

**The transformation of online teaching practice: Tracing successful online teaching in
higher education**

by

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To my family, Salih, Gulden, and Ezgi Baran

for their unwavering support and love through this journey.

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ABSTRACT

This dissertation was an in-depth investigation of successful online teaching in the context of higher education. It is presented in nontraditional dissertation format as approved by the Department of Curriculum and Instruction, Iowa State University. This dissertation includes three publishable journal articles that would represent Chapter 2, 3 and 4 of a traditional dissertation along with introduction and conclusion chapters. This dissertation argues that current standard-driven, technical, and one-size-fits-all approaches to preparing and supporting teachers for online teaching has been insufficient in addressing teachers' needs as they make a transition to online teaching and create a distinctive pedagogy for online learning. Because of these unstable patterns both at the organizational and faculty level, many online learning practices are employed as the replication of traditional classroom environments. Moreover, the research has been limited in terms of bringing teachers' voices into this process, which created a potential to regress them to passive roles. Therefore a critical review was conducted looking at the current literature on online teaching, and formulated a critique of the standards- and competency-driven vision of online teaching from the perspective of transformative learning theory. The study also provided an alternative perspective towards online teacher professional development considering teachers as adult learners, supporting teacher empowerment, promoting critical reflection, and integrating technology into pedagogical inquiry. Considering the importance of bringing teachers' voices to the discussion on online teaching, a multiple case study was conducted to investigate exemplary online teaching within different colleges of a university. Ethnographic interviews were conducted with six teachers who were selected through the nominations of online

program coordinators in different colleges. The purpose was to look at the motivational factors that affected teachers' decisions to teach online, successful practices they employed to address the concerns and challenges related to their online teaching, and contextual and support factors that influenced the success of their online teaching. An analysis within each and across the six teacher interviews indicated that teachers reconstructed their teacher roles as they revisited their approaches to understanding the course content, designing and structuring the course, knowing their students, enhancing teacher-student relationships, guiding student learning, increasing teacher presence, conducting course evaluation, and creating an online teacher persona. Additional contextual factors impacted teachers' motivation for online teaching, such as their teaching history, students' profiles, institutional rewards, technology, and pedagogy support. Building on the results of the critical review and multiple case study, a third article additionally presents a framework that can be used as a guide to design, develop, and sustain online teacher support and professional development programs. This framework intends to recognize successful online teaching as the outcome of interaction among many factors at three levels—teaching, community, and organization. Together, these three articles address the issues in the current research and practice on online teaching and propose an alternative view on understanding, preparing, and supporting online teachers by focusing on transformation of teacher persona and empowerment of online teachers through reflective practices and pedagogical inquiry.

CHAPTER 1: GENERAL INTRODUCTION

Despite the increasing number of faculty and students involved in online learning in higher education, many teachers, who represent a critical position in building quality online learning environments, still have considerable doubts about the value of current online teaching practices. Teachers hold concerns about the time and effort that is put into teaching online, and the lack of support and incentives that are provided by their institutions (Seaman, 2009). Moreover while universities embrace online education, given the lack of preparation and readiness, teachers find it challenging to adapt a new pedagogical form in a traditionally structured educational environment. Therefore, several scholars have recognized the change that faculty members experience, and studied these changes, particularly so that higher education institutions may encourage faculty to participate and improve the success of the courses (Coppola, 2002; Major, 2010). In considering the importance of teachers' transition from face-to-face teaching to online teaching, researchers have focused on the areas of faculty participation (Maguire, 2005), involvement (O'Quinn, 2002), adaptation (King, 2002), satisfaction (Bollinger & Wasilik, 2009), perception on the value of online learning implementations (Ulmer, Watson, & Derby, 2007; Zhang & Walls, 2009), and approaches to teaching online (Gonzales, 2009). Moreover, following the notion that teaching online requires the creation of new skills and sets of pedagogies, researchers have studied online teacher roles and competencies in various higher education contexts (Anderson, Rourke, Garrison, & Archer, 2001; Berge & Collins, 2000; Graham, Cagiltay, Lim, Craner, & Duffy, 2001; Goodyear, Salmon, Spector, Steeples, & Tickner, 2001; Guasch, Alvarez, & Espasa, 2010; Salmon, 2004).

Problem Statement

While research studies, which focused on teacher transition from face-to-face teaching to online teaching and accompanying emerging roles and competencies, have made important contributions to the literature by bringing teachers to the center of the discussions on online learning, growth in teacher involvement and acceptance has been modest, accompanied with limited change in online pedagogies (Natriello, 2005). Therefore, three key problems were identified in the literature that became the basis for conducting research.

First, the studies investigating online teacher roles and competencies tend to follow a “technical view of teaching,” which “focus on the primacy of knowledge and value transmission rather than a broader sense of education” (Rennert-Ariev, 2008, p. 113). Online teachers are generally assumed to take the roles without resistance, rejection, and recreation (Rennert-Ariev, 2008). In contrast to this view, this dissertation research is framed by the notion that teachers are active learners in the online environment as they shape, and reconstruct their roles and teacher persona engaging in the unique conditions of their online teaching context. Moreover, because the literature is missing a critical look at the current online teaching research and practice, this dissertation aims to provide a critique and offer an alternative perspective using transformative learning theory as a lens for discussion.

Second, because of the unstable patterns of online teaching at the teaching, organization, and community levels, many online learning practices are employed as the replication of traditional classroom environments, reinforcing the “status quo” and the

“defensive strategy” in higher education (Garrison & Anderson, 2003, p. 8). Moreover, teachers are challenged “to move to something new when the patterns of behavior required for success are not fully established” (Natriello, 2005, p. 1890). What is lacking in the online education literature is empirical research dedicated to investigating the pedagogical transformation of teachers as they move from face-to-face teaching to online teaching and establish the new patterns for online pedagogy.

Third, the research has been limited in terms of bringing teachers’ voices into this process and addressing the complex educational needs of teachers in their unique online teaching contexts. Therefore, this dissertation is an effort to fill the void by researching the transformation of online teaching practice with a critical look at the current literature and an examination of the successful online teaching patterns in the higher education contexts.

This dissertation attempts to address these gaps in the online education literature. Chapter 2 presents a critique of the standards- and competency-driven vision of online teaching and provides an alternative view that considers teachers as adult learners who continuously transform their meaning of structures related to online teaching through the ongoing process of critical reflection and action. Chapter 3 aims to provide an in-depth understanding of online teachers’ lived experiences with the success factors and conditions that nurture their teaching experiences. Chapter 4 provides a practical framework that can be used as a guide to design, develop, and sustain online teacher support and professional development programs. This research is particularly critical for those who want to explore alternative views on understanding, preparing, and supporting online teachers. Moreover, together, the articles in this dissertation provide opportunities to guide further research as

well as to inform current online education practice, especially for those working in similar higher education contexts.

Organization of the Dissertation

This dissertation investigates successful online teaching in the context of higher education institutions to assist in promoting an alternative view on understanding, preparing, and supporting teachers for successful online teaching practices. It is presented in nontraditional dissertation format including three publishable journal articles, an introduction and a concluding chapter.

Chapter 1: General Introduction

The first chapter introduces the research topic, presents a statement of the problem investigated, outlines the main purpose of the dissertation and describes the organization of the dissertation chapters.

Chapter 2: Transforming Online Teaching Practice: A Critical Analysis of the Online Teaching Literature

This article represents the literature review section of a traditional dissertation. It includes a review and critique of the literature on online teacher roles and competencies. Based on critical analysis of the literature and identified gaps, the article offers an alternative perspective using transformative learning theory as a frame for discussion.

The review concludes that while the research about online teacher roles and competencies guided the development of teacher preparation and training programs, they remained lacking in terms of addressing the issues of empowerment of online teachers, promoting critical reflection, and integrating technology into pedagogical inquiry. As an alternative to these functionalistic and technical perspectives towards teacher knowledge and practice, transformative learning theory is suggested as a perspective that considers teachers as adult learners who continuously transform their meaning of structures related to online teaching through the ongoing process of critical reflection and action.

Chapter 2: Tracing Successful Online Teaching in Higher Education: Voices of Exemplary Online Teachers

This article presents an in-depth multiple-case study that was conducted to build conceptual models for future studies as well as to identify strategies for supporting online teachers. The main purpose of this study was to investigate exemplary online teachers' transition to online teaching with a specific focus on the motivational factors, successful practices, and contextual and support elements that they relate to the success of their online teaching. Ethnographic interviews were conducted with six successful online teachers who were identified through nominations of the online program coordinators and directors within five different colleges of the university.

The results of the study documented common successful practices with accompanying challenges, concerns, and solutions. It also includes implications for research

as well as suggestions for creating and nurturing successful online teaching practices in higher education institutions.

Chapter 4: Implications for Practice: Supporting Online Teachers

This article presents a framework that can be used as a guide to design, develop, and sustain online teacher support and professional development programs. Because teachers hold key roles in determining whether online learning will be implemented successfully in higher education institutions, their preparation and support for online teaching need to be ensured with the combination of many layers within this multilevel support ecosystem. Using ecological perspective as a base, this framework intends to recognize successful online teaching as the outcome of interaction among many factors at three levels—teaching, community, and organization.

Chapter 5: Synthesis and Recommendations

The final chapter of this dissertation summarizes the findings of Chapter 2, 3, and 4 and presents recommendations for research and practical implications in the field of online teaching. Potential limitations are also addressed in applying the alternative views proposed in the articles.

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CHAPTER 2: TRANSFORMING ONLINE TEACHING PRACTICE: A CRITICAL ANALYSIS OF THE ONLINE TEACHING LITERATURE

Abstract

Understanding what is lacking in the online teaching literature is critical to helping researchers and practitioners develop programs and support mechanisms for online teachers in higher education. This critical review is an attempt to address the gaps in the literature on online teaching by synthesizing the literature related to online teacher roles and competencies. Based on this synthesis, the review formulates a critique of the standards- and competency-driven vision of online teaching from the perspective of transformative learning theory, thus providing an alternative exploration of professional development of online teachers as adult learners. The results indicated that while the research about the online teacher roles and competencies guided the development of teacher preparation and training programs, these results remained lacking in terms of addressing the issues of empowerment of online teachers, promoting critical reflection, and integrating technology into pedagogical inquiry. Different from these functionalistic and technical perspectives towards teacher knowledge and practice, transformative learning theory is suggested as a perspective that considers teachers as adult learners who continuously transform their meaning of structures related to online teaching through the ongoing process of critical reflection and action.

Introduction

The Internet is becoming the actual medium of interaction, communication, and collaboration and the working space within which learners and teachers engage in “unique and irreplaceable learning opportunities” which may only exist in online environments (Burbules & Callister, 2000, p. 277). Teachers, who are at the center of an increasing demand and pressure to teach online, are being challenged to rethink their underlying assumptions about teaching and learning, and the roles they take as educators (Wiesenberg & Stacey, 2008). The growing interest in online education challenges higher education institutions to rethink their cultural, academic, organizational and pedagogical structures in adapting to a new culture of teaching and learning (Howell, Saba, Lindsay, & Williams, 2004). Similarly, the drastic increase in the number of online programs and course offerings is changing the role of the teachers and the nature of teaching, with an increasing number of faculty and support staff required for online teaching (Bennett & Lockyer, 2004).

The experiences of early adopters have created a discourse around online education focusing on the definition of online teacher roles and competencies (Bennett & Lockyer, 2004; Lee & Tsai, 2010; Major, 2010; Natriello, 2005). The notion that teaching online requires the creation of new skills and sets of pedagogies has led researchers to study the roles that online instructors take in online education environments (Anderson, Rourke, Garrison, & Archer, 2001; Berge & Collins, 2000; Goodyear, Salmon, Spector, Steeples, & Tickner, 2001; Graham, Cagiltay, Lim, Craner, & Duffy, 2001; Guasch, Alvarez, & Espasa, 2010; Salmon, 2004).

While educators and organizations around the world are more involved in online

learning, growth in faculty involvement and acceptance has been modest, accompanied with limited change in online pedagogies (Natriello, 2005). “Given the expanding interest and demand for online learning, coupled with the results of studies showing that higher levels of learning are not easily achieved in online courses, there is an imperative to advance our understanding of how to facilitate effective online learning activities” (Kreber & Kanuka, 2006, p. 121). The research has identified several reasons why there is still limited understanding in nurturing higher-order thinking in the online classrooms. The most important reason of all that has been frequently mentioned is the tendency of carrying traditional educational practices to the online environments (Kreber & Kanuka, 2006). Teachers often rely on their traditional pedagogical approaches that were developed while emulating professors, whom they considered effective teachers, and mostly without teaching preparation, which is formed over the years of developing expertise in the face-to-face classrooms (Kreber & Kanuka, 2006). Having little (if any) prior experience in teaching online, teachers tend to transfer traditional approaches to the online classrooms, and continue ineffective approaches that are already present in traditional classrooms. Teaching online, therefore, creates tension in “introducing a new activity into existing institutions with established roles” (Natriello, 2005, p. 1890).

Although the studies on the roles and competencies of online teachers added richness to the online teaching literature, research related to the experiences of faculty who participate in online education in higher education has been limited (Conceição, 2006). Moreover, the roles and competencies suggested for online teaching have had limited impact on the professional development programs that address teachers’ needs, individual dispositions,

external social demands and capabilities within their unique teaching contexts. Despite the swift growth in online learning in higher education, the literature still lack the critical look at the existing research on teachers' roles and competencies with respect to online teaching.

What follows is an attempt that seeks to address the gaps in the literature on online teaching by (a) synthesizing literature related to online teacher roles and competencies, and, based on this synthesis, (b) presenting a critical examination of the literature on roles and competencies for online teachers. Understanding what is lacking in the online teaching literature is critical to helping researchers and practitioners develop programs and support mechanisms for online teachers in higher education. This critical review also aims to fill in the gap in the online teaching literature by providing a critical view on the current approaches and offering an alternative perspective using transformative learning theory (Mezirow, 1995, 1997) as a frame for discussion. Based on this synthesis, the purpose of the review is to formulate a critique of the standards- and competency-driven vision of online teaching from the viewpoint of transformative learning theory, thus providing an alternative exploration of professional development of online teachers as adult learners.

Methodology

This critical review seeks to understand online teaching with a particular focus on the online teacher roles and competencies and their applications to online teacher support and development. Two major questions guided the review: (a) how are online teacher roles and

competencies portrayed in the literature, and (b) what is lacking in the current approaches on supporting online teachers?

