking* MOOC, as well as co-constructed narratives of informants' experiences within the course.

As part of this study, I worked with informants to develop co-constructed narratives of their experiences in the *Human Trafficking* MOOC. The narratives can be found in Chapter Four, section 4.42. The narratives grew out of my observations of the informants' participation in the MOOC and my engagement and interviews with each

informant. Within the interviews, I asked each informant targeted questions about why they took the MOOC (motivation), what they hoped to get out of it (motivation/success), their perceptions of success in a MOOC, and what it meant to them to complete a MOOC. Their responses to these questions were then woven into the co-constructed narratives. I also mapped out a conceptual framework to organize and make connections between their responses, in order to begin to understand the intricacies of the adult learner social science MOOC experience. Figure 5.1 presents the proposed framework. Each portion of the framework (motivation, success, completion, and barriers) will be discussed in the following subsections.

Barriers Time Frequent MOOCing Life circumstances Course design Lack of interest **Motivation** Success No investment Unenjoyable Content interest Understand material Learning New knowledge Professional/volunteerism New resources to use development Enjoyment Enjoyment Expanded worldview Information retrieval ADULT LEARNER Informed citizen Career planning SOCIAL SCIENCE New relationships Social connection Recognition **MOOC EXPERIENCE Barriers** Competition (instructor, social, cognitive presences) *Time*Frequent MOOCing Life circumstances Completion Course design Satisfied course requirements Lack of interest Statement of Accomplishment No investment Unenjoyable Personal satisfaction Downloaded resources

Figure 5.1 An initial conceptual framework of adult learner social science MOOC experiences

Watched videos Authority on topic

5.2.3.1 Motivation

Motivation

- 12 Content interest
- 12 Learning
- 9 Professional/volunteerism development
- 5 Enjoyment
- 4 Information retrieval
- 3 Career planning
- 2 Social connection
- 1 Competition

Figure 5.1 Adult learner motivations in *Human Trafficking* MOOC

I intentionally asked each informant in post-interviews about their reasons for enrolling and participating in the *Human Trafficking* MOOC. Then, I purposefully coded the interviews for instances of motivation. The numbers to the left of the motivation factors listed in Figure 5.2 denote the number of informants who mentioned each motivator. As shown, all twelve informants mentioned being motivated by the human trafficking content, as well as wanting to learn more about human trafficking. Informants described an internal desire to learn more about the content in order to expand their knowledge. Informants such as Isabella described being interested in the content for personal reasons such as wanting to know more about how adoption around the world is impacted by trafficking because she had prior experience adopting her daughter in India. Informants such as Sean were initially motivated to learn more about trafficking by an

external factor. He had watched a popular moving about trafficking that peaked his interest and motivation to become more informed on the subject.

Professional/volunteerism development is listed as the third motivator for adult learner MOOC enrollment and participation in this study. Mimi, Regina, and Claudia's motivations were connected to professional development. Mimi and Claudia both worked with organizations aimed toward preventing trafficking. Regina worked as a teacher in an alternative high school and wanted to incorporate what she learned into her classroom lessons on modern day slavery. Ed, Blake, Joseph, and Elizabeth were all volunteering with different organizations that had trafficking prevention efforts throughout different countries. These results could be somewhat unique from learner's motivations in other MOOCs in that volunteers with anti-trafficking efforts were drawn to the *Human Trafficking* course.

Several of the informants also mentioned enjoyment as their main reason for signing up for MOOCs. Sean, Lynn, Anne, and Isabella were frequent MOOCers and described taking MOOCs as a hobby and for fun. Lynn and Anne particularly described taking more than one MOOC at a time for enjoyment. Lynn and Anne each mentioned that if a MOOC became too serious, demanding, or if they had a negative experience in one, they would not complete it. Isabella also described enrolling in up to three MOOCs at a time as a hobby. She would spend leisure time reading course materials, watching lecture videos, and engaging in discussion threads, instead of watching television.

Another motivator that emerged from informants' interviews was information retrieval. Informants such as Claudia, Sean, Blake, and Ed described downloading materials from MOOCs to listen to or read at a later date. Claudia intended to utilize the

course resources for developing a website for the Peace Corps human trafficking prevention program in Moldova. This particular motivator seems connected to the current analogy that learners are using MOOCs much as they would an electronic textbook (Selingo, 2014). Some of the informants in this study confirmed signing up for MOOCs only to watch the videos or find new resources, without any intention of completing the course.

Three of the informants signed up for *Human Trafficking* with hopes that it might help them, at least partially, make their next career moves. Mimi, Torrence, and Anne were all considering whether or not to pursue master's degrees in social justice-related fields. Mimi wanted to see if she could fit coursework into her already busy life.

Torrence was investigating colleges and criminal justice programs, and Anne was looking for ways to get involved in human trafficking efforts and evaluating online degree options. Burd et al. (2015) recommended that companies and higher education institutions develop a 'bridgeMOOC' for learners looking to enter a university degree program (p. 47). A bridgeMOOC could potentially be helpful for students such as Mimi, Torrence, and Anne who were looking to MOOCs to inform their decisions about pursuing a master's degree.

Social connections and competition were the least mentioned motivators in this study. Mimi was highly motivated to engage with other learners from around the world to learn more about their trafficking experiences, perspectives, and programs. Anne also described being motivated by the opportunity to connect with other learners from all over the world. Regina was the only learner who mentioned competition as a MOOC motivator. She described competition in the context of competing with herself to test her

world history knowledge in a MOOC. Regina taught history and described feeling competitive in demonstrating her knowledge through a MOOC exam on historical content.

The results of this study, specifically related to reasons for taking a MOOC, is consistent with current MOOC research that shows learners' reasons for taking MOOCs range from personal and professional development to enjoyment. Hew and Cheung (2014) reviewed MOOC literature and found 25 articles focused on student and instructor reasons for using MOOCs. The researchers reported four reasons for student MOOC enrollment including: (1) "They wanted to learn about a new subject or to increase their knowledge on something they learned before," (2) "They were curious about MOOC[s]," (3) "For personal challenge," and (4) "They want to get as many course certificates as possible" (with the reverse finding that "Many earners do not seek credit toward any credential") (p. 48). In regards to item four, none of the informants in this study mentioned wanting to earn the statement of accomplishment from *Human Trafficking* as their reason for taking the course.

5.2.3.2 Success



Figure 5.2 Adult learner perceptions of success in *Human Trafficking MOOC*

My research questions and interview protocol made the distinction between success and completion in response to MOOC literature about retention and completion rates. MOOC completion rates have been reported to be significantly low with less than 15% of enrolled students actually completing them (Kolowich, 2013c). This has led MOOC platform providers to question whether or not completion is the proper assessment for gauging learning and effectiveness of MOOCs (Koller, Ng, Do, & Chen, 2013). Cousera founder, Daphne Koller, and her team have proposed looking at MOOC effectiveness from the standpoint of learner intention and not necessarily using completion rates as the standard for measuring success. Koller et al. (2013) proposed that MOOC 'non-completers' still had successful experiences through watching videos, accessing readings, and posting to discussions, even though they did not meet course completion requirements. Koller et al. (2013) outlined three categories of MOOC

learners: passive participants (watched/read content), active participants (completers), and community contributors (posted in discussion forums).

With this distinction between r success and completion, I specifically asked informants about their perceptions of what it means to be successful in a MOOC. Figure 5.3 highlights informants' responses, which are presented and ranked based on the number of informants who mentioned each aspect. All twelve of the informants described MOOC success as understanding the material and gaining new knowledge. Seven of the informants mentioned gaining new resources as the definition of success. This appears connected to the MOOC motivator of information retrieval including downloading MOOC materials for various personal learning and professional goals. Informants such as Lynn, Anne, and Ed described MOOC success as connected to enjoyment. They discussed enjoying MOOCs much like a reader enjoys a captivating book. It is important to note that learning for enjoyment appeared as both a MOOC motivator and a criteria for success.

Five of the informants described MOOC success as expanding their worldviews and three of them identified success as becoming an informed citizen on a topic. The instructor and instructional designer created a 'Share Your Story' discussion forum within *Human Trafficking* in which learners were encouraged to discuss their experiences with trafficking. Some of the informants specifically mentioned how reading posts from trafficking victims expanded their views of the subject, and to them, that was a success. Additionally, Regina pointed out that she had success learning in a MOOC when she could apply the information to her everyday life and develop deeper understanding of issues facing her community.

To one informant, MOOC success comprised developing new relationships, making connections, and building recognition for her anti-trafficking organization. Mimi developed a direct email relationship with the *Human Trafficking* instructor. Through this relationship, Mimi and the instructor shared resources and perspectives on trafficking. The instructor also shared Mimi's professional PSA for her anti-trafficking non-profit organization in the course materials for week four. While Mimi is the only learner who directly mentioned new relationships and recognition in her definition of MOOC success, the thread of social engagement with diverse viewpoints emerged across informants who valued learning from fellow students all over the world.

Informants' perspectives of success in this study coincided with two of Koller et al.'s (2013) categories of MOOC students. Table 5.2 demonstrates how participants' criteria for success line up with Koller et al.'s (2013) categories of passive participant and community contributors.

Table 5.2 Comparison of Koller et al.'s (2013) MOOC Learner Categories to Informants Criteria for Success

Koller et al.'s (2013) MOOC Learner	Informant Perspectives on "Success" in a
Categories	MOOC
Passive Participants	Understand material
(watched videos, attempted course	New knowledge
assignments/quizzes—did not	New resources to use
complete)	Enjoyment
	Expanded worldview
	Informed citizen
Community Contributors	New relationships
(active in course, but main intention is to generate new content,	Recognition
participates in discussion—does not	
complete)	

Informants in this study did not mention completion or attaining the Statement of Accomplishment as part of their criteria for MOOC success. Koller et al. (2013) stated, "Given the broad range of motivations in the population of students who participate in MOOCs, the true challenge of online education will be to identify what students want to get from their virtual classroom experience and help them achieve those goals" ("The relevance of retention in MOOCs", para. 6) McAuley et al. (2010) also discussed learner differences in their definition of 'MOOC' and stated learners "self-organize their participation according to learning goals, prior knowledge and skills, and common interests" (p. 4). The results of this study coincide with Koller et al.'s (2013) and McAuley et al.'s (2010) descriptions of varied learner MOOC expectations and motivations. This study illustrated there are indeed varied learner motivations and goals within the MOOC environment and that while completion rates may be of concern to higher education institutions and developers as a measurement of success (Koller et al., 2013), completion was not necessarily a concern of MOOC informants in this study or their main goal for enrollment or participation. It may be important for developers, providers, and higher education institutions to evaluate other metrics in addition to completion rates to determine whether MOOC learners have been successful in reaching their goals in the course.