Search Procedures

Studies about online teacher roles and competences are important, as they provide information about the roles that may influence how online teachers are trained and supported, as well as factors that may affect the design of online learning environments. These studies present a variety of roles, which are divergent depending on the organizational, cultural and social dynamics of each online teaching and learning context.

It should be noted that there is a lack of agreement on the terms associated with online teaching in the literature, with various terms used to describe online teacher roles: online teacher, e-moderator, online tutor, facilitator, or online instructor. For the purpose of this critical review “online teacher” is defined as the faculty member who teaches online in higher education institutions. Moreover, for the purposes of this critical review “online teaching” is defined as teaching that is conducted mostly online. Face-to-face teaching is defined as teaching that is conducted in a physical classroom. For standardization of the terms, the courses taught totally online are called online courses. Those taught face-to-face or in a blended format involving face-to-face and online environments are called traditional courses (Tallent-Runnels, Thomas, Lan, Cooper, Ahern, & Shaw, 2006).

This critical analysis of existing literature on online teacher roles and competencies began as a broad search for research on online teaching. After the identification of key

articles and related frameworks, the search was then narrowed down to the topics of online teacher roles and competencies. Studies on teachers' transition from face-to-face teaching to online teaching and methods for supporting online teaching were also incorporated into the literature search. The transformation of the search topic into the search language was an ongoing effort to find the key terms in the field in order to locate the desired literature.

Overall, the articles included in this critical review consist of both qualitative and quantitative research that were located through online databases, including Educational Resources Information Center (ERIC), Academic Search Elite, and Google Scholar; the tables of contents of several key journals, such as British Journal of Educational Technology, Journal of Distance Education, Distance Education, Journal of Asynchronous Learning Networks, The Internet and Higher Education, Computers and Education, Teachers College Record, The Journal of Open and Distance Learning, Quarterly Review of Distance Education and the American Journal of Distance Education; and bibliographies of relevant articles. To locate the review studies, the Review of Educational Research journal was examined focusing on the reviews on online teaching published in the last 10 years. Apart from these resources, Distance Education Hub (DEHub) was used extensively to locate research on online teaching. DEHub (<http://www.dehub.edu.au/>) is a website that serves as a database of research on distance education and contains the research articles and other resources on distance education drawn from the Australian Education Index and from a variety of international organizations and publishers. In addition to the search of online databases and journals, three other essential search methods were used extensively: a search on printed books, a search on the references of the key articles and a search for the articles of

key researchers in the field. Due to insufficient level of consistency or agreement on the terminology used in the online teaching literature, the references of the related publications were extensively used. Keywords included “online teaching,” “online teacher roles,” “online teacher competencies,” “transition,” “higher education,” and “online learning”.

This critical review covers articles that were published in the last 25 years, starting with the current research and going back to the 1990s when the research on online teaching, teacher effectiveness and teaching with technology gained momentum with the dissemination of online learning in higher education institutions. Empirical research articles and articles on conceptual and theoretical frameworks were included in the review. The review resulted in 10 key articles on online teacher roles and competencies in the higher education: Bawane and Spector (2009), Williams (2003), Guasch, et al., (2010), Darabi, Sikorski, and Harvey (2006), Goodyear, et al. (2001), Salmon (2004), Coppola, Hiltz, and Rotter (2002), Varvel (2007), Anderson, et al. (2001), and Berge, (2009). Other articles on online teaching and the changing teacher role in online environments were also used to support the review. Because there is limited research that critically analyzes the competency- or role-based online teaching, several studies from the teacher education field were included in order to frame the critique in the online teaching context.

Literature Analysis and Synthesis

The articles that make up the synthesis include authors/researchers from seven countries who worked on exploring, identifying, and defining online teacher roles and

competencies (See Appendix for The Summary of the Literature on Online Teacher Roles and Competencies that served as data for the critical review and synthesis section of the study).

The analysis followed two phases. First, once the articles were selected for analysis, each was separately reviewed in terms of the purpose, context, methodology, and results. This process focused on identifying, listing and organizing the concepts and themes used by researchers of individual studies while relating them to one another (Major, 2010). This process resulted in the themes of context, identified roles and competencies, faculty involvement, methods for identification, methods for testing, and implications for research and practice. Second, in an attempt to synthesize, the themes identified from each single study were compared and contrasted for the existence of those themes using the constant comparison approach (Glaser & Strauss, 1967). Using the constant comparison analytical method, competencies suggested within each role were compared against existing roles and competencies in other studies. The categories that emerged from this comparison include pedagogical, facilitator, instructional designer, social, managerial, and technical roles.

The final stage of the analysis included formulating a critique of the standards- and competency-driven vision of online teaching from the perspective of transformative learning, thus providing a conceptual base for significant exploration. The following section presents the theoretical framework used to interpret the analysis of the existing research with a critical view.

Data Interpretation: A Theoretical Framework

The transformative learning theory can provide a rich framework from which to view the teacher's learning process during their online teaching. Originally explicated by Mezirow (1991) during the last two decades, transformational learning theory has evolved "into a comprehensive and complex description of how learners construct, validate, and reformulate the meaning of their experience" (Cranton, 1994, p. 22). Three common themes were mentioned in Mezirow's theory: Centrality of experience, critical reflection, and rational discourse (Taylor, 1998). The learner's experience, being socially constructed or deconstructed, is central to transformative learning. It is through critical self-reflection that the learner questions "the integrity of assumptions and beliefs based on prior experience" and this act of reflection "is most essential for the transforming of our meaning structures—a perspective transformation" (Taylor, 1998, p. 16). Critical reflection is carried out in the medium of rational discourse "where experience is reflected upon and assumptions and beliefs are questioned, and where meaning schemes and meaning structures are ultimately transformed" (Taylor, 1998, pp. 17-18).

At the core of transformative learning is the empowerment of the individual (Evans & Nation, 1993). The "definition of empowerment involves three major ideas: the notion of choice, of control of one's life, and of emancipation from ways of thinking which for the particular individual have limited both choice and control" (Evans & Nation, 1993, p. 91). It is through transformative learning that the learner is empowered by being a "mature and autonomous person" (p. 91).

Mezirow sees transformative learning as the very core of adult education, such that the goal is “to help the individual become a more autonomous thinker by learning to negotiate his or her own values, meanings, and purpose rather than uncritically acting on those of others” (Mezirow, 1997, p. 11). This notion of looking at adult learning with a transformative learning perspective may help in framing our understanding of the teachers’ experience of online teaching and the continuous changes they experience as they move from face-to-face teaching to online teaching. It also enables us to view teachers as learners as they transform the meaning of structures related to teaching online through an “ongoing process of critical reflection, discourse, and acting on one’s beliefs” (Taylor, 1998, p. 19).

Researchers explored the reflective practice drawing from transformative learning theory and suggested engaging teachers in pedagogical problem-solving and discovery about online teaching (Kreber & Kanuka, 2006). However, the literature on online teaching and learning is limited in terms of analyzing how “reflective online teacher- practitioners will work from a deep knowledge base (which relates to both their expertise in the discipline per se and their knowledge of what is known about online learning) and make their discoveries public and peer reviewed” (Kreber & Kanuka, 2006, p. 122).

If the potential of online learning is to be reached, there is a recognized need to understand online teachers’ transformative learning process as they become actively involved in pedagogical problem-solving in their teaching practices. This critical review aims to use transformative learning theory (Mezirow, 1991, 1995, 2000) to frame the critique on the literature that focus on competency- and role-based online teaching, and also propose an alternative view towards professional development of online teachers as adult learners.

Before the critical analysis and discussion of the literature, the following section will first present the current literature on online teacher roles and competencies.

Current Literature on Online Teacher Roles and Competencies

The literature seems to be in agreement that online teaching is different from traditional teaching and, as such, it requires the development of its own pedagogies (Kreber & Kanuka, 2006; Laat, Lally, Lipponen, & Simons, 2007; Natriello, 2005). While the traditional roles of teachers can be transferred to the online environment, the affordances and limitations of the new learning setting require teachers to adapt to new roles for creating effective and meaningful student learning experiences (Coppola, et al., 2002; McShane, 2004). Over the years, numerous online teacher roles have been described in literature using different terms and descriptions (Anderson, et al., 2001; Berge & Collins, 2000; Coppola, et al., 2002; Goodyear, et al., 2001; Graham, et al., 2001; Guasch, et al., 2010; Salmon, 2004). Researchers have created taxonomies and models specifying the roles that online teachers need to perform while teaching online. Although the studies addressing these roles show variety in terms of context and their definition of online teacher, commonalities can be found in the roles that teachers assume as they teach online.

One of the early models that described the teacher's role in a virtual environment is the 'Instructor's Roles Model' that identified teachers' functions under four different categories: Pedagogical, social, managerial, and technical (Berge, 1995). The roles were defined within the online discussion context, in which the pedagogical role meant to facilitate

the learning in discussions, the social role to encourage and promote working together, the managerial role to organize and design the logistics of the discussions, and the technical role to provide a transparent technology environment to the learners (Berge, 2009; Berge & Collins, 2000). These roles were suggested at a time when teachers were just moving to online environments, where the main activities were designed around online discussions. However, due the rise of virtual worlds and other learning environments, Berge (2009) called for a change in the roles that would focus more on “informal, collaborative, reflective learning, with user-generated content” (p. 412).

While the role of the teacher in online environments has changed, some of the characteristics of effective teaching remained the same, such as having clear expectations, emphasizing critical discourse and diagnosing misconceptions (Garrison & Anderson, 2003). However, online learning, by nature, changes the way these responsibilities are performed. Building on the previous research that presented roles for online teachers, Anderson, et al. (2001) suggested three categories for online teachers’ roles to ensure their teaching presence: Instructional design and organization, facilitating discourse, and direct instruction. Teaching presence is defined as “the design, facilitation, and direct instruction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes” (Anderson, et al., 2001, p. 5). Research found that teaching presence was a significant predictor of students’ perceived learning, satisfaction, and sense of community (Gorsky & Blau, 2009; LaPointe & Gunawardena, 2004; Russo & Benson, 2005). Although teaching presence is considered to be what the teacher does to create a community of inquiry with social and cognitive presence, all participants within the online learning environment

can also contribute to teaching presence by sharing the responsibilities (Baran & Correia, 2009).

While the aforementioned researchers looked at the teacher roles performed mainly in online discussion platforms, Coppola, et al. (2002) focused on the changing pedagogical roles of virtual professors in asynchronous learning networks. The roles identified were cognitive, affective, and managerial. By taking the cognitive role, teachers engage in deeper level cognitive activities related to information storage, thinking, and mental processes of learning. At the affective level, they need to find different tools to express emotions and develop intimate relationships with the students. By taking the managerial role, they structure and plan the course in detail with increasing attention on student monitoring their students.

As a result of an effort to define online teaching roles and competencies, a group of international researchers and practitioners described the main roles that online teachers perform: Process facilitator, advisor-counselor, assessor, researcher, content facilitator, technologist, designer and manager-administrator (Goodyear, et al., 2001). Aydin (2005) adopted these roles and looked at the perceptions of online mentors. The research provided additional roles, such as content expert, instructional designer and material producer. Other researchers later investigated the priority and clarity of the role categories emerged from the literature: Professional, pedagogical, social, evaluator, administrator, technologist, advisor/counselor, and researcher (Bawane & Spector, 2009). The results of the analysis of the expert surveys indicated that the pedagogical role was the highest ranked role, followed by professional, evaluator, social facilitator, technologist, advisor, administrator, and researcher roles, respectfully (Bawane & Spector, 2009). The prioritization of the roles and

competencies vary in the literature regarding the context of the online teaching. For instance, technology-related competencies (Egan & Akdere, 2005), communication competencies (Williams, 2003), and assessment related competencies (Aydin, 2005) can be considered more important than others depending on the context and culture within an online teaching setting. In other words, the variety in terms of the roles that teachers take in an online environment demonstrates the context-dependent nature of teaching, which has a direct influence on the prioritization of the roles within online teaching environments.

While teachers may be the sole performers of the online teaching roles, many times the roles are carried out by a number of actors (Guasch, et al., 2010). For instance, the UK's Open University framed a collaborative model in distance education in which the roles are performed by several individuals (Salmon, 2004). E-moderator was one of the critical roles in supporting and encouraging interaction and communication for knowledge and skill development in the interactive and collaborative online environments (Salmon, 2004). Although Salmon's (2004) e-moderator concept stresses the importance of the facilitation role that online teachers undertake, it is limited in scope with respect to the diverse online teaching contexts where the online teacher takes the main responsibility of developing and maintaining an online learning environment and taking on different roles (Bennett & Lockyer, 2004)

The need for developing competencies for online education was recognized by a number of researchers (Bawane & Spector, 2009; Varvel, 2007). Researchers indicated that defining the abilities and expectations of online teachers in functional and observable terms can help the institutions and teachers in planning the professional development opportunities

(Varvel, 2007). Therefore, Varvel (2007) constructed a competency document for online instructors which was designed to meet the needs of a particular program. The competency document included the roles of administrative, personal, technological, instructional design, pedagogical, assessment, and social roles. While these roles could be applicable in online teaching environments in other institutions, Varvel (2007) recognizes that variations in context and technology could change the competencies, requiring a need for constant update.

In a similar study, Williams (2003) identified the roles by using a panel of distance education experts. The roles of instructional designer, instructor/facilitator, trainer, leader/change agent received the highest rankings among the thirteen roles that were determined.

Table 2.1 presents a summary of the main research on online teacher roles and competencies, the purpose of each article and the method used to identify and validate the competencies at different levels.

Table 2.1 Summary of the existing literature studies on online teacher roles and competencies

| Studies | Purpose | Method |
|---------------------------|--|--|
| Guasch, et al. (2010) | Developed teachers' competencies for virtual environments in higher education | Reviewing the literature and teacher training actions |
| Bawane and Spector (2009) | Prioritized and identified online instructor roles to develop training and curricula for online teachers | Validating the literature identified competencies with the experts in teacher education |
| Varvel (2007) | Developed an online instructor competency list geared the needs of a particular program | Surveying students, course evaluations, literature survey, instructor feedback |
| Darabi, et al. (2006) | Identified and validated instructor competencies required for teaching at a distance with advanced communication technology. | Reviewing the literature and validating with experienced practitioners in academia, industry, and the military |
| Aydin (2005) | Identified roles, competencies, and resources for online teaching in Turkey | Surveying online mentors in a large open university |
| Salmon (2004) | Defined e-moderator competencies | Content analysis of UK's Open University's tutors CMC content, focus groups etc. |
| Williams (2003) | Identified roles and role-specific competencies | Validating the literature identified competencies with the experts in teacher education using the Delphi technique |
| Coppola, et al. (2002) | Captured role changes enacted by online instructors | Capturing roles enacted by the online instructors through interviews |
| Goodyear, et al. (2001) | Described main roles that online teachers perform | Using a panel of distance education experts to determine the roles and competencies |

Table 2.2 presents online teacher roles as suggested in the literature. Although the table was adapted from Bawane & Spector's (2009) study on the prioritization of online instructor roles, additional roles were also included from other studies (e.g., Anderson, et al., 2001; Berge, 2009; Coppola, et al., 2002) that focused on the teacher functions in the online learning environments.

Table 2.2 Roles associated with online teaching

| Studies | Roles |
|---------------------------|--|
| Bawane and Spector (2009) | Professional, Pedagogical, Social, Evaluator, Administrator, Technologist, Advisor/Counselor, Researcher |
| Berge (2009) | Pedagogical, Social, Managerial, Technical |
| Varvel (2007) | Administrative, Personal, Technological, Instructional Design, Pedagogical, Assessment, Social roles |
| Aydin (2005) | Content expert, process facilitator, instructional designer, advisor/counselor, technologist, assessor, material producer, administrator |
| Williams (2003) | Administrative manager, Instructor/Facilitator, Instructional Designer, Trainer, Leader/Change Agent, Technology expert, Graphic Designer, Media Publisher/Editor, Technician, Support Staff, Librarian, Evaluation Specialist, Site Facilitator/Proctor |
| Coppola, et al. (2002) | Cognitive, affective, managerial |
| Anderson, et al. (2001) | Instructional design, facilitating discourse, direct instruction |
| Goodyear, et al. (2001) | Process facilitator, Adviser-counselor, Assessor, Researcher, Content facilitator, Technologist, Designer, Manager-administrator |

Note. Adapted from "Prioritization of online instructor roles: implications for competency-based teacher education programs," by J. Bawane and J. M. Spector, 2009, *Distance Education*, 30(3), p. 388.

Common Roles Identified in the Literature

“Role” is defined as a part or a function played by an actor. The teacher roles often suggested in the literature were categorized as pedagogical, facilitator, instructional designer, social, managerial, and technical roles. These roles often overlapped in terms of their functions and tasks. Some researchers categorized teaching related tasks, such as designing and implementing instructional strategies, developing the learning resources, and facilitating and sustaining students’ participation and motivation under the pedagogical role on a more general level (Bawane & Spector, 2009). Others separated these tasks and proposed a role for each task, e.g., process facilitator for providing prompts and responses to guide students’ learning (Bennett & Lockyer, 2004), instructional designer for designing instructional materials and strategies, and managerial role for carrying out the tasks of course management.

Instructional design is often considered an important role for online teachers. Instructional design role is concerned with planning, organizing, and structuring the course components (Anderson, et al., 2001), designing learning tasks (Goodyear, et al., 2001), and designing interactive technologies and teaching strategies/models (Williams, 2003). The instructional design role also consists of the tasks of maintaining and organizing learning, and making sure that learning goals are achieved (Guasch, et al., 2010).

Managerial role is performed by carrying out the pedagogical tasks related with course management, separately (Berge, 2009; Coppola, et al., 2002). This role consists of tasks, such as course planning, organizing, leading, and controlling (Coppola, et al., 2002). Management is also defined as a role that enables teachers to carry out planned actions,

manage communication channels, and supervise the virtual learning process (Guasch, et al., 2010). The management role is also used with the administration role in order to describe the functions of managing the course, establishing rules and regulations, and involving the issues of student registration, recordkeeping, security etc. (Aydin, 2005; Bawane & Spector, 2009).

The social role was one of most emphasized roles and included the teachers' functions related to building and improving student-teacher relationships in a virtual environment (Guasch, et al., 2010). Due to carrying out several tasks at the cognitive and managerial levels, teachers can "no longer rely upon sensory and expressive skills to establish and maintain relationships with students" (Major, 2010, p. 2184). Therefore, taking the affective or social role becomes important in terms of nurturing intimate relationships, expressing energy and humor, and establishing an expressive connection with the students (Coppola, et al., 2002).

The online environment changes the fundamental interaction between the teacher, student, and content, requiring a revisit to the roles teachers take in enhancing students' learning. Because students are expected to take control of their own learning process and be active in stimulating their peers' learning, facilitation emerges as an important role in guiding these student-oriented approaches. Moreover, as the hierarchy in the online environment is flattened with more distributed power and control (Schrum & Hong, 2002), teachers are expected to adopt more facilitative approaches in creating learner-centered online classrooms (Salmon, 2004; Smith, 2005). While there is still a strong focus on the responsibilities of the teachers in the online courses, their role moves from being at the center of the interaction or the source of information to the 'guide on the side,' which implies that teachers design,

organize and schedule the activities and learners take the responsibility for their own learning by coordinating and regulating their learning activities (Anderson, et al., 2001; Berge, 2009).

In an online environment, teachers are not the sole performers on the stage. They share the roles and responsibilities with other actors such as instructional designers, program coordinators, graphic designers etc. The roles required for online teaching may be delegated to a number of specialized professionals and teams, e.g., instructional support personnel, instructional designers, teaching assistants, technology experts, media artists, online program coordinators, and even other faculty (Howell, et al., 2004; Miller, 2001; Paulson, 2002). Teachers often collaborate with other key actors to a much greater extent in order to receive support and help during the planning, design and the delivery of online courses (Bennett & Lockyer, 2004). They take different roles and responsibilities at different levels, such as facilitating, teaching, organizing, mentoring, and providing the content.

The literature suggests that proposed roles and competencies can be useful in informing curricula, training, and professional development programs for online teachers (Bawane & Spector, 2009; Williams, 2003). Furthermore, identified roles and competencies can guide the selection of the staff for online teaching (Williams, 2003). Because the implications of the research on online teacher roles and competencies are critical in informing the development of training and professional preparation programs as well as potential certification for online teaching (Spector & de la Teja, 2001), we need to analyze the research critically in terms of the limitations and issues that may affect these programs. Therefore, the following section presents a critical view on the current literature and proposes alternative directions.

Emerging Issues in Online Teaching Research

If a distinct pedagogy of online learning is to emerge, a new teacher role in the online environment needs to be explored. The literature, therefore, described a variety of roles for online teachers (Anderson, Rourke, Garrison, & Archer, 2001; Eraut, 1998; Goodyear, Spector, Steeples, & Tickner, 2001, Salmon, 2001). The competencies and roles have also been presented at different levels using approaches for categorization and classification (Bawane & Spector, 2009). The competencies were categorized as knowledge- or performance-based with the terms “competent” and “exemplary” to emphasize the exhibition of competencies at different levels (Varvel, 2007). “Online instructors are required to possess a diverse set of competencies and their extent of utilization relies on the context or role they are required to perform and also the kind of resources and support available” (Bawane & Spector, 2009, p. 387).

While the literature on online teacher roles and competencies recognized the importance of context in performing these functions, it was still lacking in terms of sharing strategies for transforming teacher practices for online teaching and helping teachers understand and adapt to the new teaching environment. Therefore, transformative learning theory is used as a lens for considering faculty as adult learners who bring a diverse range of experiences and learning preferences the online learning environment (McQuiggan, 2007). This section, consequently, aims at critiquing these standards- and competency-driven visions of online teaching from the perspective of transformative learning theory, and providing an alternative exploration towards professional development of online teachers as adult learners.

Empowerment of Online Teachers

Many studies on defining online teacher roles and competencies followed a “technical view of teaching,” which “tends to focus on the primacy of knowledge and value transmission rather than a broader sense of education” (Rennert-Ariev, 2008, p. 113). This functionalist type of orientation in competency-based teacher education approaches has been criticized, with concerns questioning the assertion that the roles are assumed to be taken by the individuals without resistance, rejection, and re-creation (Rennert-Ariev, 2008). Often, these functionalistic views “downplay the importance of teacher agency in defining and shaping the terms of their experience” (Rennert-Ariev, 2008, p. 113). Similarly, the literature on online teacher roles and competencies has limited mention of the value of the interaction between the perspectives of individual teachers and the values of the online teacher professional development and support programs. The role of the teacher in the creation of the content and values of such a program has also been lacking in the current literature.

“Transformative learning contributes to empowerment as a process of being one’s own mature and autonomous person” (Evans & Nation, 1993, p. 91). It is through critical reflection that teachers can be empowered as autonomous and self-directed professionals who constantly engage in a dialogue about solving complex problems, making decisions, reflecting in action, and collaborating with other key actors. Teachers should not be expected to simply accept the competencies and roles suggested by an authority, but instead must reflect on their roles as they become aware and critical of their own assumptions towards online learning and teaching. However, the roles and competencies are generally developed by a group of experts who were identified as knowledgeable about distance education and

educational technologies (Bawane & Spector, 2009; Goodyear, et al., 2001; Williams, 2003). The research has been limited in terms of bringing teachers' voices into this process, which created a potential to oblige them to regress to passive roles. Moreover, studies, which aimed to collect data from the teachers, generally used surveys in order to validate and prioritize already established roles and competencies (e.g., Aydin, 2005). Studies need to be driven by the intention to focus on teachers not as passive learners and performers of established roles and competencies, but as participants, expressing potentially varying degrees of conformity and resistance with the roles of online teaching. The notion of emphasizing standard-driven, technical, and one-size-fits-all online teaching approaches, thus, can be insufficient in addressing the complex educational needs of each unique online teaching context.

The concept of empowerment is rarely brought to the forefront in the online teacher education and professional development context. The understanding of empowerment needs to be explored regarding the empowerment of the teachers, who will also engage in the social effort of empowering their students. Moreover, since teacher learning is not static, but instead a continuous process, ways of empowering teachers as learners during their online teaching experiences need to be examined.

Promoting Critical Reflection

Transformative learning “involves transforming frames of reference through crucial reflection of assumptions, validating contested beliefs through discourse, taking action on one’s reflective insight, and critically assessing it” (Mezirow, 1997, p.11). It is through this critical reflection that personal empowerment is realized by challenging assumptions rather than accepting them as they are.

Reflection is a key factor for improving a teacher’s practice. Schon (1983) asserts that engaging in the process of continuous learning is an essential feature of professional practice:

Both ordinary people and professional practitioners often think about what they are doing, sometimes even while doing it. Stimulated by surprise, they turn thought back on action and on the knowing which is implicit in action. They may ask themselves, for example. “What features do I notice when I recognize this thing? What are the criteria by which I make this judgment? What procedures am I enacting when I perform this skill? How am I framing the problem that I try to solve? (p. 50)

It is through reflection in action that practitioners can bring to surface the tacit understandings that build on the specialized and repetitive practice and deal with the “situations of uncertainty, instability, uniqueness, and value conflict” (p. 50). Schön (1988) also talks about ‘reflection on action’ as a retrospective practice. ‘Reflection in action’ (during the experience) and ‘reflection on action’ (after the experience) have become two essential elements of professional training and development in different disciplines. Also of importance to online education is teachers’ ability to perform critical reflection, which can be

defined as “the process by which adults identify the assumptions governing their actions, locate the historical and cultural origins of the assumptions, question the meaning of the assumptions, and develop alternative ways of acting” (Stein, 2000, p. 3). Critical reflection “merges critical inquiry, the conscious consideration of the ethical implications and consequences of teaching practice, with self-reflection, deep examination of personal beliefs, and assumptions about human potential and learning” (Larrivee, 2000, p. 293).

One of the threats to the growth of distinct online pedagogy is the limited focus on reflectivity. Once teachers internalize the routines of online teaching, the roles they are expected to take and the methods they are to use, their ability to cope with that is guaranteed and with it the need to grow as an online teacher fades. The result is replication of the same class material and content each time it is taught, without the adoption of new methods and technologies into the learning context. While the roles are suggested to the teachers with the functions performed as specific outputs (Bawane & Spector, 2009; Howell, et al., 2004), they do not guide teachers for “pedagogical problem solving and discovery” through critical reflection in online teaching (Kreber & Kanuka, 2006, p. 122).

Furthermore, with the vast adoption of emerging technologies in everyday life at an increasing participatory and social level, it has become inevitable for teachers to reexamine their personal beliefs and assumptions towards the new culture of learning, teaching, and related ethical practices. This, without any doubt, leads to constant challenges in teacher beliefs, judgments, interpretations, assumptions, and expectations (Coppola, et al., 2002; Lee & Tsai, 2010).

Online learning environments have the capability of enabling the exploration and

discovery of new pedagogical approaches, such as encouraging participatory, inquiry-based and social learning practices (Kreber & Kanuka, 2006). Therefore, the focus of online teacher preparation and development programs needs to be geared towards encouraging online teachers' critical reflective practices, through which they engage in transformative learning practices with their students.

Integrating Technology into Pedagogical Inquiry

Another problem related to the existing literature is treating technology as a separate entity, such as the role of technologist in Goodyear et al.'s study (2001), technological role in a study by Berge (1995), and technical skills in using the features of the software in Salmon's (2004) studies. However, Koehler, Mishra, and Yahya (2007) argue that “technology cannot be treated as a knowledge base unrelated and separate from knowledge about teaching tasks and contexts – it is not only about what technology can do, but also, and perhaps more importantly, what technology can do for them as teachers” (p. 742). Therefore, researchers, particularly in the area of technology integration, argue for a more integrated and multidimensional teacher knowledge (Mishra & Koehler, 2006).

The literature on online teacher roles and competencies has limited emphasis on how pedagogical inquiry plays a role within a certain discipline (e.g., English literature, anthropology, design). “The questions that academics from sociology ask about student learning and teaching will be different from those posed by engineers, as will be the methods they use to seek answers to their questions” (Kreber & Kanuka, 2006, p. 113). Therefore, we

need to consider how students learn and develop in different disciplines and how the teachers can encourage these learning experiences with online technologies. Online teachers need to go beyond mere competence in the online technologies, and engage in pedagogical inquiry in which they consider the complex relationships between technologies, pedagogies, and content in their online teaching context (Koehler & Mishra, 2005). It is through the integration of technology into the pedagogical inquiry that teachers can go through a transformative process of examining the pedagogical potential of online technologies and constructing online learning experiences within their content areas.

Conclusion

The purpose of this critical review was to look at the current literature on online teaching, specifically the role- and competency-driven research, using the transformative learning theory as a lens for critical analysis. A review of the online teacher roles and competencies described in the literature indicates that there is diversity in the interpretations of the terms “roles” and “competencies.” Common roles suggested were managerial, instructional designer, pedagogical, technical, facilitator, and social roles. For each role, several competencies were suggested depending on the context in which the online teaching was performed (Bawane & Spector, 2009). While this line of research suggested the use of these roles and competencies for the development of teacher preparation and training programs, they were lacking in terms of addressing the issues of empowerment of online teachers, promoting critical reflection, and integrating technology into pedagogical inquiry. Moreover, while competency-based teacher education (CBTE) has been criticized in the

teacher education literature both at the pre-service and in-service levels (Téllez, 2007), the literature on online teaching remained rather silent towards the critical analysis of the use of CBTE models in online teacher education.