5.2.3.3 Completion

Completion 10 Satisfied course requirements 10 Statement of accomplishment 5 Personal satisfaction 5 Downloaded resources 4 Watched videos 1 Authority on the topic

Figure 5.3 Adult learner perceptions of completion in *Human Trafficking MOOC*

Seven of the 14 initial informants (two of the informants did not participate in post-interviews) in this study did not complete *Human Trafficking* based on the definition of meeting the course requirements (i.e., taking two quizzes, submitting a PSA assignment, and earning 70% of the 100 points to earn a Statement of Accomplishment). I asked each of the 12 informants who participated in post-interviews how they defined MOOC completion and then coded and quantified the responses (see Figure 5.4).

To the informants in this study, success and completion were not the same.

Informants tended to define success in personal terms, while completion was defined in course terms. Ten informants mentioned satisfying course requirements and earning the Statement of Accomplishment as MOOC completion. Ed discussed that while his definition of completion was traditional and focused on meeting course requirements, at his age and stage of learning, completion was not necessarily his goal for enrolling and

participating in MOOCs. Isabella, Anne, and Lynn, who take MOOCs as a hobby, included a sense of personal satisfaction in their definitions of completion. Anne, Blake, and Sean also described MOOC completion as downloading the course materials for watching, listening, and reading to learn new information, gain new perspectives, and supplement their personal lifelong learning and degree seeking efforts. Regina was the only informant who discussed MOOC completion in terms of becoming an authority on the topic. At the time of this study, Regina was a teacher in an alternative school and took MOOCs to brush up on topics, as well as learn more about specific topics in order to incorporate them into her lessons. Regina had hoped to learn more about trafficking via the MOOC to support her efforts to develop a lesson on modern day slavery.

5.2.3.3.1 Statement of Accomplishment

As the majority of informants defined completion in terms of earning the Statement of Accomplishment, discussion with informants indicated their varied views on the purpose of the credentials. Torrence described an interest in Coursera's 'Signature Track' program for obtaining credentials to demonstrate professional development or work toward a graduate degree. Informants such as Sean questioned what to do with the Statement of Accomplishment, whether it should be included on his curriculum vitae, and whether employers would value the credential. Claudia and Mimi planned to include their achievement on their resumes, while Lynn, Elizabeth, Joseph, Blake, and Isabella simply printed out their statements or kept them in their online records as a personal accomplishment. Regina framed her MOOC certificates and displayed them in her classroom as an example of lifelong learning for her students.

The various informant perspectives, questions, and considerations of the uses of the Statement of Accomplishment mirror the current larger discussion about MOOC credentials (add a ref here). Providers, learners, and employers are exploring the value and uses of MOOC completion credentials such as certificates and badges (Maas, Heather, Do, Brandman, Koller, & Ng, 2014). In a move to further develop a credible MOOC credentialing program, Coursera has implemented a 'Signature Track' program in which learners can set up a verified online identity, pay a fee, and earn a verified completion certificate in a variety of courses (Maas et al., 2014). However, the fee for gaining the credential challenges the 'open' feature of MOOCs.

A mixed-methods study of human relations (HR) professionals (n = 103) from business and communications, education, technology, manufacturing, health, public administration, finance and retail, showed 31% of those surveyed had heard of MOOCs and 64% viewed MOOCs positively (Walton Radford et al., 2015). The majority of respondents also viewed MOOCs as potential avenues for employee recruitment and professional development. While these research results are somewhat promising for adult learners such as Torrence, Mimi, and Anne who were considering graduate school and career change and advancement paths, it is still somewhat unclear as to how MOOC completion credentials are currently being utilized by learners and employers.

5.2.3.4 Barriers

Barriers

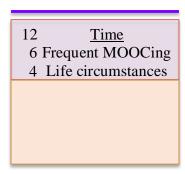


Figure 5.4 Adult learner perceptions of barriers in *Human Trafficking MOOC*

All 12 of the informants in this study described time and course design as the two biggest barriers that prevented them from completing MOOCs. Six of the informants described frequent MOOCing as inhibiting them from succeeding in and completing them. Blake described signing up for several MOOCs at one time, yet he did not have time in his daily life to fully participate in and complete each MOOC. As time allowed, he was able to sometimes learn new information and download materials from some of the MOOCs in which he had enrolled, but he often did not engage in or complete the courses.

Informants had full lives and busy schedules and while they appreciated and valued MOOCs for lifelong learning and professional development, other priorities such as graduate school, careers, volunteer efforts, and family took precedence in their lives. Therefore, when life became hectic, their MOOC participation moved down on their list of priorities. As an example, Ed intended to participate in and complete *Human*Trafficking, but he became busy in a new role with his local chapter of The Rotary Club

and efforts to help a local businessman in Thailand increase sales with a share of the proceeds going towards anti-trafficking efforts. Torrence also intended to participate in and complete the course, but unforeseen circumstances prevented him from doing so. A severe storm hit Michigan, knocking out power to Torrence's home and work for almost two days, and damaged Torrence's rental property.

A common theme across informant interviews was how course design could sometimes prevent informants from succeeding in and completing MOOCs. The informants each had individual motivations for participating in, and expectations for the design of, *Human Trafficking*. Elizabeth described how the videos were too short compared to videos of other MOOCs. Anne and Isabella both discussed how the course was atypical compared to other MOOCs they had taken; for example, the lecture videos were shorter and it was more discussion-based. Observations of discussion threads in the MOOC showed some learners openly criticized the course design. Joseph, Sean, and Regina all discussed how the course did not necessarily expand their prior knowledge on the topic and how they had wished there were more content and information from the instructor. Based on the results of this study, there appears to be a connection between course design expectations and informants' continuation in and completion of the course. On the monetary front, Torrence discussed how if he had made a financial investment in *Human Trafficking*, it may have pushed him to complete the course.

Khalil and Ebner (2014) reviewed data from 42 different MOOCs offered across popular platforms such as Coursera, Edx, and Udacity to identify "reasons that may cause student drop-out or withdrawal from their MOOCs" (p. 1306). The researchers identified the following factors leading to MOOC dropout: "lack of time, lack of learners"

motivation, feelings of isolation and lack of interactivity in MOOCs, insufficient background and skills, and hidden costs" (p. 1311). As mentioned earlier, lack of time was the most frequently mentioned barrier for MOOC success and completion in this study. Unlike this study, Kahlil and Ebner (2014) do not discuss learner expectations of MOOC design as a barrier. However, the researchers did recommend instructional design approaches for increasing MOOC learner engagement and completion including: "accommodating students different time tables, promoting student completion or enhancing 'students to students' and 'student to instructor' interaction as well as increasing online learning skills" (p. 1311). While Khalil and Ebner's findings and recommendations support the findings of this study, the results presented here suggest that barriers to MOOC success and completion also include frequent MOOCing in relation to time, lack of interest, no monetary investment, and lack of enjoyment.

5.3 Implications for Social Science MOOC Instructional Design

The results of this study and use of virtual ethnographic methods provide rich insights into the adult learner social science MOOC experience and culture. The findings also provide insights into gaps in the MOOC literature in regards to adult learners' motivations and perceptions of success and completion. In this section, I describe implications for the instructional design of MOOCs in the social sciences. The implications include: insights into characteristics of targeted MOOC learners, a social learning network approach including the combination of c-MOOC (connectivist) and x-MOOC (self-paced) models, development of customizable, dynamic MOOC environments with assessment measures for intention and completion, and MOOCs for volunteerism development, social justice education, and attitudinal change.

5.3.1 Characteristics of Targeted MOOC Learners

Quantitative MOOC data have shown adult learners with bachelor's and master's degrees comprise a large percentage of the learners who are enrolling and participating in these courses (Nesterko et al., 2014a; Nesterko et al., 2014b). While this population may not be the learners MOOC providers originally intended to target, the reality of the matter is that educated adults are engaging in MOOCs for a variety of purposes as indicated by this research including professional/volunteerism development, lifelong learning, and learning for enjoyment. Liyanagunawardena et al. (2013) described a gap in MOOC research about learners' experiences and perceptions, specifically in regards to motivation and completion. This study attempted to address this gap by collecting rich qualitative data about adult learners' MOOC experiences in hopes of providing insights about the population that can inform future MOOC instructional designs.

Adult learning literature has proposed, based on the concept of andragogy and self-determination theory (SDT), that adults learn differently than children, have different internal and external motivations for learning, and have varying ways of approaching learning (Cerone 2008; Hartnett et al., 2011). Within MOOC learning environments, adult learners' similarities and differences are amplified due to the sheer volume of learners enrolling and participating in the courses. Coupled with these varying motivations and learning approaches, there is the added layer of the demands of adult learners' lives, influencing their levels of online presence and engagement.

The results of this research led to themes of commonalities and differences across adult learner MOOC experiences (Table 5.1). One of the most important and crucial steps in many systematic instructional design (ID) models is the needs assessment phase.

In this phase, it is important for the ID team to gain an understanding of their target learners. The insights from this study regarding the characteristics of adult learners who enroll in MOOCs could provide baseline considerations about this population. These characteristics, then, can lead to thoughtful decisions when developing MOOC content and assessment measures, establishing time requirements, making decisions about language requirements, as well as determining strategies to address various learning styles, motivations, and online presences. One way to address adult MOOC learners' varying needs would be to combine c-MOOC and xMOOC designs. Further recommendations will be discussed in the following sections including: a social learning network design approach, customizable and dynamic MOOC environments, and MOOCs for volunteerism and attitude change.

5.3.2 Social Learning Network Design Approach

The first iterations of MOOCs (c-MOOC) focused on connectivism pedagogical approaches and designs (Clarà & Barberà, 2013; Liyanagunawardena et al., 2013; Rodriguez, 2012). The c-MOOC model comprised students socializing, collaborating, and learning from one another via social media tools external to the MOOC environment. The more recent xMOOC or AI-Stanford MOOC design (Rodriguez, 2012) involves a more self-paced approach in which learners individually watch lecture videos, take assessments, complete assignments, and sometimes participate in discussion boards within the environment.

Results from this dissertation showed that adult MOOC learners valued a combination of social learning and self-paced, individualized learning. Some informants completed course assignments, yet they chose to lurk in the discussion boards. Even

though they were lurking, the informants still described a degree of social learning via reading the posts of their fellow learners. Research has shown that while lurkers do not actually engage in social interactions, they still learn vicariously through reading these social exchanges (Sun et al., 2014). At the other end of the socialization spectrum, other informants described an appreciation for the opportunity to interact with learners from around the world. One informant specifically described herself as a "relational learner" and explained how socializing with others helped her to view the content from multiple viewpoints and further her understanding of human trafficking.