As a result of the critique developed by teacher educators on the competency-driven approaches, the teacher education literature moved on to different models, such as reflective teacher education, constructive teacher education, and alternative certification (Téllez, 2007). Téllez (2007) indicated: “Like the accountability movement, CBTE did not require significant increases in state education budgets, held the promise of systematic changes, was focused on results—instead of the messy and confusing processes nested within most educational reforms—and, finally, seemed capable of paying off quickly” (p. 548). Today’s competency- and standard-driven efforts in online education have a similarly attractive quality, yet embody the same limitations. Furthermore, earlier works on online education were grounded in the motivation of systematization and industrialization of educational processes via technology. This techno-centric approach, still dominant in many forms of today’s online education, resulted in the replication of traditional approaches in the online environments and created one-size fits all preparation and support programs for online teachers.

Different from these functionalistic and technical perspectives towards teacher knowledge and practice, transformative learning theory can provide us a perspective on considering teachers as adult learners who continuously transform their meaning of structures related to online teaching through the ongoing process of critical reflection and action (Taylor, 1998). According to Mezirow (1991) transformative learning:

“involves an enhanced level of awareness of the context of one’s beliefs and feelings, a critique of their assumptions and particularly premises, an assessment of alternative perspectives, a decision to negate of old perspective in favor of a new one or to make a synthesis of old and new, an ability to take action based upon the new perspective, and a desire to fit the new perspective into the broader context of one’s life. (p. 161).

Similarly, as teachers move from traditional to online classrooms, they are faced with a constant challenge of finding their teacher self by interacting within the dynamics of a new teaching environment. While they may lean to their traditional practices as reference points, the affordances and limitations of online environments pose new challenges to them as they try to operate with their existing sets of beliefs and practices. What teachers need is the preparation and support programs that encourage them to reflect upon their past experiences, assumptions, and beliefs towards learning and teaching, question them, and transform their perspectives by engaging in pedagogical inquiry and problem solving (Kreber & Kanuka, 2006).

We need to consider online teachers, especially in higher education, as reflective practitioners who make their own decisions about preferred goals and practices of online teaching and construct “a working knowledge, which favors personal experience but also includes theory, research, values, and beliefs, is used to critically analyze and continually improve teaching” (Valli, 1992, p. xv). Encouraging online teachers to construct a working knowledge of online teaching out of alternative viewpoints and frames of references, thus, need to be the focus of the online teacher preparation and professional development programs.

“Teaching involves many complex and somewhat ill-structured activities; as a consequence, establishing reliable and relevant performance measures for teaching competence is difficult” (Spector, 2007, p. 6). Similarly, the teacher’s role in the online environment is dynamic and multi-dimensional, requiring a more integrated look as they work through pedagogical problem-solving within their disciplines and use various online technologies. The approaches of online teacher preparation and support, therefore, need to regress from the technology-focused programs, which treat technology as a separate entity to be learned and an isolated role to be performed. What is needed, then, is the creation of transformative learning experiences for faculty who would “engage in pedagogical problem-solving and discovery about online teaching” within their disciplines (Kreber & Kanuka, 2006, p. 122). Moreover, by incorporating collaborative work groups, community building, and group discussions into professional development programs, and sustaining their continuity, teachers will have an opportunity to participate in communities of practice and thus transform their teaching by socially constructing their knowledge and practices (King, 2002).

“Online learning can enable and inspire instructors to acquire radically new and different understandings of pedagogy, as well as transform practices entrenched in university traditions that are less effective in promoting higher-order learning” (Kreber & Kanuka, 2006, p. 125). This critical review, therefore, was an attempt to address the issues in the current literature and propose an alternative view towards online teaching. If the purpose of online learning is to promote students’ higher-level learning as well as develop their critical and creative thinking skills, teachers, then, need to be empowered and encouraged to be

active adult learners themselves as they act with critical power in their world, and to take charge of their own learning.

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**APPENDIX: THE SUMMARY OF THE LITERATURE ON ONLINE TEACHER
ROLES AND COMPETENCIES**

| Researchers | Purpose | Method | Roles/Competencies |
|-------------------------------|---|---|--|
| Guasch, et al. (2010) | Developing teachers' competencies for virtual environments in higher education | Reviewing the literature and teacher training actions | Design/Planning, Social, Instructive, Technological, Management |
| Bawane and Spector (2009) | Prioritize and identified online instructor roles to develop training and curricula for online teachers | Validating the literature identified competencies with the experts in teacher education | Professional, Pedagogical, Social, Evaluator, Administrator, Technologist, Advisor/Counselor, Researcher |
| Berge (1995), Berge (2009) | Listing the roles and functions of the online instructor in computer conferencing (CC) | Conceptual paper revisited in 2009 | Pedagogical, Social, Managerial, Technical |
| Varvel (2007) | Developing an online instructor competency list geared the needs of a particular program | Surveying students, course evaluations, literature survey, instructor feedback | Administrative, Personal, Technological, Instructional Design, Pedagogical, Assessment, Social roles |

| Researchers | Purpose | Method | Roles/Competencies |
|-----------------------|---|--|---|
| Darabi, et al. (2006) | Identify and validate instructor competencies required for teaching at a distance with advanced communication technology. | Reviewing the literature and validating with experienced practitioners in academia, industry, and the military | <ol style="list-style-type: none"> 1. Manage logistical aspects of the course 2. Exhibit effective written, verbal, and visual communication skills 3. Provide learners with course-level guidelines 4. Evaluate effectiveness of course 5. Assess learners' learning based on stated learning goals and objectives 6. Create a friendly and open environment 7. Facilitate productive discussions 8. Stimulate learners' critical thinking 9. Employ appropriate types of interaction 10. Provide timely and informative feedback 11. Identify when and how to use various instructional methods 12. Monitor learner progress 13. Employ appropriate presentation strategies to ensure learning 14. Ensure appropriate communication behavior within the given environment 15. Assist learners in becoming acclimated to the given environment 16. Encourage learners to become self-directed and disciplined in their educational pursuits 17. Foster a learning community 18. Use relevant technology effectively 19. Accommodate problems with technology 20. Improve professional knowledge, skills, and abilities |

| Researchers | Purpose | Method | Roles/Competencies |
|-------------------------|---|--|--|
| Aydin (2005) | Identifying roles, competencies, and resources for online teaching in Turkey | Surveying online mentors in a large open university | Content expert, process facilitator, instructional designer, advisor/counselor, technologist, assessor, material producer, administrator |
| Salmon (2004) | Defining e-moderator competencies | Content analysis of UK's Open University's tutors CMC content, focus groups etc. | Understanding of online process, technical skills, online communication skills, content expertise, personal characteristics |
| Williams (2003) | Identifying roles and role-specific competencies | Validating the literature identified competencies with the experts in teacher education using the Delphi technique | Administrative manager, Instructor/Facilitator, Instructional Designer, Trainer, Leader/Change Agent, Technology expert, Graphic Designer, Media Publisher/Editor, Technician, Support Staff, Librarian, Evaluation Specialist, Site Facilitator/Proctor |
| Coppola, et al. (2002) | Capturing role changes enacted by online instructors | Capturing roles enacted by the online instructors through interviews | Cognitive, affective, managerial |
| Anderson, et al. (2001) | Developing the conceptual framework to understand, measure and improve the function of "teaching presence" within a computer conference environment | Investigating computer conferences used for educational purposes | Teaching Presence: Instructional design, facilitating discourse, direct instruction |

| Researchers | Purpose | Method | Roles/Competencies |
|----------------------------|--|---|--|
| Goodyear, et al. (2001) | Describe main roles that online teachers perform | Using a panel of distance education experts to determine the roles and competencies | Process facilitator, advisor/counselor, assessor, researcher, content facilitator, technologist, designer, and manager/administrator |

CHAPTER 3: TRACING SUCCESSFUL ONLINE TEACHING IN HIGHER EDUCATION: VOICES OF EXEMPLARY ONLINE TEACHERS

Abstract

In order to build conceptual models for future studies as well as to identify strategies for supporting faculty who teach online, a multiple case study was conducted. First, six successful online teachers were identified through nominations of the online program coordinators and directors within five different colleges of the university. Second, ethnographic interviews were conducted with the faculty members in order to understand the motivational factors that affected their decisions to teach online, successful practices they employed to address the concerns and challenges related to their online teaching, and contextual and support factors that influenced the success of their online teaching. An analysis within each and across the six faculty interviews indicated that faculty members reconstructed their teacher roles as they revisited their approaches to understanding the course content, designing and structuring the course, knowing their students, enhancing teacher-student relationship, guiding student learning, increasing teacher presence, conducting the course evaluation, and creating an online teacher persona. Moreover, several contextual factors impacted teachers' motivation for online teaching, such as their teaching history, students' profile, institutional rewards, technology, and pedagogy support. The results of this study present implications for research as well as suggestions for creating and nurturing successful online teaching practices in higher education institutions.

Introduction

Higher education institutions have embraced online education as an opportunity for meeting the needs of diverse groups of students. The 2009 Chronicle of Higher Education research report, entitled ‘the College of 2020,’ predicted that students will demand more online courses in the near future (Van Der Werf & Sabatier, 2009). The Seventh Annual Sloan Survey on Online Learning (Allen & Seaman, 2007) indicated 4.6 million college students were enrolled in one or more online courses in Fall 2008. Additionally, there is a growing number of non-traditional students who are working professionals and are not able to attend educational programs in conventional ways.

Despite the increasing number of faculty and students involved in online learning in higher education, many faculty members, who represent a critical position in building quality online learning environments, still have considerable doubts about the value of current practices of online teaching and learning. A national survey conducted by APLU Sloan National Commission on Online Learning presents the views of 10,700 faculty from 69 colleges and universities across the US (Seaman, 2009). According to the survey report, faculty are concerned about the time and effort that is put into teaching online, and the lack of support and incentives that are provided by the institutions. The survey results suggest that there needs to be a constructive dialogue about the role of online teachers, support and quality of the online teaching at the institutions (Seaman, 2009).

University professors, generally, lack the systematic preparation for teaching, and “gain beliefs and knowledge about good pedagogy through trial-and-error in their work, reflection on student feedback, and by using self-evaluation” (Hativa, Barak, & Simhi, 2001,

p. 700). Their teaching approaches are formed by their observations, generally while they were students, or by their own teaching as they teach and reflect on their teaching practices.

A study by Hativa, et al. (2001) explains why this might be problematic:

This unplanned and nonsystematic process may lead to fragmented pedagogical knowledge and to unfounded beliefs about what makes teaching effective. It is interesting to learn about pedagogy-related thinking, beliefs, and knowledge, particularly of outstanding teachers, because these probably contribute to their excellence in instruction. (p. 700)

Similarly, despite the rapid growth in the use of and demand for online technologies in higher education institutions, distinct pedagogies for online learning have not yet emerged (Levine & Sun, 2002). Because pedagogy for online learning is not fully established, faculty may find it “difficult to move to something new when the patterns of behavior required for success are not fully established” (Natriello, 2005, p. 1890). Moreover, while universities embrace online education, having a lack of preparation and readiness, faculty may find it challenging to adapt to a new pedagogical form in a traditionally structured educational environment. Therefore, because of these unstable and non-established patterns both at the institutional and faculty level, many online learning practices are employed as the replication of traditional classroom environments (e.g., offering video recorded lectures as online courses). This approach of carrying traditional approaches to the online learning environments occurred in part due to the early notion of comparing online learning with face-to-face learning (Dennen, 2007), rather than treating online learning as a new educational experience with its own conditions and affordances for learning and interaction (Garrison &

Anderson, 2003; Knowlton, 2000; Natriello, 2005). Developing distance learning that was centered on “achieving classroom-like or classroom equivalent conditions as a source of legitimacy” (Natriello, 2005, p. 1898), therefore, resulted in “the status quo and reinforced the defensive strategy in higher education”(Garrison & Anderson, 2003, p. 8). Hence, considering the need for pedagogical and institutional transformation, an in-depth investigation of faculty members’ online teaching experiences and their changing roles is crucial for establishing the new patterns for online pedagogy.

Teachers’ acceptance of online learning is another key factor in the growth of online education (Allen & Seaman, 2007; Cook, Ley, Crawford, & Warner, 2009). Their concerns about the teacher roles in the online environments, the quality of online learning, the intensity of the workload, the amount of time spent for teaching responsibilities, the level of help and support (technological, pedagogical, and administrative), and the requirement for ongoing interaction with the students play critical roles in their adoption (Samarawickrema & Stacey, 2007). Moreover, scholars have acknowledged that lacking the knowledge and skills for online teaching was one of the common de-motivators for teachers in making decisions to teach online (Levine & Sun, 2002). Perhaps most importantly to consider, faculty are challenged to implement new teaching methods, channels, technologies, and a transformed teaching role and practice in the online environment (Major, 2010).

While online education has become more commonplace, little is known about what makes online teachers successful, and how they can transform to create successful online teaching practices. In order to build conceptual models for future studies as well as to identify strategies for supporting faculty who teach online, we need to explore what makes

online teachers exemplary and successful in the higher education context. An in-depth qualitative case study exploring the context of a higher education institution's different online teaching practices can illuminate such conceptual and pragmatic understandings.

Thus, the main purpose of this study was to investigate exemplary online teachers' transition to online teaching with a specific focus on the motivational factors, successful practices, and contextual and support elements that they relate to the success of their online teaching. The following questions guided the research:

- Why do exemplary teachers choose to teach online?
- What aspects of context and support do these teachers consider as important as they transition to become online teachers?
- How do exemplary online teachers make a transition to online teaching in a way that they create successful practices?

Transition to Online Teaching

Research on faculty members' transition from face-to-face teaching to online teaching has focused on the areas of faculty participation (Maguire, 2005), faculty involvement (O'Quinn, 2002), faculty adaptation (King, 2002), faculty satisfaction (Bolliger & Wasilik, 2009), faculty perceptions on the value of online education implementations (Ulmer, Watson, & Derby, 2007; Zhang & Walls, 2009), and faculty conceptions of and approaches to teaching online (Gonzalez, 2009). In addition, investigating how faculty members perceive the advantages and disadvantages of online teaching is critical to understanding how they experience and create new patterns of behavior in their online teaching. Therefore, this

section will first focus on the motivating and inhibiting factors that influence teachers' participation in online education and later explore the areas of pedagogical transformation that they undergo as they become online teachers.

Faculty Participation in Online Education: Motivating and Inhibiting Factors

The research published prior to and after 2001 shows differences in terms of motivating and inhibiting factors for faculty members' participation in online education (Cook, Ley, Crawford, & Warner, 2009). Faculty who participated in online education before 2001 were the early adopters who perceived online education as a vehicle for trying something new and reaching out to the students who could not have opportunities for attending to the classes otherwise (Cook, et al., 2009). For instance, faculty found teaching online to be an intellectual challenge and had personal motivations to teach with technology (Bonk, 2006). Moreover, teaching online provided them the opportunities to teach at any time and any space, thus making teaching flexible and adaptable (Schifter, 2000). Faculty also perceived teaching online as innovative in terms of increasing course quality, reaching to a wider student audience and increasing students' access to the course content (Bonk, 2006; Schifter, 2000). Early adopters' motivation for trying a new and innovative way of teaching was as important as other tangible factors, such as monetary gains, external support, and training.

On the other hand, late adopters, those faculty members who participated in online education in the last decade, were more influenced by extrinsic factors such as "stipends, course releases, technology training, administrative support and recognition" (Cook, et al.,

2009, p. 151). Several disincentives impacted late adopters' participation, such as increasing investment of time and effort preparing for and teaching online, lack of technology support, and lack of financial support (Maguire, 2005). The amount of time spent and workload were two critical factors in their adaptation of web-based learning environments as well. Developing online resources, preparing for online teaching, and maintaining course interaction required faculty to spend extra time adjusting to new work habits and learning new technologies (Samarawickrema & Stacey, 2007). It is critical to note that faculty generally judged the time and workload required for online teaching using their face-to-face teaching as a reference, because it was the most familiar teaching mode to them (Samarawickrema & Stacey, 2007).

Related to the increasing workload, lack of technology support and administration recognition was also stated to be critical inhibitors of faculty's participation in online teaching (Cook, et al., 2009). Moreover, lack of credits toward tenure and promotion, financial stipends, monetary rewards or release of time, technology barriers, concerns related to intellectual property and ownership, and unstable political climate within the work settings were noted as related inhibiting factors (Chen & Chen, 2006; Maguire, 2005; Samarawickrema & Stacey, 2007).

Faculty's motivations for choosing to teach online were also examined in the literature. Online education policies, administrative support, recognition and encouragement to teach online, credits towards tenure and promotion, monetary incentives, technological support, and instructional design support were found as motivational factors (Maguire, 2005). Faculty were also encouraged to teach online because of the "supportive environments and extensive interpersonal networks" (Samarawickrema & Stacey, 2007, p. 320). Role modeling by their peers and faculty members' interest in collaborating with other institutions were also

suggested to be primary motivational factors (Maguire, 2005). Moreover, participating in collegial learning communities and strong social networks in formal and informal ways influenced faculty's continuity and engagement in online teaching (Samarawickrema & Stacey, 2007).

Research about motivating and inhibiting factors that influence faculty's participation in online teaching is critical, because it can "provide information about factors that may influence faculty decisions to teach online as well as about factors that may cause faculty to continue or discontinue their efforts" (Major, 2010, p. 2161). In addition, these factors play an important role in faculty's experiences of teaching online or the changes they experience as they make a transition from traditional teaching environments to online settings.

Changing Teaching Pedagogy with Online Education

A growing body of literature has emerged about the changing teacher roles during the transition from face-to-face teaching to the online teaching environments and the challenges faculty and institutions face along the way (Coppola, Hiltz, & Rotter, 2002; McShane, 2004). Several different roles were proposed from different perspectives with various terms and descriptions. The experiences of early adopters created a discourse about online education and supported the notion that online teaching and learning vastly differed from its face-to-face predecessor, requiring changes regarding the role and characteristics of online teachers (Bennett & Lockyer, 2004). Several researchers, therefore, attempted to study the new skills and roles of the online teachers (e.g., Anderson, Rourke, Garrison, & Archer, 2001; Berge & Collins, 2000; Goodyear, Salmon, Spector, Steeples, & Tickner, 2001; Graham, Cagiltay,

Lim, Craner, & Duffy, 2001; Guasch, Alvarez, & Espasa, 2010; Salmon, 2004), and the changing role of the teacher while moving from face-to-face teaching to online teaching (e.g., Conceição, 2006; Coppola, et al., 2002; Major, 2010).

The research focusing on the change in the student-teacher relationship in the online environment suggested a new role for the teacher: “guide on the side”. “When the organizational context of instruction shifts dramatically, as it does in the change from the traditional classroom to that of distance learning, then we should expect shifts in role enactment from the focal person (instructor)” (Coppola, et al., 2002, p. 172). The teacher, rather than becoming the center of the interaction or the source of the information, now is expected to design and facilitate a student-oriented approach to learning (Laat, Lally, Lipponen, & Simons, 2007). For instance, the hierarchy in the online environment is flattened with a more distributed power and control, creating a need for designing learner centered environments where teachers are expected to choose facilitative approaches (Salmon, 2004; Schrum & Hong, 2002; Smith, 2005). Taking the role of a facilitator, coach, or mentor, teachers are expected to design, organize and schedule the activities in which learners take responsibility for their own learning by coordinating and regulating their learning activities (Anderson, et al., 2001; Berge, 2009). For instance, instead of taking an authoritarian role, teachers can share the facilitation role with their students, “giving them the opportunity to explore unique ways to promote peers’ active participation and meaningful dialogue” (Baran & Correia, 2009, p. 359).

While these new roles emerged and were suggested to the faculty, adjustment to these new roles, expectations and behaviors were limited for several reasons. First, faculty, who

both taught and learned in face-to-face classroom settings over many years, developed rather stable sets of expectations from learning environments (Natriello, 2005). For instance, experienced teachers could rely heavily on their face-to-face teaching experiences, especially when they have limited knowledge about the new medium (Conrad, 2004). Indeed, several scholars noted that online learning did not necessarily bring a separate notion of learning, because many factors that influence and shape traditional classrooms were also present in online learning environments, such as attitudes, issues related to course design, communication and interaction (Coppola, et al., 2002). Teachers bring their conceptions, attitudes, dispositions, and beliefs about how they teach and how students learn to online teaching contexts. Yet, these may be reconsidered, reshaped, and reconstructed as teachers are presented with the challenges of teaching online without the traditional conditions of teaching and learning.

The review of research resulted in four areas where teachers experience changes as they go through a pedagogical transformation in an online environment: (a) increasing structure and planning during course design, (b) increasing organization in course management, (c) increasing teacher presence for monitoring students' learning, and (d) reconstructing student-teacher relationships.

Increasing structure and planning during course design.

Several research studies acknowledged that teaching online changes teachers' activities on the design, organization and management of online courses (Major, 2010). As

teachers move to online teaching, they feel a need to be more conscious about planning and teaching. Course planning tasks include organization of the course content, structuring the course flow and outline, and designing course activities (McShane, 2004). Teachers feel the need to re-imagine the entire course from initiation to completion, when especially teaching it for the first time online (Kanuka, Collett, & Caswell, 2002; McKenzie, Mims, Bennett, & Waugh, 2000). The intensity of work increases as teachers prepare the course materials in advance and anticipate the course flow and student responses within the online learning environment.

Planning and structuring the online course are two important tasks during the course design, yet there appears to be a tension between the flexibility and structure, especially for novice online teachers (Kanuka, et al., 2002). While some teachers believe that course content and activities need to be planned early and structured to improve student learning and efficiency (Coppola, et al., 2002), others feel the need for flexibility to make spontaneous changes as they teach and interact with the students (Conceição, 2006).

The process of adapting to online teaching environments also requires a time investment on the part of the teachers with respect to the design and development of learning resources, including learning environment setup, organizing and uploading the files, collecting resources, and preparing the materials (Samarawickrema & Stacey, 2007). Teachers in many studies noted an increase in time and effort required to design and structure their online courses (Conceição, 2006; Lee & Tsai, 2010). While designing their online courses, teachers needed more time “because it involved (a) organizing content, (b) presenting information that addressed different learning styles, and (c) providing lecture

notes in advance” (Conceição, 2006, p. 35). Yet, the development and delivery time is closely related to the level of support that teachers receive as they prepare for online teaching (Visser, 2000).

Support is provided to the teachers in several ways, such as pedagogical help in the form of training and support with online pedagogies, technical help during the development of the course platform and the materials, and financial help in the forms of released time or compensation (Conceição, 2006). Course design, once considered to be an isolated activity, becomes more of a collaborative act that requires teachers to adjust to the new work practices. The experience of working in teams to design online courses can be an unfamiliar work practice for teachers (Samarawickrema & Stacey, 2007). They, therefore, engage in new sets of relationships with the other actors, establish good communication channels to express their needs, and develop skills for project management, collaboration, and interaction with other professionals.

Increasing organization in course management.

A teacher’s engagement within the course increases even more during the teaching phase. “While teaching online may not take more time, it may actually take more effort. In terms of actual effort, a larger number of shorter duration activities may increase the effort to teach by increasing cognitive overhead” (Hislop & Ellis, 2004, p. 29). This is in line with the literature that emphasizes the constant effort spent on the teaching tasks, such as classroom management, monitoring and assessing learner performance, course clarification, and

continuity (Conceição, 2006).

One distinctive change in the pedagogy is the teacher's continuous involvement in the management and organizational tasks in the online courses. Teachers are faced with the management responsibilities that they do not have in their traditional classes, such as managing students' technology conditions and related problems (Lao & Gonzales, 2005). Moreover, teachers need to manage their own workload in terms of monitoring student participation in the online courses. For instance a teacher in Conceição's (2006) study indicated that while she met students at a definite time period in a traditional classroom, in an online class she had to sit back, read, reflect, and provide feedback on everything that every learner did in the course. Moreover, teachers needed to stay online frequently to answer student questions and clarify course expectations (Coppola, et al., 2002). Therefore, teachers' ongoing involvement with the management and organization of the online course, requires an increasing teacher presence in the online environment.

Increasing teacher presence for monitoring students' learning.

Starting with the emergence of computer-mediated communication in the 1990s, a growing body of literature investigated online discussion platforms as tools for classroom dialogue and learning spaces. Many research studies were conducted based on the community of inquiry model that was developed by Garrison and Anderson (2003). The model is primarily concerned with analyzing the online discussions as evidence in the categories of social presence, teaching presence and cognitive presence. The role of the

teacher in a community of inquiry is to perform teaching presence by designing, facilitating and directing cognitive and social processes for the purpose of creating personally meaningful and educationally worthwhile student outcomes (Anderson, et al., 2001). Research found that teaching presence was a significant predictor of students' perceived learning, satisfaction, and sense of community (Gorsky & Blau, 2009; LaPointe & Gunawardena, 2004; Russo & Benson, 2005). By responding to the students' needs and questions in a timely manner and modeling good interaction and communication, teachers, create a sense of teaching presence which is very critical to the students' development of cognitive and social presence (Gorsky & Blau, 2009). Facilitating discourse includes responsibilities, such as "identifying areas of agreement/disagreement, seeking to reach consensus/understanding, encouraging, acknowledging, or reinforcing student contributions, setting climate for learning, drawing in participants, prompting discussion and assessing the efficacy of the process" (Anderson, et al., 2001, p. 8).

Feedback and frequent interaction with students are considered to be important success factors in online courses. The latency of feedback is considered as an advantage, as it gives teachers more time to reflect, and carefully craft their responses (Coppola, et al., 2002). Moreover, teachers need to adjust to new time management routines and sustain a strong cognitive effort to "(a) stay engaged in conversation, (b) keep the class focused, (c) distinguish between administrative and personal information, (d) pursue a comprehensive discussion, and (e) create a mental image of what learners look like" (Conceição, 2006, p. 39).

Reconstructing student-teacher relationships.

In carrying out several tasks at the cognitive and managerial level, teachers can “no longer rely upon sensory and expressive skills to establish and maintain relationships with students” (Major, 2010, p. 2184). Teachers’ affective role must “change in terms of nonverbal communication, intimacy, and energy/humor” (Coppola, et al., 2002, p. 178).

The immediacy concept is first defined as “those communication behaviors (verbal or nonverbal) that enhance closeness to and nonverbal interaction with another” (Mehrabian, 1971, p. 203) and have frequently been used and studied in online education literature (Baker & Woods, 2004). The studies found that student satisfaction and learning are positively correlated with the teacher immediacy and social presence (Richardson & Swan, 2003; Thurmond, Wambach, Connors, & Frey, 2002). Despite the lack of nonverbal communication, teachers may develop intimate relationships with their students using various online tools (e.g., chat, video conference) to show their energy and humor (Coppola, et al., 2002). Yet, these tools may remain inadequate for some teachers in establishing sensory, expressive and closer relationships with their students (Major, 2010)

Teachers feel the need to revisit their relationships with students by responding to their needs in a timely manner, delivering clear expectations, and being attentive to the communication styles (Bailey & Card, 2009). They also create online classroom communities in order to reduce the feelings of loneliness and social isolation that online students may experience (Baker & Woods, 2004). For instance, as the benefits of collaborative and cooperative learning were well-promoted in higher education classrooms, the advancements on the Internet and communicational channels also created possibilities for

setting up similar online collaborative learning opportunities (Baker & Woods, 2004; Correia, Baran, & Yusop, 2007).

Constructing Online Teacher Persona

Teachers go through a transitional journey while becoming online teachers, during which, they reconstruct their teaching personas with beliefs, values, and teaching philosophies. “Making room for this new reality requires an internal revision of self that includes examining values and beliefs that inform self” (Willment, Baynton, Groen, & Slater, 2008, p. 77). As indicated in the sections above, teachers experience a number of changes in pedagogies for online teaching: Increasing structure and planning in the course design, increasing organization in the course management, increasing teacher presence for monitoring student learning, and reconstructing teacher-student relationships.

It is often mentioned that teachers transfer many strategies and teaching approaches from their traditional classrooms to the online environments. For instance, Conrad (2004) found that “drawing on his background experiences, each instructor brought to his new environment a framework by which to judge what he should do, how he should do it, and what the results should look like” (p. 41). Therefore, earlier teacher-centered or learner-centered orientations towards teaching would affect how the instructors approach online teaching. Looking at whether teachers would have a content-centered approach or learning-centered approach according to their earlier orientations, researchers concluded that teachers applied an intermediate approach by using the elements from each and possessed a

“transitional conception of teaching” (Gonzalez, 2009, p. 309).