Social learning theory maintains that we all learn in a social context (Schön, 1973; Vickers, 1978). We may learn individually or collectively from public social systems such as our governments and cultures (Schön, 1973). We may also choose to form collaborative groups referred to as communities of practice (CoPs) to learn from one another, our surroundings, and our shared history (Snyder & Wenger, 2010). Social learning is traced back to behaviorism where it appeared in the notions of observation and reward, but it has grown into the idea of constructing knowledge through social learning networks and CoPs (Blackmore, 2010). Bandura (1977) described social learning as "a process of reciprocal determinism, behavior, personal factors, and environmental factors [which] all operate as interlocking determinants of each other" (p. 10). In this view, social learning is a combination of personal motivation and environmental factors. The MOOC environment has great potential for leveraging social learning on a global scale. Specific suggestions for developing MOOCs for social learning, while also respecting the values of learners who prefer an individualized, self-paced approach include:

- discussion posts of learner social engagement. Many learners will only read discussion posts, while some will post consistently and/or frequently. Do not require learners to post as part of their grade in an open learning course, as making the discussion a requirement could cause less social learners to withdraw from the course. Remember that discussion "views" are also a type of social, vicarious learning. Learners who prefer to lurk could be encouraged to use upvoting/down-voting and 'anonymous' posting features. Instructors will need to remind students to follow respectful social learning guidelines in the course code of conduct.
- Encourage learners to form groups within and outside the online learning environment via internal course tools and external social media. Structure discussion boards so that learners with similar backgrounds, motivations, interests, and learning questions could potentially develop CoPs. This would involve consciously structuring areas in the online discussion where learners with common interests could come together in a shared space.
- Include peer-review of assignments in the course design. Much of the MOOC controversy concerns how a single instructor, with or without teaching assistants, can effectively facilitate learning for thousands of learners in one course (Suen, 2014). However, if we view MOOCs as social learning environments, the learners can work together to learn the content, expand their worldviews through interactions, and support social learning. By including peer-review opportunities

in MOOCs, learners have another opportunity to socially reinforce the content, share ideas, and increase their knowledge of global cultures and perspectives.

5.3.3 Development of Customizable, Dynamic MOOC environments

The development of the conceptual framework of the adult learner social science MOOC experience (Figure 5.1) in this dissertation was developed based on informants' motivations and perceptions of success and completion. The framework demonstrates the complexity of the social science MOOC experience for adult learners. Informants from all over the world had a variety of reasons for enrolling in *Human Trafficking* and a variety of perspectives regarding their success in the course and their levels of completion.

In an online learning environment with thousands of learners with a wide range of backgrounds, prior knowledge, perceptions, motivations, and goals for enrolling, it is impossible to expect that a one-size-fits-all virtual learning environment (VLE) will meet all of the learners' expectations for the course. It is also difficult for instructors and MOOC developers to quantify and gauge success and learning when thousands of the learners do not intend to complete a MOOC in the first place. Informants in this study described taking multiple MOOCs at once and gave analogies for viewing MOOCs as libraries, buffets, and a Netflix queue, in which they could select what they wanted to learn, absorb the pieces of information they wanted, and check out of the MOOC when they had reached their personal learning goals. Koller et al.'s (2013) suggestion to focus on learners' intentions rather than completion may offer a clearer approach for assessing the success of a specific MOOC. Instructional design that provides choices for MOOC learners should also be considered. For instance, the *Human Trafficking* MOOC in this

study required learners to develop a public service announcement as part of their final course grade. What might happen if learners were given more choices, such as to develop the project, write an essay, or watch a series of videos? Providing room for learner choice could have a positive impact on completion rates.

This study also provided insight into the adult learner MOOC culture and I proposed the term, MOOCocracy—a social learning democracy—to capture this idea. Interviews with informants and observations showed the adult learners assumed the role of critical education consumers who were taking multiple MOOCs at one time, comparing and critiquing course designs, engaging in voting and peer review systems within the course, socializing, lurking, and dropping out of courses that did not meet their expectations for effective MOOC designs. Hall (2013) suggested that with the opening up of education, learners are developing consumerism attitudes, which in turn, place more pressure on instructors to meet all of the various consumer demands, and ultimately could lead to teacher and learner dissatisfaction. Hall concluded "…professors and university administrators need to rise to the challenge of confronting new consumer attitudes and designing different ways of approaching and evaluating teaching that take into account fit between consumer images and university professors as well as structural features influencing teaching" (p. 722).

The findings of this study suggest the need for MOOCs to shift from a unidirectional, instructor-focused, one-size-fits-all model toward a more customizable and dynamic learner-centered design. Scalability and technology infrastructure are hurdles to overcome in creating customizable learner-centered MOOCs. Greener (2010) suggested that there is 'plasticity' to VLEs and a potential for "...progression from a teacherconstructed online environment, based on their own views of student needs and learning behaviors, to an environment which, potentially, could adapt itself to the student's needs and preferences" (pp. 260–261). Reigeluth, Watson, and Watson (2012) outlined the systematic development and application of Personalized Integrated Educational Systems (PIES) for individualized information age learning. Reigeluth et al.'s (2012) PIES model addressed the following information age learner characteristics: "(1) students learn at different rates; (2) students have differing amounts of time per day that they can devote to learning; and (3) students have different needs, interests, and talents that influence what they should or want to learn" (p. 43). These factors coincide with facets of the adult learner MOOC experience that were discovered in this study. As the MOOC experiment progresses and pedagogical approaches and delivery platforms evolve, the PIES model, as an individualized, customizable approach could potentially address the complexities of the adult learner MOOC experience.

5.3.4 MOOCs for Volunteerism Development, Social Justice Education, and Attitudinal Change

Another implication of this study is the potential of MOOCs for volunteerism development, social justice education, and attitudinal change. Initially, MOOCs tended to focus on the hard sciences. For example, some of the first MOOCs focused on content such as "Connectivism and Connective Knowledge," computer programming, personal learning environments, and mobile learning (Rodriguez, 2012). Over time, MOOCs have begun to include more topics from other subject areas such as the humanities, foods and nutrition, health literacy, and social sciences. At the time of this study, MOOC platform

provider, Coursera offered: 71 mathematics, 47 arts, 114 biology and life sciences, 29 chemistry, 165 humanities, 159 social science courses, as well as a variety of other MOOCs (https://www.coursera.org/courses). The social science sub-section of courses included topics such as animal welfare, governance of non-profits, and education reform history (https://www.coursera.org/courses?categories=socsci).

The *Human Trafficking* course fit into the Coursera social science category.

While this study did not originally intend to examine the use of MOOCs for social justice education and attitude change, *Human Trafficking* presented a unique context that could not be ignored. Nine of the 12 informants in this research were connected to various volunteer organizations with anti-trafficking missions. One of the informants' top reasons for enrolling in the course was to further develop her understanding of human trafficking in order to apply her learning to volunteer efforts. Based on course observations, the instructor and instructional designer developed the course with an overarching goal to raise awareness and change attitudes toward human trafficking. I added a question to the interview protocol asking each informant their thoughts on the use of MOOC platforms for advocacy around controversial issues. All twelve participants had favorable views and discussed the potential of MOOCs for increasing awareness and impacting learners' perceptions and attitudes on topics related to social justice.

Much of the current research and discussion related to MOOCs focuses on potential uses of MOOCs for (a) introducing high school students to college and higher education institutions (Horn, 2014; Najafi, Evans, & Federico, 2014), (b) using blended-learning approaches for current college students (Kolowich, 2013g), and (c) offering

MOOCs for degree attainment or professional development (Stephens & Jones, 2014). This study demonstrated that promoting attitudinal change could be another potential use for MOOCs in the contexts of volunteerism development, social justice education, and public understanding of controversial issues.

5.4 Limitations

The limitations of this study include differences in MOOC contexts between the *Technology and Ethics* course and *Human Trafficking* MOOC, the small sample size focused on adult learners between the ages of 25 to 70 with bachelor's and master's degrees, and the short duration of the *Human Trafficking* MOOC. First, the subject matter of the MOOC in which I participated as a learner (*Technology and Ethics*) differed from the subject matter of the MOOC, which used adult learners as informants (*Human Trafficking*). Differences between course settings included different instructors, different content, different demographics of the enrolled learner population, and different course designs, which could have influenced the observations and design of the interview protocol.

Another limitation was the small voluntary sample size. A sample of only 12 informants may have resulted in a narrow view of the adult learner MOOC experience, especially in regards to diversity of informants' ages, education levels, backgrounds, locations, and experiences. Furthermore, the small number of informants may have had different qualities than leaners who did not volunteer to participate. Also, the informants volunteered to participate and provided their demographic information and education levels via an online survey tool. Therefore, the possibility exists that informants may have provided false information about themselves.

The length of the study could also be viewed as a limitation, as *Human*Trafficking had a limited four-week duration and virtual ethnographic methods typically call for substantial time in the field for rich data collection (Hine, 2000). Finally, as a novice researcher I served as the main instrument in this study. While my research design included member checking, triangulation of data sources, and rigorous coding, my background as a Caucasian, English-speaking, mother, full-time employee, part-time graduate student, with a higher education degree and access to online education could have biased my perceptions and findings of the adult learner MOOC experience.

5.5 Recommendations for Future Research

There is still much research to be done surrounding MOOCs, in general. From design and pedagogical approaches, to instructional strategies and facilitation, to technology development and implementation, to learner experiences and business models, there are still several questions remaining in the MOOC experiment. I began this dissertation with the intention of better understanding the adult learner MOOC experience through virtual ethnographic methods. While this research and its results afforded greater insights, I am left with even more questions. The following list provides suggestions for areas of further research:

• Adult learner MOOC experience—This dissertation had the narrowed scope of investigating the experiences of adult learners between the ages of 25 to 70 with bachelor's or master's degrees in a social science MOOC. There is the potential to carry out this same study with MOOC learner populations who are younger or older than the ages researched in this study. Do younger or older learners have similar or contrasting experiences as the informants in this study? What about

learners without bachelor's or master's degrees? Or learners who do not speak English? Or learners who are from a low socioeconomic status? Do learners in MOOCs in the hard sciences or humanities have similar or different experiences than the learners in this study?