Though faculty believe in the need for reconstructing their personas online, they may “lack the information about how to make changes” (Major, 2010, p. 2170). While being constantly challenged in an uncontrollable and unpredictable teaching environment, teachers regularly “think about themselves very differently as instructors, recognizing the changes in the educational paradigm, engage in new kinds of activities, and reconsider the meaning of being an expert” (Conceição, 2006, p. 44)

Online teaching provides a unique context for infusing learner-centered principles (Mccombs & Vakili, 2005) and a pedagogy that is more interactive and collaborative. In practice, the evolution of online learning however has gone through pedagogical approaches that were inspired more by traditional classroom models (e.g., video-taped lectures, and teacher- directed packaged courses), having the students access traditional approaches through different mediums. Researchers, however, call for the development of new and distinctive pedagogy for online learning (Garrison & Anderson, 2003; Natriello, 2005).

Given the need for a change in the pedagogies, it is critical to investigate and report faculty experiences for understanding the “challenges as well as opportunities for success” (Major, 2010, p. 2157). Thus, this research is an attempt to investigate how exemplary online teachers go through a transition and how they transform their pedagogies for successful online teaching practices.

Methodology

This research study was an in-depth investigation of exemplary online teachers' transition from face-to-face teaching to online teaching with a specific focus on the motivational factors, successful practices, and contextual and support elements that they relate to the success of their online teaching. Multiple-case study approach was followed as a methodology, as it allowed understanding online teaching in depth. The selection of multiple cases was important for the study, as it permitted the opportunity to compare similar and contrasting situations, and therefore helped draw more compelling and robust conclusions from the study (Yin, 2009). Moreover, multiple-case design helped to collect information from several online teaching contexts and viewpoints as it was difficult to draw meaning from or discover patterns through only one single case (Kennedy, 1979). Accordingly, Miles and Huberman (1994) indicated:

By looking at a range of similar and contrasting cases, we can understand a single case finding, grounding it by specifying how and where and if possible, why it occurred as it did. We can strengthen the precision, the validity, and the stability of the findings. (p. 29).

Case study is defined as an “empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident“ (Yin, 2009, p. 18). With an emphasis on the contextual conditions that are significant to the phenomenon of the study, case study allowed an examination of the interactions between the contextual factors that were pertinent to the exemplary online teaching within the scope of this study (Yin, 2009).

For the purpose of this study, each online teacher was considered as the case that was studied. Six cases were included in this multiple-case study. Collecting enough details from multiple cases within a university setting provided opportunities for identifying both the similarities and differences across cases and served as the foundation for drawing conclusions that were difficult to establish when examining only one single case.

Research Context and Participants

This study was conducted within a large research university in the Midwestern United States. The university colleges included Agriculture and Life Sciences, Business, Design, Engineering, Graduate, Human Sciences, Liberal Arts and Sciences and Veterinary Medicine. The university had a number of centers within the colleges to support online education, such as college offices that provided online education and educational technology assistance, and college centers that offered online degrees.

The participants of this study were six faculty members who taught online courses in five different colleges within this large Midwest research university: Agriculture and Life Sciences, Business, Design, Engineering, Graduate, Human Sciences, Liberal Arts and Sciences. They were teaching in programs within the departments of Political Science, Art & Design/Human Computer Interaction, Agronomy, Agricultural and Biosystems Engineering, Family and Consumer Sciences Education and Studies and Classical Studies in World Languages and Cultures.

All teachers were originally from the U.S. Two teachers were male and four were female, ranging in age from 47- to 65- years old. Five of the teachers were full time tenured

university professors and one was an adjunct professor. Their face-to-face teaching experience varied, ranging in years from 13 to 41. Their experience with online teaching ranged in years from 3 to 25. All teachers designed and taught at least one online course.

Selection of the Participants

Selecting the participants, in other words screening the candidate “cases” for this multiple-case study (Yin, 2009), was a critical phase before starting the data collection. Because the purpose of this study was to look at exemplary online teachers’ transition and teaching practices, the screening consisted of “querying people knowledgeable about each candidate” (Yin, 2009, p. 91). In a multiple-case study, Stake (1995) argues “the first criterion for selection should be to maximize what we can learn” (p. 4). Since collecting information from different online teaching contexts would add to the depth and richness of the online teaching phenomenon under study, selecting exemplary online teachers from different online teaching programs and colleges was an important criterion. Therefore, a sequential nomination process was followed to identify the key actors and later the exemplary online teachers in different colleges.

The selection process first started with identifying the online education centers and online programs within the university. During an interview with a staff member who worked at the university’s central teaching and learning support center, information was gathered on the university’s online education structure and centers that offered online courses and programs, as well as the list of online program coordinators and online education center directors for further contact. Second, six online program coordinators and directors were

identified and contacted for interviews. These online program coordinators and directors were the key actors who were leading or supporting the online programs and online course offerings within the colleges. It is important to note that there was no single title definition for the online program coordinators or directors, because the job titles, roles and responsibilities of these key people showed variety. They were, however, considered as the primary contact people because they worked closely with the teachers. For practical reasons, they are referred to as “online program coordinators” in this study.

During the semi-structured interviews conducted with these online program coordinators, contextual information was gathered on the online education context in their centers, such as programs and courses offered, structure of the online programs, student profiles, teacher profiles, teacher support systems, roles of the support personnel within the centers, and teacher and student evaluation methods.

After gathering the rich information regarding each online teaching context, online program coordinators were asked to nominate and rank three successful teachers who had taught or were teaching at least one online course in their centers and/or programs. Additionally, they were asked about their criteria for selecting these successful online teachers. Their criteria for success were based on their own personal judgment as well as student evaluations. Among the three nominations provided by each online program coordinator, teachers who were selected as the first rank were contacted for further interviews. Finally, six faculty members who were rated as the 1st rank within their programs agreed to participate in this study. They were all informed of the research study and intentions as required and approved by the university’s Institutional Review Board (IRB) before the interviews took place.

Data Collection

The qualitative data were collected through: (1) semi-structured interviews with the online program coordinators; and (2) ethnographic interviews conducted with the exemplary online teachers. Data collection took place during the spring semester of 2010 (January 14, 2010 to March 11, 2010). The following is a full description of each method used.

Semi-structured interviews with online program coordinators.

Prior to the interviews with the online program coordinators, a semi-structured interview guide was organized and included questions about the structures of the programs, student and faculty profiles, faculty support and professional development services provided within the programs or centers, and the details regarding the technology platforms and course design processes. The purpose was to collect contextual information regarding each teacher's online teaching situation. After gathering these contextual details, online program coordinators were asked to nominate and rank three exemplary online teachers, describe their criteria for their selections, and provide more details on the nominated teachers' teaching styles and strategies.

Prior to conducting the actual interviews, the interview protocol was pilot tested with an online program coordinator who did not participate in this study and who had extensive experience on teacher support and online program coordination (See Appendix 3 for the Program Coordinator Interview Protocol).

Faculty ethnographic interviews.

Ethnographic interviews aimed at collecting information on exemplary online teachers' transition to online teaching with a specific focus on the motivational factors, successful practices, and contextual and support elements that they relate to the success of their online teaching. The purpose of selecting the ethnographic interview method was to begin the study with teacher-expressed needs, knowledge, and practices in order to understand and discover their unique culture (Spradley, 1979). Two major themes are involved in the ethnographic interviewing process: developing rapport with the participants and attaining meaningful information. Spradley (1979) suggests four stages for the rapport process: Apprehension, exploration, cooperation and participation.

When an interview starts, there is an uncertainty about the flow of the conversation between the researcher and the participant that may cause apprehensive feelings. In order to minimize the feelings of uncertainty in the *apprehension* phase, the interview started with descriptive questions on faculty members' teaching context, background, number of courses, and experiences with online teaching. Once the rapport begins between the researcher and the participant, they become comfortable with each other. The *exploration* phase, therefore, commenced with a ground tour question: "You were nominated as the most successful online teacher in the ____ College. What do you do that makes you the most successful online teacher?" This question helped to set the stage with teachers' own descriptions of their online teaching, rather than posing the researchers' definitions, jargons, or conceptions on the participants. Moreover, it was essential to get faculty to talk about their teaching practices, stories, examples, beliefs and perceptions of online teaching and what they thought about

successful online teaching. At the beginning of the interviews, it was also made clear that the tone of *cooperation* was set by telling that our interest was on a comprehensive picture of what it was like for them to teach online so that we knew what to expect of each other. This later led to the *participation* of the faculty by recognizing and accepting the role of teaching the researcher about their own descriptions of their culture.

While teachers were talking about their experiences with online teaching, it was essential to impose absolute minimal structure on their responses. However, probing questions were used to collect information on the online teaching practices with specific examples, as a great level of detail was desired. These probes were asked under 4 sections: (1) Best practices in teachers' online teaching-preparation, design, learning activities, communication, evaluation, (2) Teachers' transition to online teaching-changing teacher's role, difference in students' role, the challenges faced, change in face-to-face teaching, (3) The support mechanisms-pedagogical, financial, technological, (4) Descriptions of successful online teaching- specific qualities and skills of successful online teachers. The interview concluded with a closing question on what teachers felt as important in preparing and supporting online teachers for successful practices.

According to Spradley (1979) "practice also reduces the anxiety which all ethnographers experience when they begin interviewing a new informant" (p. 57). Therefore, a pilot ethnographic interview was conducted with a faculty member who taught online courses and who was also an expert in qualitative research. Additionally, the faculty member had extensive experience in teaching online both at the practical and theoretical level. The purpose of this was to determine if the interview protocol and questions served their purposes and if any revisions needed to be made. The feedback was gathered and the changes were

made on the protocol. The questions at the demographics section were revised to make them more clear and easy to understand (e.g., “Age” was changed to “Date of Birth”). The time load of each section within the interview protocol was also revised with more emphasis on the section where teachers described their transition and successful practices. Finally, the interview closure was modified with additional questions for the teacher to summarize and close the interview (See Appendix 4 for the Online Teacher Interview Protocol).

Each interview took place in the faculty members’ offices and lasted between 45 minutes to 80 minutes. Before the interviews teachers were asked to complete a demographics questionnaire (See Appendix 2 for the Demographics Questionnaire). The interviews were tape-recorded and transcribed later for further analysis.

Data Analysis

Data analysis followed two iterative stages: Within-case analysis and cross-case analysis. Drawing from the work of Glaser and Strauss (1967) on grounded theory, Yin's (2009) case study, and Eisenhardt's (2002) building theory from case studies, a “homegrown” technique was developed for building the themes from the cases. The data analysis included three stages: (1) Screening program coordinator interviews for contextual information, (2) Within-case analysis, and (3) Coding in spiral: Combining within- and cross-case analysis.

Screening program coordinator interviews for contextual information.

The initial data analysis started with screening each program coordinator’s descriptions of the online teaching context, nominated online teachers, success criteria for

online teachers and how the nominated online teachers met these criteria. Online program coordinator interviews were conducted before the faculty member interviews, they also provided the data for selecting the participants for the ethnographic faculty interviews.

Each online program coordinator's nomination criteria and descriptions of why nominated teachers met those criteria were organized in a cross-analysis table to allow for the comparison of different online teaching contexts of the teachers (See Appendix 5 for the Cross-analysis of Program Coordinator Interviews). This comparison helped to pin down the specific conditions under which the findings occurred within each online teaching context and later understand the processes and outcomes across the cases by looking at the similarities and differences between teachers' online teaching environments. Online program coordinators' description of the contexts also informed the case vignettes' write-up process.

Within-case analysis.

This study consisted of six different cases of online teachers and their teaching contexts. While looking at the teachers' transitions to online teaching and the factors that impacted their successful practices, it was important to first analyze the patterns in each single case in order to be able to compare them across cases. According to Yin (2009), "Each individual case study consists of a "whole" study, in which convergent evidence is sought regarding the facts and conclusions for the case; each case's conclusions are then considered to be the information needing replication by other individual cases" (p. 56). Therefore, within-case analysis was used to examine a particular case for unique patterns before an attempt to generalize patterns across cases. The process helped "to become intimately

familiar with each case as a stand-alone entity” and provided a “rich familiarity with each case which, in turn, accelerated cross-case comparison” (Eisenhardt, 2002, p. 18).

The first step in within-case analysis was writing the detailed case study write-ups—case vignettes for each case after the interviews were transcribed verbatim and organized into the Microsoft Word documents corresponding to each case. The case vignettes were written by looking at the program coordinators’ and online teachers’ interview from each case and presented in the form of narrative case write-ups with the necessary contextual details regarding each online teacher’s background and teaching environment. This narrative write-up process helped to shed light on each online teaching context as a whole, which later was used as a guide during the detailed procedures of within- and cross-case analysis of the cases. The summaries of these case vignettes are presented in the findings section (See Appendix 1 for the Detailed Write-up of the Case Vignettes).

After writing the case vignettes, in order to conduct the detailed analysis within each case, the interviews were imported into the QSR NVivo® software. According to Yin (2009), these software programs can be extremely helpful when “the words or verbal reports represent verbatim records and are the central part of your case study evidence” (p. 129). The software helped to organize the data during the coding and categorizing process. Another advantage of the software was the capability of writing researcher memos during the analysis and linking those to the emerging codes. A memo is defined as “the theorizing write-up of ideas about codes and their relationships as they strike the analyst while coding” (Glaser, 1978, p. 83). While working through the data coding process, memos were written to capture the thoughts and insights on the emerging themes, ideas, and the relationships between the themes. The software allowed the memos to be tied to specific codes and categories, which

later helped to search my reflections and ideas in an efficient way. Moreover, the software allowed for a detailed open coding of the data in an efficient way, dragging and dropping highlighted text in the coding list, categories and tree structures.

Coding in spiral: Combining within- and cross-case analysis.

Before starting the coding process, the transcripts were read in entirety several times. This helped to get a sense of each case before breaking it into codes and categories. During the initial process of exploring the data, “data analysis spiral” (Creswell, 2007) was followed as a process in which the researcher moves in “analytical circles rather than using a fixed linear approach” (p. 142). Open coding started with the first loop of analyzing the first case and examining whole sentences or paragraphs that represented the major idea brought out. The texts were reviewed line by line, and a list of codes was generated, and subsequently constantly relabeled and revised (e.g., teaching history, knowing the students, breaking down the tasks, lack of immediate feedback, lack of group interaction, etc.). During the open coding, analytic and self-reflective memos were written to make the implicit thoughts explicit, and to expand the data corpus. Analytic memos consisted of questions and speculations about the relationships between the codes and cases, and properties of the emerging themes. Self-reflective memos documented the researcher’s personal reactions to the participants’ narratives. The memos were linked to the codes, and the software allowed their inclusion to the data corpus for the analysis. The analytical memos later facilitated the process of categorization of the codes, arranging and rearranging the codes within the categories.