- Conceptual framework of the Adult Learner Social Science MOOC experience (Figure 5.1)—This initial framework warrants further investigation. First, I plan to return to the online follow-up survey responses of the learners who were not selected to participate in the study (Appendix K; n = 54) and code their responses related to motivation, success, and completion. These responses will then be compared to the framework developed from the responses of the 12 informants in this study. Also, the overlaps between motivation, success, and completion need to be further researched. Are there concepts that overlap those categories? If so, what concepts are they? How do they overlap, and why? Also, does the framework change in regards to the adult learner MOOC experience in hard science and humanities courses?
- MOOC design—The informants in this study noted that the design of a MOOC could be a barrier to completion. Future research might examine which MOOC designs are more favorable to adult learners. This study showed that the experiences of adult MOOC learners are complex and multifaceted. There is a need for MOOC pedagogy and technology to be more learner-centered. Would more adult learners complete MOOCs if the courses were more learner-centered by utilizing models such as PIES (Reigeluth et al., 2012)? For instance, what

- would the learner experience be in an xMOOC design that incorporated c-MOOC features and that utilized assessments of intention and completion?
- Instructor and instructional designer (IDer) perspectives—It is important to understand the instructor and IDer experiences in the development and implementation of a MOOC. As part of my work with the Purdue Action—Centered Educational Research (PACER) group, we have already begun investigating the perceptions of the *Human Trafficking* instructor and instructional designer. In the example of the *Human Trafficking* MOOC, what design decisions went well/did not go well? Why? How do the instructor and IDer perceive they influenced adult learners in the course? What are their definitions of MOOC success and completion? Do they believe their MOOC was successful in reaching their goals? Another area of research regarding the instructor role in MOOCs would be to find out more about how an instructor could effectively establish social presence with thousands of learners around the world.
- Attitudinal change, social justice education, and volunteerism development—The context of this study was unique in that it was a MOOC focused on raising learners' awareness and changing attitudes regarding the social justice issue of human trafficking. Also, several of the informants in this study were motivated to take the course because they were volunteering with anti-trafficking organizations. What are the opportunities for MOOCs to be used for attitude change, social justice education, and volunteerism development? What are effective design strategies for MOOCs focused on attitude change toward social justice issues—from instructor, IDer, and learner perspectives? What is the potential for MOOCs

- to be used by volunteer organizations such as the Peace Corps to educate volunteers about social justice issues they may encounter in their work?
- MOOCs and public pedagogy, adult transformational learning—Closely connected to researching MOOCs for attitudinal change are the areas of public pedagogy and adult transformational learning, to which MOOCs have yet to be connected. Public pedagogy refers to the teaching and learning that occurs in spaces such as popular culture, museum exhibits, websites, television shows, video games, and so on (Sandlin, Wright, & Clark, 2013). Transformational learning "in general refers to learners developing more open and inclusive worldviews" (Sandlin et al., p. 5). Using the lens of MOOCs for public adult transformational learning, research questions could include: What are the perceptions of adult learners regarding the role a MOOC played toward influencing their worldviews and values? What ID features in a globally delivered MOOC are effective for engaging adult learners in re-evaluating their worldviews on a controversial topic?
- MOOCs and free-choice lifelong informal/nonformal learning—Due to the adult learners in this research equating MOOCs to checking out a book from the library or selecting videos from an on-demand streaming service, it appeared that participation in MOOCs could potentially have a connection to other bodies of research encompassing free-choice learning, lifelong learning, and informal/nonformal learning. Additional research is needed to identify the criteria adult learners use when choosing specific MOOCs in which to enroll, to determine how they spend their free time within MOOCs, and to examine whether

- or not MOOC learning could be equated with learning that occurs in other informal and nonformal environments such as zoos and museums.
- Internet-based Research methods for understanding MOOC experiences—This study used methods from virtual ethnography (Hine, 2000) and the arts-based methods of co-constructed narratives (Barone & Eisner, 2012) and photoelicitation (Nykiforuk, Vallianatos, & Nieuwendyk, 2011). Informants in this study consented to participate in video recorded Skype interviews and took and shared photos with their own personal electronic devices. Ethical issues related to conducting online inquiry research of open virtual environments such as MOOCs should continue to be considered and respected. With that being stated, there appears to be opportunity for further utilizing arts-based methods such as participatory action video (PV) (Mitchell & de Lange, 2012) for co-constructing a research-based documentary about the MOOC experience from multiple viewpoints for greater understanding this learning innovation.

5.6 Summary

The first MOOCs offered via major MOOC platform providers tended to enroll adult learners with higher education degrees (Ho et al., 2014). Although this was not the intended audience, initially, adult learners with higher education degrees have been the early adopters of MOOCs (Rogers, 2003). In this dissertation, I used virtual ethnographic methods to learn more about the adult learner MOOC experience, in general, and more specifically, about the motivations and perceptions of success and completion among MOOC adult learners.

I observed and interviewed 12 adult learners from around the world about their experiences in a MOOC on human trafficking. Results showed the adult learner MOOC experience is complex and occurs within a dynamic and democratic social learning system. Learners have a variety of reasons for enrolling in MOOCs, as well as different definitions of learner success and completion. A conceptual framework for the adult learner social science MOOC experience emerged from this study as a potential basis for understanding the differences, similarities, and barriers related to adult learners' motivations, definitions of success, and levels of completion. The results of this study suggest the need for a learner-centered MOOC instructional design approach that aligns success and completion criteria in response to the wide range of adult learner expectations and experiences. As MOOC research moves forward and technologies advance, it is crucial for MOOCs to appeal to a diverse group of adult learners who see value in MOOCs for their educational endeavors. Furthermore, results suggest that adult learners remain hopeful regarding the future potential of open, global learning environments.



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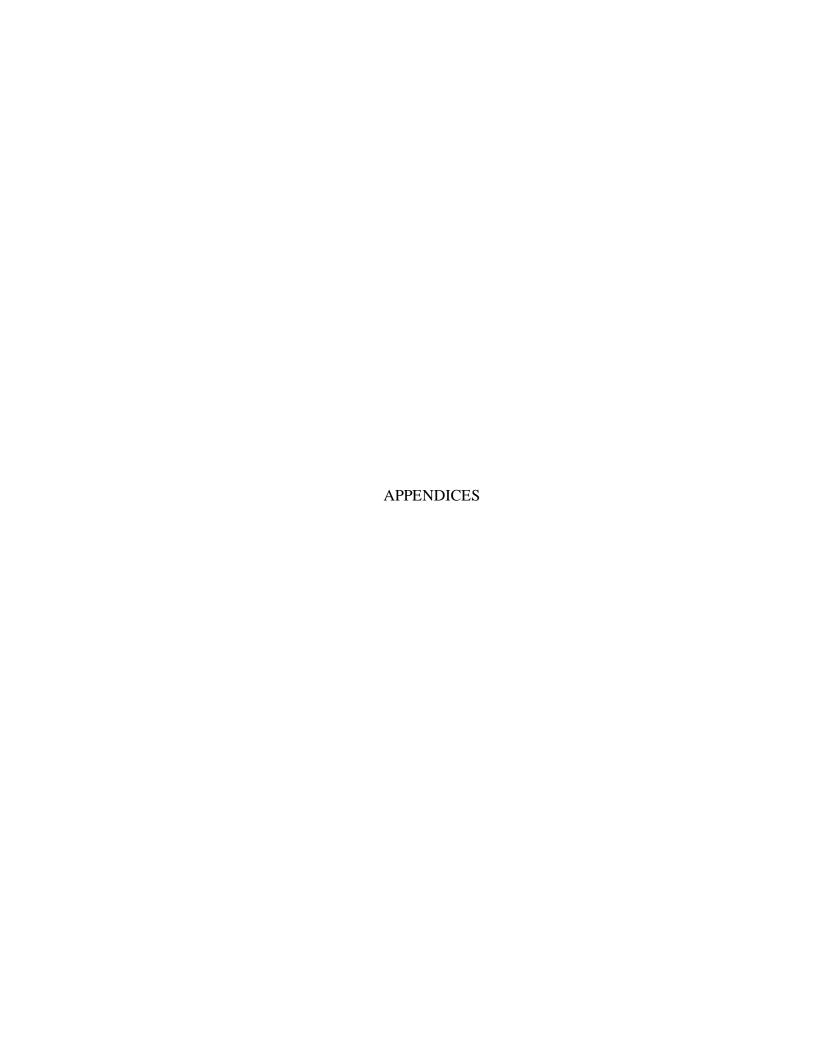
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Appendix A Informed agreement form: Virtual ethnography, Human Trafficking



RESEARCH PARTICIPANT ONLINE CONSENT FORM

Student Experiences of Massive Open Online Courses Professor Peggy Ertmer Department of Curriculum and Instruction Purdue University

What is the purpose of this study?

We are conducting a research study to find out more about the experience of adult learners, who hold bachelor's degrees, in Massive Open Online Courses (MOOCs). You are being asked to participate because you are an adult with a bachelor's degree between 25-65 years old who has enrolled in a MOOC. We plan to include 10-12 adults in this study.

What will I do if I choose to be in this study?

If you choose to participate in this study you will be asked to:

- Provide demographic information in this online survey, including your age, education level, location, email address and/or phone number
- Allow the researcher to observe your participation in the MOOC, including posts in discussion boards and completed assignments
 - This includes providing your MOOC screen name, so the researchers can take screen captures of your discussion posts
- · Write and share a schedule of what a day in your life looks like in a Microsoft Word document
- Take and share two pictures of the locations where you physically are when you login to the MOOC and the devices you use
 - This will help us better understand what a 'day-in-the-life' of a MOOC student looks like
 – from where you log on (work, home, etc.) to the devices you use (laptop, desktop
 computer, smartphone, etc.) for participating in the MOOC
- Participate in an approximately one hour video recorded interview about your MOOC experience via Skype
 - The collected data (MOOC course artifacts, daily schedule, photos, and video recorded interviews) will be analyzed and findings will be presented in academic journals and at conferences.

How long will I be in the study?

Your total participation in the study will last five weeks. During weeks 1-4, the researchers will observe your participation in the MOOC, and you will provide your daily schedule and two photos. During week 5, you will participate in a one hour (approximate) Skype interview with the researcher.

What are the possible risks or discomforts?

There is a potential risk of breach of confidentiality if other participant's know of your participation. However, safeguards are in place as listed in the confidentiality section.

Are there any potential benefits?

There are no direct benefits to you in this study, but there are some good things that could happen thanks to your participation. MOOCs are a heavily debated topic in higher education and much of the current MOOC research focuses on looking at numerical data about learners' participation. This study is one of the first to talk directly to MOOC learners to gain richer insights into their motivations and

IRB No.	Page 1

experiences. This study has the potential to provide deeper information about how MOOCs work, who is participating in them, and the experiences they are having. Findings could help MOOC providers, instructional designers, instructors, and students in a variety of settings.

Will I receive payment or other incentive?

Once you fully complete all of the steps in the research study, you will receive a \$10 gift card to Amazon. You will need to share an email address to receive the online gift card.

Will information about me and my participation be kept confidential?

The project's research records may be reviewed by Purdue Professor Peggy Ertmer and graduate student Jamie Loizzo and by departments at Purdue University responsible for regulatory and research oversight. We will not share your name or any personal information about you with others. Your name will be removed from course discussion screen captures, assignments, video recordings, daily schedules and photos. All of the mentioned data will be kept on secure computers in Dr. Ertmer and Jamie Loizzo's offices for up to four years. Results of the research will be used in research publications and presentations. A pseudonym will be used to protect your identity.

What are my rights if I take part in this study?

Your participation in this study is voluntary. You may choose not to participate or, if you agree to participate, you can withdraw your participation at any time without penalty or loss of benefits to which you are otherwise entitled. If you choose to withdraw from the study, you can contact us at: jamiemoocresearch@gmail.com. You will not receive the Amazon gift card for incomplete participation.

Who can I contact if I have questions about the study?

If you have questions, comments or concerns about this research project, you can talk to one of the researchers. Please contact: Dr. Peggy Ertmer, Professor Curriculum and Instruction, (765) 494-5675, pertmer@purdue.edu

If you have questions about your rights while taking part in the study or have concerns about the treatment of research participants, please call the Human Research Protection Program at (765) 494-5942, email (irb@purdue.edu) or write to:

Human Research Protection Program - Purdue University Ernest C. Young Hall, Room 1032 155 S. Grant St., West Lafayette, IN 47907-2114

Documentation of Informed Consent

IRB No.

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research study, and my questions have been answered. I am prepared to participate in the research study described above. I will be offered a copy of this consent form after I read it.

Please provide your level of consent regarding the Skype video interview, included in this study.
Researchers have my permission to record (choose one):
my image/face and present the video at academic conferences
image/face, but blur it for presentation at academic conferences
record my voice only for presentation at academic conferences
only use quotes from the interview for presentation at academic conferences

have read the	e consent forr	n and agree/o	consent to pa	irticipate in t	his study.	

Page 2

Appendix B Informant recruitment email text

Hello, (learner's name)!

I am a doctoral candidate in the Learning Design and Technology program at Purdue University. For my dissertation, I am researching adult learners' experiences in Massive Open Online Courses (MOOCs). The OSU designers and faculty have permitted me to conduct this research within the Human Trafficking MOOC.

I am in need of participants between the ages of 25–65 years old for my study and am reaching out to all of you—especially those of you who have completed a bachelor's degree.

Your participation in the study would be completely voluntary and would include:

- my observation of your participation, including discussion posts, in this 'Human Trafficking' MOOC
 - o This includes providing your MOOC screen name, so I can take screen captures of your discussion posts
- a video recorded interview with you through Skype, at the end of the MOOC
- writing down a schedule of a 'day in your life' and how you fit in time for the MOOC
- taking and sharing two photos of the places where you physically are and the technology you use when you participate in a MOOC

Your identity would be protected in this study, and you can stop participating in the study at any time. Pseudonyms would be used in place of your real name in my dissertation and any academic reports or presentations about the study.

If you are interested in participating in the study, please go to this secure online survey and answer a few questions about yourself:

https://purdue.qualtrics.com/SE/?SID=SV_6DPMQd3WtG0UtuZ

Once I have the survey responses, I will select up to twelve of you to participate and contact you directly. Those who provide consent, participate, and complete the study will receive a \$10 Amazon gift card.

If you have any questions, please contact me at: jamiemoocresearch@gmail.com

Thanks! Jamie

Appendix C Interview protocol: Human Trafficking

Hello! I am conducting research for my dissertation of adult learners' MOOC experiences. Thank you for participating in this study and agreeing to participate in this interview. You may remember completing the online survey, before I contacted you to participate. At the beginning of that survey, you gave consent for me to observe your MOOC participation and conduct this interview with you. Just a reminder—we are connected via Skype, and I will use a technology called 'eCamm' to video record this interview. I will keep the video file on a password-protected computer in my office and label the file with a pseudonym and the date to protect your identity. Also, I may show portions of the video interview at academic conferences and use quotes from this interview in academic journal articles - but again, I will not use your real-name. A pseudonym will be used in place of your name to protect your identity. I will not use your name or any personal information about you.

This interview is meant to be fairly informal and more like a conversation. I am interested in hearing your thoughts and experiences. You do not have to answer a question if you do not want to. Your participation is voluntary, and you can ask to stop the interview at any time.

So, let's get started....

Tell me about yourself—age? Location? what is your professional background? How did you find out about the human trafficking MOOC?

Why did you decide to take this MOOC? (motivation)

- Will it help with your career?
- Did you take it for personal interest?

What is it like to be a student in a MOOC?

What was your strategy for participating each week?

- Discuss participant's 'day-in-the life' schedule.
- How did you balance watching the videos, doing the homework, and participating in the discussions?
- What advice do you have for other MOOC students—regarding strategies for participating in the courses?

Could you describe a typical day in your life?

• How did you fit the MOOC into your daily life? (**online presence**)

What did you think about the course technology?

How many times did you log in to the MOOC each week? (online presence)

- Where did you log in—at home, work, or other?
- What devices did you use—computer, tablet, or smartphone?
- Discuss photos participant took of two places and devices they use to participate in the MOOC.
- Do you use your full name in your profile? A photo? Why/why not?

Did you do the suggested homework/reading for each week? Describe what it was about.

• If you did not complete the suggested homework/reading this week, could you please explain why?

Did you watch any of the instructor's videos?

- What did you think about the videos? Lengths?
- What did you think about the instructor's presence/teaching/speaking?
- Did you watch all of the videos completely? Did you speed them up?
- What did you learn?

Did you participate in the discussion boards? (online presence)

- If you did not participate, why?
- If you did participate, how many times did you post each week?
- What did you post about?
- What were your interactions with classmates? Did you have thoughtful conversations? Did you have any tense interactions?
- What do you think about the upvoting and downvoting features in the discussions?
- Did you connect with any of them outside of the MOOC?
- Will you keep in touch with any of them?
- The instructor?

What does it mean to 'complete' a MOOC? (completion)

Did you complete the MOOC?

- If so, will you receive the certificate?
- If not, why did you not complete it?

If you have stopped participating in the MOOC, why did you stop?

- Why did you originally sign up for the MOOC?
- What did you gain from the MOOC?

What did you like about the overall experience?

What did you not like about the overall experience?

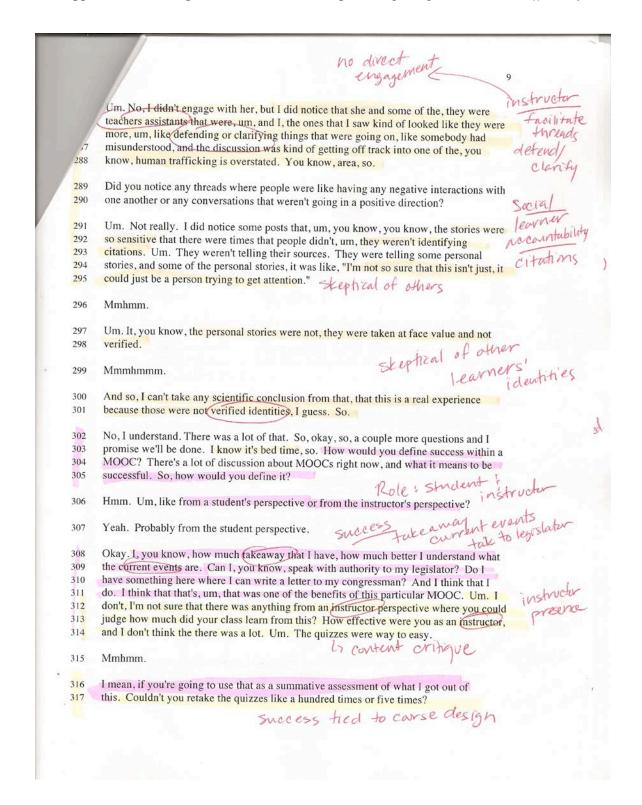
How would you define 'success' within a MOOC? What is a successful MOOC experience? (success)

What would you describe as the key factors for succeeding in a MOOC? (success) Will you register for future MOOCs?

Appendix D Sample of interview transcript coding: Claudia, *Human Trafficking*

	instruction = gatekeeper
	Instruction gent 4
	May my
	looks legit and it's not. Um. So, it was just, you know, it was nice to be like, "Okay, you
	know, this is the organizations that are working with this that are legitimate, um. This is
1	the research that's out there." So, I was kind of more interested in the resources, rather,
102	more than like everything else that was offered, like the conversations and things like
103	that. Although, I did get engaged in those (laughs), the threads. So, that was interesting.
104	(laughs)
105	So, do you feel like your expectations were met? Do you think like the MOOC offered
106	what you were looking for?
	22
107	Um, it definitely gave me the resources, and I do plan on using them for building the
108	website for my organization, right now. The current website is not very, it's informative,
109	um, but it looks very basic. So, what I want to do is improve the website. Um, and I'm
110	Um, it definitely gave me the resources, and I do plan on using them for building the website for my organization, right now. The current website is not very, it's informative, um, but it looks very basic. So, what I want to do is improve the website. Um, and I'm going to add a resource list and resource page, where I want to use a lot of the links to all these other studies and things that are out there. Soum, in that sense, yes. And yes, it did surpass my expectations because I did become involved in the conversations and read people's stories and you know, when you do read people's stories, it does become a little bit more real and personal. Um and for sure in the next three years that I'm going to be here, I am probably going to meet people who have been impacted or family members of these people, but it's always, um, you know, it's still, it was interesting that like that came
111	these other studies and things that are out there. Soum, in that sense, yes. And yes, it
112	did surpass my expectations because I did become involved in the conversations and read
113	people's stories and you know, when you do read people's stories, it does become a little
114	bit more real and personal. Um and for sure in the next three years that I'm going to be
115	here, I am probably going to meet people who have been impacted or family members of
116	these people, but it's always, um, you know, it's still, it was interesting that like that came
117	up without really expecting it to, you know so, that was nice, actually, that was like
118	So, your organization is going to be, it is intended to help people of human
119	trafficking? Correct?
117	So, your organization is going to be, it is intended to help people of human trafficking? Correct? Um, they help women, um, in the areas of domestic violence and women crisis and that includes potential victims of trafficking.
120	Um, they help women, um, in the areas of domestic violence and women crisis and that
121	includes potential victims of trafficking.
122	One of the things that I learned from reading recently is that a statistic had surfaced that 75% of the women that have been victims of trafficking, 75% of them had encountered domestic violence in their past. So, there is like such a high correlation between those two that is addressing domestic violence that it is automatically almost, like, doing work
	Cognition !
123	One of the things that I learned from reading recently is that a statistic had surfaced that
124	75% of the women that have been victims of trafficking, 75% of them had encountered
125	domestic violence in their past. So, there is like such a high correlation between those
126	two that is addressing domestic violence that it is automatically almost, like, doing work
127	with, like, anti-trafficking. Or at least I, I foresee it that way.
	- nor other
128	No, definitely. Um, I learned a lot, as well, when I took the MOOC that I didn't know
729	with, like, anti-trafficking. Or at least I, I foresee it that way. No, definitely. Um, I learned a lot, as well, when I took the MOOC that I didn't know before about trafficking. It really made me very aware now, more than I ever was. So, what was it like for you to be a student in the MOOC? Can you describe a little bit about
7130	what was it like for you to be a student in the MOOC? Can you describe a little bit about
431	what was it like for you to be a student in the MOOC? Can you describe a little bit about (your experience and how you navigated the course? Yeah. Um. I mean, I think one of my hesitations with taking online courses. I never
	Yeah. Um. I mean, I think one of my hesitations with taking online courses. I never actually had. So, one of my hesitations was the lack of just being in front of people and talking and having a conversation. It was great that I was able to read other people's comments and you could see where their going and their responses, but I always felt also that even if you posted to someone's comment, that person never really actually
132	Yeah. Um. I mean, I think one of my hesitations with taking online courses. I never
133	actually had. So, one of my hesitations was the lack of just being in front of people and
134	talking and having a conversation. It was great that I was able to read other people's
135 136	comments and you could see where their going and their responses, but I always felt also that even if you posted to someone's comment, that person never really actually
130	and even if you posted to someone's comment, that person never really actually
	preser Rarrier lack of
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	ngage.
	comments and you could see where their going and their responses, but I always felt also that even if you posted to someone's comment, that person never really actually presence karrier lack of engagement

Appendix E Sample of interview transcript coding: Regina, Human Trafficking



Appendix F Sample of researcher field notes: Human Trafficking

Information About Quiz Attempts

Hi Class

After hearing from some of you from around the world, I have decided to increase the number of attempts permitted to take the quizzes. You now have five attempts allowed. This seems like a good idea given the many languages that are spoken among participants. You will also be given ample time to complete each quiz because the deadlines have been extended out to the end of the course for each quiz.