After finishing the first loop of open coding within the first case, a list of initial codes emerged. In the second loop, the codes that emerged from the within-case analysis of the second case were examined in terms of their presence or absence of alternatives occurring in the previous case. In other words, each within-case analysis followed a recursive and spiral pattern, where after each open coding within the case, the analysis went back to the previous case(s) and compared the existence or nonexistence of the emerging codes. This cycle was repeated until the final case was analyzed and codes emerged and were compared with the previous five cases. This helped to identify the similarities and differences across the cases and the identification of common themes (Miles & Huberman, 1994). As a result of the iterative analysis of the open codes during within- and cross case analysis, tentative codes, concepts, overall impressions and relationships between the codes emerged. This process is illustrated in Figure 3.1.

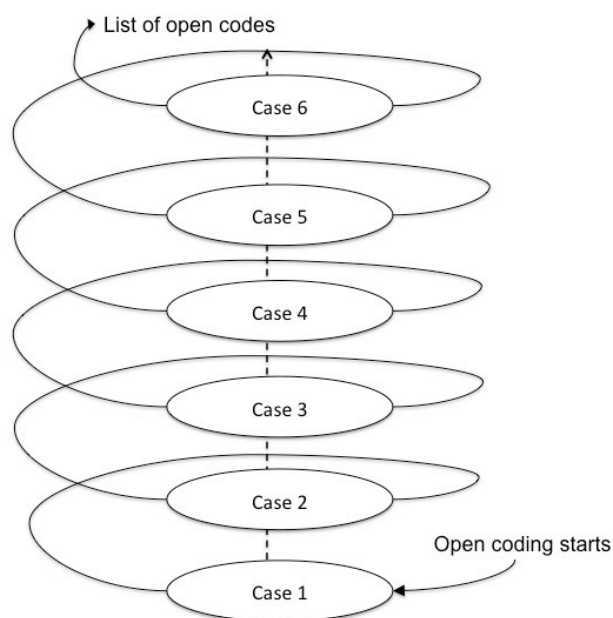


Figure 3.1 Open coding data analysis spiral

While categories emerged during the open coding of within and cross-case analysis, axial coding was then employed by examining the relationship between the codes and relating the categories to subcategories. The analysis moved from a descriptive level to a more conceptual level by iteratively recreating the categories, subcategories, and linkages. For instance, the codes that emerged under the category of concerns, and the codes that emerged under the category of the teaching strategies were later connected under the themes of successful practices. This is because while describing their teaching strategies, teachers often started with their concerns regarding the nature of online teaching, then presented the strategies they employed to overcome their challenges and concerns. For instance, codes that emerged under the category of concerns, such as absence of immediacy, absence of nonverbal cues, and lack of energy were connected to the codes that emerged under the category of strategies used by teachers to overcome these challenges, such as using online synchronous communication tools, collecting personal information on the students, and communicating the responsibilities. The connections of the codes under the categories are presented with an example in Table 3.1.

Table 3.1 Example of axial coding during the cross-case analysis

| Concerns | Strategies | Successful practice |
|--|--|--|
| <ul style="list-style-type: none"> • Absence of immediacy • Absence of nonverbal cues • Carrying face-to-face expectations to online • Lack of energy • Lack of group interaction | <ul style="list-style-type: none"> • Using online synchronous communication tools • Collecting information on students • Communicating the responsibilities • Establishing trust • Creating teacher videos • Using social media channels | <ul style="list-style-type: none"> • Enhancing student-teacher relationship |

In the final phase of the data analysis, selective coding was conducted in the form of organizing and refining the connected concern and strategy categories under the themes. During this process, the themes were compared with evidence from each case in order “to assess how well or poorly it fits with case data” (Eisenhardt, 2002, p. 20). Finally, the themes were refined according to the categories that emerged during this iterative analysis of constant comparison between the data and emerging themes. The final themes that emerged from this analysis were: Knowing the course content, designing and structuring the online course, knowing the students, enhancing student-teacher relationships, guiding student learning, sustaining teacher presence, evaluating the online courses, and creating an online teacher persona.

Trustworthiness

Trustworthiness is used to determine “whether the findings are accurate from the standpoint of the researcher, the participant, or the readers of an account” (Creswell, 2003, p. 196). Lincoln and Guba (1985) listed three criteria for trustworthiness: Credibility, transferability, and confirmability. Several strategies were used to promote trustworthiness in this study.

According to Merriam (1998), credibility, deals with the question, “How congruent are the findings with reality?” (p. 201). A number of strategies were used to ensure credibility: (a) triangulation using a wide range of informants, (b) peer debriefing, (c) member checking, (d) including personal and professional information about the researcher relevant to the online teaching and learning under study, and (e) providing a rich description of the context (Lincoln & Guba, 1985). To establish credibility, the primary strategy was collecting data concerning several aspects of online teaching with a wide range of people involved in online teaching within the university. This helped to triangulate the teacher and program coordinator interviews to ensure that the account of online teaching was rich, robust, and comprehensive. Furthermore, peer debriefing was used to provide an external check on the inquiry process and also “for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer’s mind” (Lincoln & Guba, 1985, p. 308). An experienced qualitative researcher was consulted for the debriefing process, during which she was asked to review the analysis and findings. This process helped to explore, test and see if the findings seemed reasonable and plausible to a “disinterested debriefer” (Lincoln & Guba, 1985, p. 308). Another strategy used to ensure the credibility was to conduct “member

checking”. The write-up of the findings was sent to the faculty members who participated into the study in order to rule out the possibility of misinterpretation of the meaning of what they said and what is reported in the study. Member checking provided an opportunity for soliciting faculty members’ feedback on the findings and confirming particular aspects of the data.

In qualitative research, it is the responsibility of the researcher to ensure that sufficient contextual information about the research site is provided so that the reader can make such a transfer (Lincoln & Guba, 1985). Shenton (2004) suggests:

It is also important that sufficient thick description of the phenomenon under investigation is provided to allow readers to have a proper understanding of it, thereby enabling them to compare the instances of the phenomenon described in the research report with those that they have seen emerge in their situations. (p. 70)

Thick description is defined as describing a phenomenon in sufficient detail so that the conclusions drawn can be evaluated for transferability to other times, settings, situations, and people (Lincoln & Guba, 1985). Because describing the context of the university’s online teaching structure, support systems and centers were central in understanding the transferability of the findings, a rich description of the faculty members’ teaching environments was presented within the study, looking at the analysis of the various data sources: interviews with the program coordinators and directors, interviews with the faculty, and interviews with the university’s central support personnel. Additionally, case vignettes were written to provide “sufficient information about the context in which an inquiry is carried out so that anyone else interested in transferability has a base of information appropriate to the judgment” (Lincoln & Guba, 1985, p. 124). Moreover, one of the purposes

of choosing multiple-case study and conducting cross-case analysis was to enhance “the relevance and applicability of our findings to other similar settings” (Miles & Huberman, 1994, p. 173).

In qualitative research, “the researcher is the instrument of the research, and the research relationships are the means by which the research gets done” (Maxwell, 2005, p. 83). The perspective of the researcher with regard to positions, values, and beliefs plays an important role during the research process; thus, it is particularly critical to be reflexive about the relationship of the researcher to the data (Lincoln & Guba, 1985). In order to foster reflexivity, and therefore establish confirmability, I described my assumptions, perspectives, values, and beliefs regarding online learning and teaching in the following section. I also elaborated on the relationships I built with the participants and how my role as a researcher could have had an effect on the analyses and interpretation.

My Role as a Researcher in Online Learning and Teaching

My perspectives and beliefs towards online education have been formed through various roles that I undertook during my academic and professional activities, the roles that introduced me to the many faces of online learning and teaching from different angles: student, teacher, and instructional designer. My interest in online education started three years ago, when I took an online course for the first time as part of my graduate studies. My experience as an online learner was not very pleasant; it was, instead, quite painful to get through. This negative experience provided me a chance to reflect on how a learner could be frustrated within a course that lacked the interaction, student and teacher presence, and

engagement. Talking with the course instructor several months after the course, I realized that she had also gone through a very negative experience as a teacher, not being ready for teaching online at that time and not having the necessary orientation and support for transitioning to becoming an online teacher. During that time, I was working as a co-instructor, teaching several different online courses, and also as an instructional designer, designing online courses with the other professors and developing online learning communities for different audiences. I also had several opportunities to talk and work with online teachers in different colleges, listen to their experiences, success stories and concerns about teaching online. That was when my interest in research shifted to the online education field, with a specific focus on examining how online teaching was successfully employed in different teaching environments and how teachers could be supported to create successful online teaching practices.

I see online teaching as an opportunity to provide students a chance to interact in learning environments by engaging in thoughtfully designed hands-on learning activities, collaborating with their peers in different levels, participating in online learning communities and creating their own personal learning environments that would help them build lifelong learning skills. I have always been very passionate about integrating emerging technologies into my online teaching by providing students learning environments where they could network, socialize and learn together, going beyond the borders of the classrooms or classroom management systems and interact with the communities of learners around the world.

Over the last couple of years, my teaching strongly influenced my research interests and I investigated the use of collaborative online platforms, community building, peer

facilitation and virtual teams in several different online teaching contexts in my research. I looked at how peer-facilitation impact the quality of interaction on the online discussions (Baran & Correia, 2009), how using different technologies in virtual learning environments impact the quality of virtual collaboration (Karpova, Correia, & Baran, 2009), and how using social networking tools extend classroom interaction to Cyberspace (Baran & Thompson, 2010). The findings of these studies also informed my online teaching, where I designed online courses with the online pedagogies that were transformed with the emerging technologies that I utilized in the courses. During this time, I developed a strong interest toward the changing nature of pedagogies in different online teaching contexts, and thus, the teacher's role during this transition.

Findings

This study aims investigating exemplary online teachers' transition to online teaching with a specific focus on the motivational factors, successful practices, and contextual and support elements that they relate to the success of their online teaching. Therefore, particular attention is paid to understanding (a) why exemplary teachers choose to teach online? (b) what aspects of context and support these teachers consider as important as they transition to become online teachers, and (c) how exemplary online teachers make a transition to online teaching in a way that they create successful practices.

First, a rich description of each teacher's case is presented with the case vignettes in order to set the stage by providing necessary contextual information about the teaching contexts and backgrounds. Second, common motivational aspects are presented in order to understand why exemplary teachers chose to teach online along with the aspects of context and support that teachers consider as critical to their success. Third, the approaches with successful practices were presented with accompanying challenges and concerns.

Case Vignettes

Case vignette 1: Teaching an online visual design course.

Brian, the program coordinator at Engineering Distance Education (EDE), was responsible for online course management, professional development, program development and online course development for off-campus courses. Brian nominated Linda as the most successful online teacher in EDE and elaborated on her characteristics as a successful online teacher: Patient, willing to learn and try, not being afraid to let people know that she doesn't know, enjoying teaching, changing, communicating with the students and providing frequent feedback to the students.

Linda was a full-time, tenured associate professor in the College of Design with more than twenty years of teaching experience in face-to-face and three years in online environments. She taught undergraduate courses in multimedia, animation and graphic design. She had a dual appointment both in the Graphic Design and Human Computer Interaction (HCI) programs and she had been teaching online visual design courses in the HCI graduate program for three years. The HCI graduate degree program was targeted to the

professionals in business and industry, and was supported by EDE that offered a wide-ranging suite of tools, communication technologies, virtual labs and classrooms to support faculty in their online teaching. Linda taught the “Visual Design for HCI” online course in the HCI degree program during the summer terms. The course was targeted to the working professionals and non-traditional students who were enrolled in an online certificate program in HCI. Her students were either working professionals, stay at home moms, or people who had just left their workplace and were trying to obtain another degree before going back into the workforce.

Case vignette 2: Teaching coastal policy and e-democracy online.

Sean, the director of College of Liberal Arts and Sciences Center for Distance and Online Learning (CDOL), managed the online education support activities within the center, such as offering resources and best practices for teachers, having course planning and design meetings, helping with the student support, and providing testing services, course evaluations, and technical platforms. Sean nominated Robert as the best online teacher within the program because Robert followed many of the principles of developing successful online courses, such as creating visually appealing short modules to organize the course on the learning management system (LMS), communicating with the students, and creating a student-centered learning environment. Robert’s expertise in the subject matter and ability to incorporate various activities and evaluation methods into the online courses were also mentioned as characteristics that made him a successful online teacher.

Robert taught online courses within the Online Master in Public Policy and Administration program. The online program aimed to prepare learners for public service leadership in public administration and was designed to prepare or improve the performance level of mid-career public managers and administrators. Robert taught the Coastal Policy and E-democracy course, which was offered asynchronously to students all over the world. Robert was an active teacher in distance education courses and programs for twenty-five years. Previously, he had taught distance courses by correspondence and by airplane. He was one of the early adopters of teaching with computers and the Internet. In the early days, he took all of the courses and attended the workshops on HTML to learn the computer and Internet operations. When the university started working on the possibility of using Internet for distance education, he was one of the first professors to experiment with online teaching. Robert developed five courses and taught them both within the university and for another institution where he worked as an affiliate.

Case vignette 3: Teaching Latin and classical studies online.

Oscar, the director of the Languages Studies Resource Center (LSRC) at the Department of World Languages and Cultures, nominated Helen as the most successful online teacher within the department. Oscar directed the LSRC, the technology language-learning hub for the department, and was actively involved in the planning, design and implementation of the online courses that were developed as part of the grants offered for developing the online courses. Oscar nominated Helen as the best online teacher, not only because she was involved in the development and teaching of the online courses, but she was

also quick to respond to questions and problems. She could identify the things that were not going well and change the direction of the activity and the course to solve the problems. According to Oscar, she “does it very gracefully and naturally”.

Helen taught face-to-face for 30 years and online for four years. She taught Latin and Classical Studies courses online as part of the Classical Studies program. Students from diverse backgrounds who were interested in the ancient languages took these courses. Helen created the Latin course starting with the content she used in her face-to-face courses. She created the Classical Studies Terminologies class for online teaching.

Case vignette 4: Teaching agronomy online.

Jude worked as a program coordinator and instructional development specialist for the M.S. in Agronomy program. His activities entailed working with students on the coordination of the information, answering their e-mails, preparing online orientation materials, course information, and job aids, planning for on-campus meetings, conducting the evaluations of the program and the courses, creating reports and performing the tasks related to the program management. Jude nominated Molly as the best online teacher in the program because of her high student evaluation scores.