So excited about the conversations and the communications. Keep up the great work!.

Thu 21 Aug 2014 2:27 PM EDT

3

I spent some time taking screen captures of the overall broad view of how the discussion threads are looking as of this morning. I also spent some time looking into the social work track and came across a US Attorney who made some interesting posts. I see she took my demographic survey and have emailed her directly to see if she would participate in the study. She would be a good case example for the professional track of the course in comparison to some of my other participants on the awareness track. ¶

T.

All of the screen captures can be found in my August 25 file. T

I am seeing some similarities to the Tech and Ethics MOOC regarding the idea of a 'MOOCocracy' and the power of the learners in having a say in their learning—course design, materials, etc. However, I am seeing an even more emotional engagement in this course with such a sensitive social science topic. There are some on track 2 in the professional area sharing information and resources, however, in the 'share your story' space things can be quite emotional. It is an amazing blend of perspectives and discussion, yet at the same time, there is a demand from learners for the space to be a good learning experience with demands on the instructor and content, as well as reminders to one another to be civil in discussion. ¶

П

It's really a blend of Facebook, meets online learning, meets social science, meets learning democracy – there's just a whole lot going on!! ¶

T

I am going to have to keep working on a game plan for effectively observing each of

Appendix G The Ohio State University instructor research approval

Ohio State University MOOC research approval

Evans, Thomas A. (Tom)

Sent: Thursday, March 13, 2014 at 5:01 PM

To: Loizzo, Jamie L

Cc: Meshelemiah, Jacquelyn; Bailey, Robert; Griffiths, Robert

You replied to this message on 3/14/14, 8:52 AM.

Show Reply

Dear Jamie,

With this email, we give you permission to conduct research of The Ohio State University's Massive Open Online Courses (MOOCs).

Specifically, you have our permission to act as a participant observer in Dr. Robert Bailey's "Technology and Ethics" MOOC tentatively scheduled from April 21, 2014 to June 6, 2014.

Also, you have our permission to observe and engage participants in a qualitative study of Dr. Jacquelyn Meshelemiah's "Human Trafficking" MOOC tentatively scheduled from August 20, 2014 to September 12, 2014. This would include contacting and interviewing participants, observing the course, collecting course artifacts, and utilizing participants with participants about their MOOC experiences.

We wish you the best as you conduct your doctoral research and look forward to learning more about your experiences and findings in this research.

Sincerely,

Thomas Evans

Dr. Jacquelyn Meshelemiah

Dr. Robert Bailey

Dr. Robert Griffiths

Thomas A Evans Senior Instructional Designer, Open Courses Coordinator The Ohio State University

Office of Distance Education and eLearning Digital Scholarship

614.688.1135 | evans.1517@osu.edu | @taevans

Learn more about our Impact Grants: go.osu.edu/grants Get involved in a MOOC today: go.osu.edu/MOOC

Appendix H The Ohio State University Institutional Review Board exemption



Hi Jamie, to re-confirm my e-mail on January 23rd based on the description of your study that you have provided you would not need OSU IRB approval since there are not any OSU personnel engaged in the research.

Thanks, Joni



Joni K. Barnard, PhD, CIP

Quality Improvement Specialist SBS Education and Outreach

Office of Responsible Research Practices

Research Administration Building/3rd floor, 1960 Kenny Road, Columbus, OH 43210

614-688-3405 Office / 614-688-0366 Fax

barnard.15@osu.edu www.orrp.osu.edu.osu.edu

Appendix I Sample of field notes: Technology and Ethics

T 93 1863 reinforce the importance of understanding what adult professional learners are 1864 doing in MOOCs and how they're managing their time. \(\frac{1}{2} \) 1865 1866 June 19, 2014 11am 🔻 1867 1868 I did not note this, but on June 17 in the evening... I built up the nerve to directly ask 1869 the top forum poster who has been responsive in the thread I started what his 1870 strategy is for keeping up with all of the online discussion and about his MOOC 1871 interests. 1872 1873 Here are my questions and his response: \(\) 1874 Allison - 2 days ago % ۰ I appreciate your response - and from a MOOC learner stand point, I wonder how are you able to keep up with all of these threads and provide such great insights? This is my first MOOC. In addition to learning the content, I am still learning how to navigate the environment. I see you are one of the 'top forum posters.' Any tips/suggestions you have for me? What have you learned in this course so far? Thanks for your time! + 0 + - flag · 2 days ago % Be sure you have each thread you are interested in following checked at the bottom where it says; Subscribe to this thread at the same time I think its checked by default in each thread you make a comment in but you can turn it on or off. You can also check at the top of each thread and make sure it says "You are Subscribed" By subscribing to a thread you will get email notifications every time someone else comments in that thread. There might be somewhere else in your profile where you have to check to make sure you are set to receive notifications Otherwise, if all that is in place, all else that is required is to scroll through the Discussion Forums lists of threads and click on each one that sounds interesting. I probably only comment in less than a 1/3 of all the threads there are, but in those I might be commenting frequently if the conversation develops over time. I probably spend more time in here than some, I only work part time and am a writer, so a lot of what I spend my time in here learning relates to the research I am writing about. I'd say the greatest thing I've learned in this class so far is hope. I tend to be pretty cynical about technology and materialism in general. I've always loved science and technology, but it seems like for all the good its done, it makes it easier to do far greater damage far more quickly than we every could have done in the past. You could only kill so many people with a bow and arrow. Now with nuclear weapons in the hands of people who have little or no understanding of the physics involved, we're living on a time bomb. It's a race between enlightenment and Armageddon. I'm not a fan of end times theology, so I don't put much stock in that. But I do know how stupid people can be and how nationalism generates fear and hatred of the "other". So the thing I like about this class is the measured, methodical way we are being shown how to take back the power that we have given away to our governments by simply educating ourselves. So there is hope. If everyone does their homework and acts on it accordingly. 1875 1876

Appendix J Qualtrics informant recruitment survey text: Human Trafficking

Link: https://purdue.qualtrics.com/SE/?SID=SV_6DPMQd3WtG0UtuZ

Survey text:

Thank you for your interest in participating in my research of adult learners' MOOC experiences! I am looking for up to 12 adult learners to participate in this study. In order to select the research participants, I need to know a few things about you.

Your participation in this survey and the overall research project is voluntary and confidential. Please click the bubble or fill in the blank for each of the following items:

Gender: Male Female
Ethnicity: Caucasian African American Asian Hispanic or Latino
American Indian Native Hawaiian/Pacific Islander
Age:
How many years of education have you completed?
High school some college bachelor's degree master's degree
doctoral degree
Where do you live (city, state/province, country)?
Would you allow me to observe your participation in the Human Trafficking MOOC?
Yes No
Would you participate in a video recorded Skype interview with me after the Human
Trafficking MOOC has ended?
Yes No
If you are interested in participating in the study, please provide an email address and/or
phone number that I can use to reach you:
2
Email:
Phone:

Thank you for completing the survey! Based on the results, I will select up to 12 adult learners to participate in the research project. Those who participate and complete the study will receive a \$10 Amazon giftcard. I will contact you very soon with more details.

If you have any questions, please contact me: jamiemoocresearch@gmail.com

Appendix K Follow-up survey questions: *Human Trafficking*

Gender: Male Female

Ethnicity: Caucasian African American Asian Hispanic or Latino

American Indian Native Hawaiian/Pacific Islander

Age: 18–25 26–35 36–45 46–55 56–65 66+

How many years of education have you completed?

High school some college bachelor's degree master's degree

doctoral degree

Where do you live (city, state/province, country)?

What motivated you to take the Human Trafficking MOOC? Were your expectations met? Why or why not? (motivation vs reality)

Please describe a typical day in your life and how you found/made time for participating in the Human Trafficking MOOC.

Where were you and what device did you mostly use when you logged into the MOOC? (presence)

Did you participate in the discussion boards? Why or why not? If you did participate, how frequently did you 1) read and 2) post to the boards (e.g., daily, every-other day, weekly, etc.)?

Did you 'up vote' or 'down vote' a comment in the discussion threads? Please describe why you 'up voted' and/or 'down voted'.

Please describe your overall experience interacting with classmates and the instructor. (presence)

How would you define "success" within a MOOC? (success). By your own definition, do you think you succeeded in the course? Why or why not?

What would you describe as key factors for MOOC success? (success)

What does it mean to you to "complete" a MOOC? (completion). To what extent, were you able to complete the Human Trafficking MOOC? What positive and/or negative factors impacted your completion?

What did you learn in the Human Trafficking MOOC? (presence)

On a scale from 1–5, with 1 being completely disappointed and 5 being completely satisfied, please rate your overall experience in the MOOC. Explain your rating.

Is there anything else you would like to add about your MOOC experience?

Appendix L Sample of informant schedule: Fernando, *Human Trafficking*

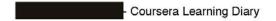
SCHEDULE OF MY TIPICAL DAY IN GUATEMALA CITY

MORNING: read e-mails, read Argentine newspapers, local newspapers, help my wife in the house work and take care of my step Papa (his and older man with serious phisical illness)

NOON: search a job according my expertise and CV, walk the streets near my house, take pictures, reading books, etc. In this time 1400 to 1900 hs log in the course MOOC for one to 3 hours aprox.

NIGHT: speak with my wife over us future in Guatemala or Argentina (better), read books, e-mails, tv (CNN), local news. Facebooks (friends news)

Appendix M Sample of informant schedule: Isabella, *Human Trafficking*



August, 21st, 2014 - Thursday

Human Trafficking - The Ohio State University - week 1

7:00 pm - 9:00 pm - location: bedroom with a/c on (it's very hot at the moment here) read introductory material/announcement and some posts (forum) tried to understand how I can access to the external videos (no success because of Chinese fire wall)

downloaded all suggested sources (texts) by instructors

30 minutes reading material having the week 1 quiz in mind

August, 22nd, 2014 - Friday

Human Trafficking

8:00 am - 9:00 am reviewed material (texts) and taken week 1 quiz

Learning How To Learn - UC San Diego week 4/4

8:00 pm - 9:15 pm read posts on the Forum (looking for interesting inputs/ideas)

August, 24th, 2014 - Sunday

Learning How To Learn - UC San Diego week 4/4

7:00 pm - 7:30 pm

downloaded video lectures (I can view them with no interruption - sometimes if watched online

August, 25th, 2014 - Monday

Learning How To Learn - UC San Diego week 4/4

7:45 am - 8:30 am watched lectures from 4-0 to 4-3

Appendix N Informed agreement form: Follow-up survey, Human Trafficking

RESEARCH PARTICIPANT ONLINE CONSENT FOR Student Experiences of Massive Open Online Courses

Professor Peggy Ertmer
Department of Curriculum and Instruction
Purdue University



What is the purpose of this study?

We are conducting a research study to find out more about the experience of adult learners, who hold bachelor's degrees, in Massive Open Online Courses (MOOCs). You are being asked to participate because you are an adult with a bachelor's degree between 25-65 years old who has enrolled in a MOOC.

What will I do if I choose to be in this study?

If you choose to participate in this study, you will be asked to answer 12 short answer questions in an online survey about your MOOC experience(s).

How long will I be in the study?

Depending on how much you choose to write in response to the survey questions, your participation in the survey could take anywhere from 10 minutes to an hour of your time.

What are the possible risks or discomforts?

There is a potential risk of breach of confidentiality. However, safeguards are in place as listed in the confidentiality section.

Are there any potential benefits?

There are no direct benefits to you in this study, but there are some good things that could happen thanks to your participation. MOOCs are a heavily debated topic in higher education and much of the current MOOC research focuses on looking at numerical data about learners' participation. This study is one of the first to collect written descriptions directly from MOOC learners to gain richer insights into their motivations and experiences. This study has the potential to provide deeper information about how MOOCs work, who is participating in them, and the experiences they are having. Findings could help MOOC providers, instructional designers, instructors, and students in a variety of settings.

Will information about me and my participation be kept confidential?

The project's research records may be reviewed by Purdue Professor Peggy Ertmer and graduate student Jamie Loizzo and by departments at Purdue University responsible for regulatory and research oversight. We will not share any personal information about you with others. Your name will not be collected. All of the survey data will be kept on secure computers in Dr. Ertmer and Jamie Loizzo's offices for up to four years. Results of the research will be used in research publications and presentations. A pseudonym will be used to protect your identity.

What are my rights if I take part in this study?

Your participation in this study is voluntary. You may choose not to participate or, if you agree to participate, you can withdraw your participation at any time without penalty or loss of benefits to which you are otherwise entitled.

IRB No.	Page 1

Who can I contact if I have questions about the study?

If you have questions, comments or concerns about this research project, you can talk to one of the researchers. Please contact: Dr. Peggy Ertmer, Professor Curriculum and Instruction, (765) 494-5675, pertmer@purdue.edu

If you have questions about your rights while taking part in the study or have concerns about the treatment of research participants, please call the Human Research Protection Program at (765) 494-5942, email (<u>irb@purdue.edu</u>) or write to:

Human Research Protection Program - Purdue University Ernest C. Young Hall, Room 1032 155 S. Grant St., West Lafayette, IN 47907-2114

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research study, and my questions have been answered. I am prepared to participate in the research study described above. I will be offered a copy of this consent form after I read it.

- I have read the consent form and agree/consent to participate in this study.
- o No thanks, I do not want to participate in this study.

IRB	No.		

Appendix O Follow-up survey recruitment email text: Human Trafficking

Hello, (learner's name)!

Thank you for completing the online survey I sent you at the beginning of the 'Human Trafficking' MOOC and for agreeing to participate in my research study.

There was a huge response to the survey, and we randomly selected twelve people to participate in the observations and in-depth interviews as part of the study. While you were not selected to participate in the observations and interview, your voice is still very important in helping me to better understand adult learners' MOOC experiences. Please consider still contributing to the study by sharing your experience and answering some open-ended, short answer questions through this follow-up online survey: (Qualtrics link)

Your survey responses will be stored on a password-protected computer in my office. The survey results will be presented in academic journals and conferences. A pseudonym will be used in place of your real name to protect your identity.

I will not be able to provide compensation for your survey participation. However, I would be able to share the research results with you at a future date. If you are interested in viewing the results, please contact me at: jamiemoocresearch@gmail.com

Please let me know if you have any questions. Thank you for your time!

Jamie Loizzo
Doctoral Candidate—Purdue Learning Design and Technology



VITA

JAMIE L. LOIZZO

Ph.D. Candidate
Department of Curriculum and Instruction
Learning Design and Technology
Purdue University

Academic Advisor Agricultural Communication Department of Youth Development and Agricultural Education Purdue University

Education

Ph.D. Learning Design and Technology, Purdue University—May 2015

Research interests: multimedia/backpack journalism, informal science communication, blended learning, distance learning, mobile learning, portfolio-based assessment, electronic field trips, social media impacts on learning, technology integration

MS. Ed., Learning Design and Technology, Purdue University—May 2011

Emphasis: informal STEM learning, electronic field trips, technology integration in P-12

Thesis: Using Electronic Field Trips to Provide Scientist Role Models: A Qualitative Pilot Study

B.A., Radio-Television (News), Southern Illinois University—Carbondale—May 2003

Emphasis: writing, reporting, videography, editing, broadcasting, and producing for radio and television news programs

Employment

Academic Advisor, Purdue University, Youth Development and Agricultural Education Agricultural Communication Program

November 2012–present

Advise 40–50 undergraduate students. Co-advise the Agricultural Communicators of Tomorrow (ACT) student organization. Develop and teach a multimedia, blended learning course for agricultural communication students. Serve as co-instructor for additional courses. Assist in research, presentations, and

publications related to the program's funding and interests. Update program website and maintain department and program social media presences.

Electronic Fieldtrip Manager, Purdue University, Multidisciplinary

Purdue zipTripsTM

June 2009–October 2012

http://www.purdue.edu/ziptrips

Managed multidisciplinary effort to create and deliver electronic field trips to middle school science students across the country. Maintained partnerships with pilot schools throughout Indiana. Facilitated assessment research activities. Worked with more than 30 STEM faculty members to deliver complex content in a relatable/understandable manner to students. Wrote, shot, edited, and produced LIVE television and web-broadcast electronic field trips for schools across the country. Assisted in managing a grant from the Howard Hughes Medical Institute. Devised marketing strategies to grow the program nationwide. Assisted with conference presentations and research publications involving the program.

Video Producer, Purdue University

Agricultural Communication Department

August 2005–October 2012

Managed and coordinated instructional video projects for a variety of different audiences in Purdue Extension and Purdue Agriculture programs, including the public. Collaborated with content specialists in different areas such as agriculture, animal science, nutrition, forestry and natural resources, and agricultural and biological engineering to develop educational videos. Helped experts deliver complex research/content in relevant manner for target audiences. Wrote scripts, shot video, and edited video for multiple formats including DVD and online.

Educational Technology Specialist, Purdue University

Agricultural Communication Department

August 2005–May 2008

Worked with university faculty and Purdue Extension staff to develop Internet protocol (IP) videoconferencing training sessions on a variety of topics such as agriculture, nutrition, and economics. Connected campus to county extension offices for train the trainer sessions and programs for public audiences.

Broadcasting Experience

Producer

WZVN-TV, Fort Myers, FL

June 2004-June 2005

Produced live, one-hour morning newscast; included overseeing video editing staff, reporters, photographers, and anchors. Coordinated live television coverage; produced live coverage during Hurricane Charley.

Videographer

WPSD-TV, Paducah, KY

January 2004–June 2004

Worked with reporters to produce television news packages; included conducting interviews with experts. Assisted in script writing. Shot and edited video for live broadcast. Operated live broadcasting truck.

Producer, Reporter, Videographer

WSIL-TV, Carterville, IL

August 2001–November 2003

Contributed to live, half-hour newscasts in various capacities. Produced live, weekly morning show. Coordinated live television coverage. Oversaw reporters, photographers, and video editors. As a reporter, duties included interviewing experts and reporting complex information/research in short on-air news packages. Wrote scripts and shot and edited video. Live shot experience.

Producer, Photographer, Editor, Reporter, Anchor

WSIU-TV, Carbondale, IL

September, 1999 - May 2003

Produced, shot and edited video, reported, and anchored for daily live half hour television news broadcasts.

Reporter, Writer, and Host

September 2001–September 2002

WSIU-FM, Carbondale, IL

Recorded audio, wrote scripts, reported, and hosted for live radio broadcast segments.

Teaching Experience

YDAE: 491 Multimedia in Agricultural Communication

Spring 2013

& 2014

Developed and taught a blended and project-based learning course using iPadminis and a cloud-based computing video editing platform to introduce students to multimedia communication principles and theories, including hands-on experience writing, shooting, and editing a completed video project in a current agricultural topic. In spring 2014, students used iPad-minis to produce videos for the office of Purdue Agricultural Research. In 2013, students produced videos for the Purdue Extension Small Farm and Sustainable Agriculture team. Video clips are under review for Extension publication numbering.

YDAE 152: Agricultural Communication Seminar

Fall 2013 & 2014

Served as co-designer and co-instructor for the introductory agricultural communication seminar introducing incoming students to historical and theoretical perspectives of the media industry.

YDAE 591: Youth and New Media

Fall 2013

Served as co-designer and co-instructor for a newly developed blended-learning, project-based graduate course focused on instructional technologies, mass media

effects, and instructional techniques for engaging with youth through Extension outreach and educational program efforts.

Instructional Development

Purdue Blackboard Redesign Course Development Project (2012)

Served as instructional design consultant to assist multiple professors across Purdue's campus in migrating online course materials from Blackboard Vista to Blackboard Learn. Assisted in developing asynchronous online video modules for introductory teaching course EDCI 496 and re-designed instructional design assignments for EDCI 575: Foundations of Distance Learning.

What's on MyPlate? (2012)

Educational DVD introducing concepts from the United States Department of Agriculture's (USDA) MyPlate dietary guidelines to adult and young adult learners.

*Purdue zipTrips*TM: *The Science of Nutrition* (2012)

Electronic field trip and wrap around materials to introduce middle school students across the country to nutrition scientist role models with the goal of increasing nutrition content knowledge and STEM interest.

Purdue zipTripsTM: It's a Gene Thing! (2011)

Electronic field trip and wrap around materials to introduce middle school students across the country to genetics scientist role models with the goal of increasing STEM interest and expanding perceptions of science and careers.

*Purdue zipTrips*TM: *Disease Detectives* (2010)

Electronic field trip and wrap around materials to introduce middle school students across the country to scientist role models working in disease research with the goal of increasing STEM interest and expanding perceptions of science and careers.

*Purdue zipTrips*TM: We're All Animals (2009)

Electronic field trip and wrap around materials to introduce middle school students across the country to scientist role models working in comparative biology with the goal of increasing STEM interest and expanding perceptions of science and careers.

Publications

Loizzo, J. L. & Lillard, P. (2015). In the field: Introducing undergraduates to Extension through a blended project-based multimedia production course. *The Journal of Extension*, 53(1).

- Loizzo, J., & Ertmer, P. A. (2014). Teachers' recommendations for the effective use of social media in the middle school STEM classroom. International Society for Technology in Education (ISTE): *Teaching and Learning with Technology*, 41(6), 32–35.
- Adedokun, O. A., Hetzel, K., Parker, L. C., Loizzo, J. L., Burgess, W. D., & Robinson, J. P. (2012). Using virtual field trips to connect students with university scientists: core elements and evaluation of Purdue zipTripsTM. *Journal of Science Education and Technology*, 21(5), 607–618. http://dx.doi.org/10.1007/s10956-011-9350-z
- Adedokun, O. A., Parker, L. C., Loizzo, J.L., Burgess, W. D., & Robinson, J. P. (2012). Factors influencing participant perceptions of program impact: lessons from a virtual fieldtrip for middle-school students. *Journal of Extension* [Online], 49(6) Article 6FEA8. Available at http://www.joe.org/joe/2011december/a8.php
- Adedokun, O. A., Parker, L. C., Loizzo, J. L., Burgess, W. D., Robinson, J. P. (2011). A field trip without buses: connecting your students to scientists through a virtual visit. *Science Scope*, *34*(9).
- Parker, L. C., Adedokun, O. A., Loizzo, J. L., & Burgess, W. D. (2010). Purdue zipTripsTM: Connecting students and scientists through electronic field trips. *IL Spectrum*, 36(2), 36–43.

Articles and Manuscripts in Progress

- Loizzo, J., Borron, A., Gee, A., & Ertmer, P.A. (2015; submitted for publication). Teaching convergence in 21st century undergraduate agricultural communication: A pilot study of backpack multimedia kits in a blended, project-based learning course. *The Journal of Applied Communication*.
- Borron, A., Loizzo, J., & Gee, A. (2015; accepted for publication). The role of crticial reflexive analysis in a service-learning course in agricultural communication. *North American Colleges and Teachers of Agriculture (NACTA) Journal.*
- Watson, S. L., Loizzo, J., Mueller, C., Lim, J., Watson, W. R., & Ertmer, P. A. (2015; submitted for publication). Instructional design for attitudinal change: applications in a human trafficking mooc. *Educational Technology Research and Development*.

Presentations

Loizzo, J., & Ertmer, P. A. (2014). Using the mobile and mighty ipad-mini for undergraduate multimedia project-based learning. Association for Education and Communication Technology (AECT). Jacksonville, FL.

- Loizzo, J., Borron, A., & Tucker, M. (2014). Preparing agcom undergraduates for 21st century careers: Purdue's project-based, blended-learning, multimedia approach. Association for Communication Excellence (ACE) in Agriculture, Natural Resources, and Life and Human Sciences. Portland, OR.
- Loizzo, J., Borron, A., & Tucker, M. (2014). Assembling a backpack journalist kit for ageom. Association for Communication Excellence (ACE) in Agriculture, Natural Resources, and Life and Human Sciences. Portland, OR.
- Loizzo, J. & Ertmer, P. A. (2013). Implementation of cloud-based computing in a blended learning multimedia undergraduate course. The Sloan-C Annual International Conference. Lake Buena Vista, FL.
- Loizzo, J., & Ertmer, P. A. (2012). "Scientists help others:" Student experiences with an electronic field trip. The National Science Teacher Association (NSTA). Indianapolis, IN.
- Loizzo, J., Crow, J., & Doyle, S. (2012). Take a bus-free field trip. The National Science Teacher Association (NSTA). Indianapolis, IN.
- Loizzo, J., & Doyle, S. (2012). The path to developing an electronic field trip in science education. Presented at The National Extension Technology Conference (NETC). New Orleans, LA.
- Loizzo, J. L., Crow, J., Doyle, S., Burgess, W. D., Carleton-Parker, L., Adedokun, O. A., & DeFord, C. (2010). Teacher's guide to Purdue zipTrips. Hoosier Association of Science Teachers, Incorporated (HASTI). Indianapolis, IN.
- Loizzo, J. L., Doyle, S., Crow, J., Burgess, W. D., & Robinson, J. P. (2010). Teacher's guide to Purdue zipTrips. Science Education Council of Ohio. Columbus, OH.
- Loizzo, J. L., McGrew, C., Crow, J., Burgess, W. D., & Robinson, J. P. (2010). Teacher's guide to purdue ziptrips. michigan science teacher association. Lansing, MN.
- Adedokun, O. A., Bell, J., Loizzo, J. L., Burgess, W. D., & Robinson, J. P. (2009). Description of a hybrid electronic field trip. World E-Learn Conference. Vancouver, Canada.
- Capobianco, B., Loizzo, J., & Burgess, W. (2009). Lesson learned from integrating electronic fieldtrips in the science classroom. In G. Siemens & C. Fulford (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications* 2009 (pp. 2747–2751).

Invited Presentations

- Loizzo, Jamie (2014). iPads, Tablets, and Smartphones: Engaging Students in a 1:1 Computer World. Indiana Agriculture Teachers Workshop. West Lafayette, IN.
- Loizzo, Jamie (2013). Creating a Video; Operation: Military Kids. Speak Out for Military Kids (SOMK) Organization. Indiana 4-H. West Lafayette, IN.
- Loizzo, Jamie (2013). Start the Conversation with Social Media. Indiana 4-H Horse and Pony Club. Indianapolis, IN.

Awards

- Gold Award for Outstanding Professional Skill for Lafayette Science Café (2013). The Association for Communication Excellence.
- Bronze Award for Media Relations Campaign for drought coverage (2013). The Association for Communication Excellence.
- Purdue Agriculture TEAM Award (2012) for Purdue zipTrips electronic field trip program.
- Silver Award for Electronic Media, Video (2011). ACE: The Association for Communication Excellence.
- Outstanding Professional Skill Award and Gold Award in Distance Education and Instructional Design (2010). ACE: The Association for Communication Excellence.
- Educational Aids Blue Ribbon Award (2010). American Society for Agricultural and Biological Engineers.
- Accolade Award of Merit in Live Television Events category (2009). The Accolade Awards.
- Bronze Award Marketing Campaign over \$1.000 (2009). CASE: Council for Advancement and Support of Education District V.
- National Winner—Promotional Piece—Team (2008). National Association of Extension 4-H Agents.
- North Central Regional Winner Promotional Piece—Team (2008). National Association of Extension 4-H Agents.

- Educational Aids Blue Ribbon Award (2007). American Society of Agricultural and Biological Engineers.
- Ann Hancook Educator/Specialist Cooperation Award (2007). Purdue University Cooperative Extension Specialists Association (PUCESA).

Grants

Awarded

- Loizzo, J. & Tucker, M. (2013). Purdue Agricultural Research Office, Senior Associate Dean Dr. Karen Plaut. (\$12,500) Proposal to Develop Science Communication Products for the Purdue University College of Agriculture.
- Loizzo, J., Borron, A., & Tucker, M. (2013). Purdue Provost's Instructional Equipment Program. (\$7,600) *Multimedia Kits for Science Communication*.
- Loizzo, J., Borron, A., & Tucker, M. (2013). Ag Alumni Trust Fund Proposal. (\$3,200) Engaging New Audiences through Science Communication.
- Kim, M., Burgess, W.D., Loizzo, J. L., & O'Shea, K. J. (2012). Purdue College of Education Seed Grant. (\$7,000) *Opening a Backchannel: Enhancing Student Engagement through Social Networking Technology*.
- Robinson, J. P., Whittaker, D., Burgess, W. D., & Sigurdson, C. (\$749,000; 2007–2012). Howard Hughes Medical Institute Pre-College Program. *Electronic Field Trips in Comparative Biology*.

 Served as Project Manager; assisted in managing budgets.

Foundation

John W. Anderson Foundation (2012-2013). (\$20,000). (Key Personnel). *Purdue zipTrips*TM *Electronic Field Trip Program*.

Award Funding

Purdue Agriculture TEAM Award (2012). (\$10,000). (Project Manager). *Purdue zipTrips*TM *Electronic Field Trip Program*.

Pending

Zaspel, J. (2013). National Science Foundation CAREER (\$500,000). Vampire moths and the evolution of hematophagy: A novel system for integrating phylogeny, ecology and behavior in the classroom (Lepidoptera: Erebidae: Calpinae). Would serve as instructional designer for development and assessment of electronic books introducing middle school students to entomology content and careers.

Un-awarded

- Loizzo, J., Borron, A., Tucker, M. & Savage, M. (2014). The Knight Foundation (\$35,000). Engaging Undergraduate Agricultural Communication Students in Informal Science Communication.
- Kim, M., Carroll, N., Burgess, W.D., Loizzo, J. L., & O'Shea, K. J. (2011). National Science Foundation Cyberlearning. (\$500,000) (Key Personnel) *Opening a Backchannel: Enhancing Youth Engagement through Social Networking Technology*.

Scholarships

- Frank DeBruicker Scholarship for a graduate student in educational technology 2014–2015 (\$1,000). Purdue University College of Education. Department of Curriculum and Instruction.
- Dean's Graduate Student Travel Grant 2013 & 2014 (\$1,000). Purdue University College of Education. Department of Curriculum and Instruction.
- Department of Curriculum and Instruction Graduate Student Travel Grant 2013 & 2014 (\$1,000). Purdue University College of Education.

Media Coverage of Projects

- Indiana Prairie Farmer. (October 2014). (feature article) Purdue Educator Introduces Students to All Types of Social Media Training. http://farmprogress.com/story-purdue-educator-introduces-students-types-social-media-training-9-118703
- Farm World. (July 2014). (feature article) Your farm ought to be in pictures... YouTube, documentary and democratization of video to promote ag. pp. 5–7.
- Purdue Agricultures Magazine. (Summer 2012). (feature article) zipTrips Bring Scientists into the Classroom—Virtually. p. 6.
- National Science Teacher Association (NSTA) Lab Out Loud Podcast Episode 67. (2012). (audio podcast interview) Take a Virtual Field Trip...In Your Classroom. http://laboutloud.com/2011/10/episode-67-take-a-field-trip-in-your-classroom/
- Purdue Today. *Did you Know? Purdue zipTrips*. (2011). (*press release*) http://www.purdue.edu/newsroom/purduetoday/general/2011/111104_DYK-zipTrips.html

University Committees

Communication Consultant—Indiana: Operation Military Kids (2006–present)

Purdue Agriculture Distance Education Committee (2013–present)

Purdue Agriculture Recruitment and Retention Committee (2013–present)

Purdue Agriculture Career Services Committee (2013–present)

Chair of the Informal Science Education Committee (2012) Purdue Agricultural Communication Department

Celebrate Science Indiana Planning Committee (2011–2012)

National Science Teacher Association (NSTA) Planning Committee (2011–2012)

Professional Organizations and Activities

Early Career Symposium: Building a Cyberlearning Research Program (2014, Jacksonville, FL) Sponsored by the National Science Foundation

Association for Educational Communications and Technology (2014–present)

Golden Key International Honour Society (2013–present)

Association for Communication Excellence (2012–present)

Hoosier Association of Science Teachers, Inc. (2010–present)

Purdue Association of Learning Design and Technology (PALDT) (2005–present)

Volunteer Work

Assistant Marketing Director for TEDx PurdueU (2012)

Kiwanis International—Harrison High School Key Club Advisor (2005–2006)

Purdue Worklife Wellness Ambassador (2005–2006)