Molly taught agronomy to graduate students across the United States in the program. The masters program was aimed at professionals working in industry and government and emphasized the development of superior problem-solving and communication skills. The majority of students were from the U.S., and the rest were from Canada. Molly had twenty-four years of teaching experience in face-to-face and ten years of teaching experience in the

online environments. Molly was teaching the Agronomics Systems Analysis course, the last course in the program, which connected all the previous courses and what students had learned in the program.

Case vignette 5: Teaching models of teaching online.

Kim worked as the College of Human Sciences online course coordinator within the Office of Distance Education and Educational Technology (ODEET) that provided logistical support for online education courses and programs to the departments, instructors, and students. The office's services included maintenance of the class websites collection, LMS support, Adobe Connect support, technical assistance with the streaming audio and video, and instructor training for online and distance hardware and software. She was the instructional designer and worked with the teachers who designed and taught online courses within the college. Kim nominated Erin as the most successful online teacher within the college, because Erin received high scores on student evaluations and gave individual attention to her students, taking into account their experiences and possible problems that they could face in an online class.

Erin has been a lecturer and instructor in the Family and Consumer Sciences Education program since 2000. She earned her Masters and PhD from the same department in which she was teaching. She had 10 years of teaching experience in online environments. Her online courses showed variety in terms of student profile, content and the organizational structure. Her students included teachers who were taking courses online to fulfill the requirements of the Family and Consumer Science Teaching License and students earning

their degrees through a consortium that offered online degrees, certificate and course share programs.

Case vignette 6: Teaching biorenewable systems online.

Luis was the director of College of Agriculture and Life Science's Center for Technology and Distance Education for seven years. He provided technology support for on-campus and off-campus courses. The services included capturing live courses and recording them for delivery, helping with the design of online course platforms, providing help with the online program delivery and student support. Luis nominated Justin as the most successful online teacher, because Justin was dynamic, fun and full of energy. He also taught brand new, cutting-edge courses, which received high scores from student evaluations.

Justin started teaching after 10 years of working for a company. He was also serving as the Director of Assessment in College of Engineering and Interim Director of Online Learning at College of Engineering. He taught online for 3.5 years and face-to-face for 13 years. Justin taught an online, cross-listed biorenewables course to undergraduate students from various majors. His course had both online and face-to-face sections with around 80 students taking it per semester. He also taught the Preservation of Grain Quality course to undergraduate students with both face-to-face and online formats.

Motivating Factors

One of the guiding research questions was to understand why exemplary teachers choose to teach online. The analysis of within and cross case analysis of the ethnographic

interviews revealed following emerging themes: Observation of the quality, teachers' backgrounds in distance education, answering the needs of a non-traditional student population, opportunity to try alternative approaches, technology, pedagogy, and financial support.

Observation of the quality.

Teachers in this study taught in different online contexts with varying experiences and online teaching histories. In making decisions about teaching online, they were motivated by their observations of the quality of online courses both within their programs and in other contexts. Over time, their perceptions and beliefs regarding online education were shaped either through their own experiences as online educators or their observations of others while teaching and developing online courses. For instance, in the late 1990s, Molly decided to teach online after observing the interactive courses developed within the online masters program. Although she previously was skeptical about teaching online, her observation of the quality of the course changed her mind. She commented:

I saw how well they were producing the other classes. How interactive the courses were, the high quality of the courses. It wasn't something that was just thrown together. It was quality stuff. (Molly, Agronomy)

Accordingly, developing an online course in the form of putting the content online in a course management platform with limited interactivity and engagement was one of the common concerns that teachers shared. Linda, for instance, decided to teach online because

the online program gave her a chance to take an active teaching role, instead of a passive one in which the teacher was only seen as a content provider. She was motivated to teach online after seeing the high-quality products delivered in the online program that she was going to teach.

Observation of other teachers' online teaching was another motivational source for the teachers. With a close look at how an online course could be delivered successfully, teachers gained the confidence to teach online. Helen, for instance, commented on how peer-observation influenced her decision to teach online:

When I first started, I knew it was something I needed to do for Latin and Classical Studies here but I wasn't sure how to go about it. The only other class I really looked at is Tom's biology class and a few years ago I was shown the version of that class at that time and I just looked at a couple of lessons and it just struck me how versatile this environment was and it just gave me the confidence to know that I could do it... You know you just need to watch somebody who knows what they are doing a few times and have somebody watch doing you are doing. You just have to have a sense of it. (Helen, Classical Studies)

Teachers' backgrounds in distance education.

Teachers' backgrounds in different forms of distance education were mentioned as one of the motivational factors. For instance, Helen and Robert were initially involved in teaching and designing distance courses by correspondence. These experiences provided

them with opportunities to work with non-traditional students. Robert, having an additional distance teaching experience by airplane, was one of the first professors at the university who started working with computers and experimenting with online education. Helen, referring back to the days of teaching by correspondence, stated how she transferred from being a distance teacher to an online teacher:

One other thing about my background that made me think that distance education was good and I was trying to do that here. When I was a grad student, I was put in charge with the correspondence school Latin program at the university of Minnesota and that was way back paper and pencil, correspondence classes. And I was impressed with how well the students learn at a distance and when there is new technology started coming in, I thought well we could just do that. So I always knew that it was a good thing, innately for the reasons for kind of the market. (Helen, Classical Studies)

Teachers' experiences related to the early forms of distance education had an influence on their motivation to teach online. Although the mediums were different, early forms of correspondence distance education, for example, shared common characteristics with the newest forms of online education. Teachers could transfer some of these earlier experiences to their current practices (e.g., working with non-traditional students).

Answering the needs of a non-traditional student population.

One of the significant themes arising from the analysis of the interviews was teachers' motivation to reach out to the non-traditional student population. All teachers emphasized the importance of online education as providing these students with the educational opportunities that they could not otherwise have. Molly commented on the characteristics of a unique student population in their program:

I realized that the students in this program are in a very unique place. They are already working. They are already professionals. They would never have the opportunity to quit their job, move their family to Ames to get this Masters. That would be the best the scenario but they are not going to have the best so what is the next best thing? So this would be the next best thing. It was really quality. So I am willing to do it. (Molly, Agronomy)

Helen elaborated on this and further indicated that one of the missions of the land grant universities was to provide access. She taught Latin and thought that it was an ideal subject to reach out to those people who had physical disabilities. Robert, in his Coastal Policy class, had students from all over the world- Europe, Hawaii, Africa, Latin America, and Asia who were interested in coastal issues. His asynchronous teaching style made it possible for any student at anytime from anywhere to take his courses and participate in the discussions. In her graduate courses, Erin worked with working professionals across the U.S. Moreover, the level of participation, responsibility, and interest demonstrated by the non-traditional students motivated the teachers as well. Teachers participated in the online

teaching activities, because they thought it was the future of education in terms of providing access and extending the university education beyond the traditional university settings.

Opportunity to try alternative approaches.

The teachers in this study were identified as exemplary teachers within their programs. One of the reasons behind the selection was that they took active roles throughout the phases of online course development, teaching and evaluation. These teachers' observations of quality courses as well as non-quality ones played important roles in their decisions to teach online. Concerns related to the quality issues were apparent during the interviews, hence the teachers did not perceive online teaching as sacrificing quality, but as an opportunity to address the quality concerns and solve them through various ways.

One of the common criteria that program coordinators mentioned as they nominated these teachers was their use of online teaching as an opportunity to try new and alternative approaches. All teachers expressed their excitement and motivation for trying alternative ways for reaching out to the students, and most of all, enhanced communication with students. For instance, Erin, who taught the methods classes to teachers enrolled in the teaching certificate program, expressed her motivation:

I like to teach. I like to teach university students and adults. I like the creative process of creating the course. So I am creating interesting learning experiences for them. Also finding the most important concepts that they need to be aware of,, especially my people who will be teachers. (Erin, Teacher Education)

Although lack of immediacy and face-to-face interaction were indicated as challenges while teaching online, teachers took it as an opportunity to experiment with online communication and interaction through various channels. Robert, for instance, expressed that there were minor problems compared to having students physically at the same location with the teacher:

I see only minor problems compared to having students physically there with you. Nowadays you can write things, you can speak, you can communicate, you can ask questions. You can do all of that whether it is between me here and the last student in my classroom in a physical classroom. Or me sitting here and a student in Hawaii who can get in touch with me and we can exchange information... (Robert, Political Science)

Teachers found online teaching challenging, yet as they met the challenges by offering solutions with alternative approaches, each challenge became less of a disadvantage and more of an opportunity to try alternative teaching approaches. Molly, for instance, considered online teaching as a fun experience because she could try new things with the support staff:

“So it is pretty fun because I can always try new things. We are only a week from burning the CD and I can observe and say...oh I’d like to add this”. (Molly, Agronomy)

Like Molly, Linda also tried innovative approaches with her students. She thought that part of the success in her online teaching comes from her unique content, art and design.

Teaching an online art class, she had to interact more with individual students and that made her create a unique experience for her students.

Support.

Support emerged as one of the most cited motivational factors for teaching online. All teachers in this study were nominated by the online program coordinators and directors who supported them throughout many phases of teaching online. Hence, the teachers viewed support in the forms of pedagogical, technical and financial help as strong influencing and contributing factors for their online teaching.

Technology support.

Technology support was an important motivating factor for all teachers. Critical to all teachers was the increasing workload involved in designing and teaching an online course. According to the teachers, teaching online required more time and effort than a face-to-face course. Therefore, they needed support with the technology-related issues while developing the learning resources, reorganizing existing course materials, exploring new pedagogical approaches with the capabilities of the technology platforms, solving technology related problems, and troubleshooting. Erin, for instance, emphasized that technology support was important for her while she was exploring what she could do with the classroom platform and having somebody who kept her up to speed with the new tools.

All teachers in this study were heavily involved in the creation of the online courses, and they invested a considerable amount of time designing and teaching these online courses. They emphasized that as online teachers, their role was not the technologists who made the technology work. They preferred investing their time in teaching-related tasks. For instance, Helen indicated that by having the technology support specialist, technology seemed less scary to her, and without the support she could not do it by herself, because she was not a “techy person”. She commented:

I'm not at all gifted at using information and instructional technology at all. I give myself a 'C' on a good day. I knew if there was somebody here that I could get help from who understood what I was trying to do then I could do it. So when Oscar came, I just start everything in place, I'll see if he is interested so. For me it was my own personal motivation, sense of the market, the land grant mission and then most critically really a professional who could help me implement my ideas. I could not do it without him. (Helen, Classical Studies)

Linda also indicated that having technology support was critical to success. She needed help with troubleshooting and solving students' problems related to the technologies quickly:

I think the idea of having enough tech support that you are not personally in charge of. Because those are two separate full time jobs. Tech support over here, content, professor over here. And anybody who tries to border the line, I think we as faculty should say no. I am not tech support. Because you just can't. You spend all your time trying to upload everything and fight with WebCT and by the time you are done you

are so burned out, you can't handle the teaching. And the idea that teaching, if I am online and answering emails for hours with these student, my time has been compensated. That's what they pay me to do. Making the computer is what Brian to do. (Linda, Graphic Design)

Other teachers commented on the importance of having someone with technology expertise as they developed learning materials with the innovative uses of technologies. Molly, for instance, worked with the development lab on the creation of virtual field trips, videotaping farmers, taking panorama shots, preparing the illustrations, and editing the videos. Justin also had a very close contact with the university's central technology support center while teaching online.

Pedagogical support.

Pedagogical support was another motivating factor for the teachers. Although they transferred some of their existing teaching approaches to the online classes, they required assistance in finding new pedagogical strategies for teaching the online courses and the new updates regarding the pedagogical use of technologies. For instance, Erin appreciated attending the brown bag lunches where the instructional design specialists updated the faculty about new developments and tools for online teaching. Helen also received help from a graduate student with the preparation of instructional materials and instruments. The need for pedagogical assistance was especially obvious while moderating the large-scale classes. Robert commented on the need for a teaching assistant to moderate the discussions, help him write the tests and assessments, and answer students' questions.

Financial support.

Financial support was another common motivational factor among the teachers who were concerned with the increased time and work involved in designing and teaching online courses because of the intense engagement before and during the course delivery. Whether in the form of transferring a face-to-face course to the online platform or creating a new one for online teaching, the process for creating a quality course was considered challenging, and that required additional time and energy devoted to online teaching. The exemplary online teachers were willing to make the transition to the online environment, with the financial reward schemes that were provided.

When started teaching online, Erin was paid a month in the summer to develop a course, which gave her time to prepare the course materials. Robert emphasized the importance of the return of the delivery fees to the instructor so that he could hire teaching assistants. He commented:

I don't have time to teach all of these students unless I have resources coming back to me besides compensation, you know salaries. (Robert, Political Science)

Linda also indicated that teachers needed to be provided with some compensation because of the amount of work involved in creating a high quality product:

I think just make sure that there is some compensation. It has to be fair. It is a lot of work and people who don't online teach or don't teach very high impact, don't get it. And it is a lot of work; it is a lot of contact. I think you should add up your hours. Add up your online hours, if you are having phone calls or conversation or

troubleshooting, you should add up the hours. It takes you to prepare the materials, make the recordings, and like I said if I just add up the times I was on the phone or I answer emails. It was hours a day. And if I added up the time it took me to remake things to make it special, little things for people, or to tweak up and fix files, they send to me. That was an additional amount of time. And people are not appreciating the time it takes and I think we don't do ourselves as a community of educators, much of a service, if we don't say we must be fairly compensated and fairly accredited.
(Linda, Graphic Design)

Financial support provided to the teachers was also used in the forms of attending the professional meetings and hiring graduate students. Justin, who also worked as the director of Engineering Distance Education, indicated that they provided a percentage or certain amount of money back to the department and faculty who were teaching online. Because teaching online was considered overload, teachers in the college were going beyond normal teaching responsibilities. He further commented:

So it is just like everybody. I am in that position. Ok instead of teaching this online class, I could write a couple of research grants, get half a million dollars, get three grad students, five papers and get rewarded by the system, Why should I teach an online class? You need to provide something to make it worthwhile. You won't get rich but on the other hand, you know get a pile of money that pays for me to go to meetings and maybe I can pay a grad student half a semester, some flexibility in doing some things. And it is worth it. (Justin, Engineering)

In summary, both intrinsic and extrinsic factors played important roles in teachers' motivation for teaching online. While they felt self-gratification from teaching online with an opportunity to try new and alternative approaches to teaching and reaching out to the students, external factors such as pedagogical, technological and financial support played critical roles in their decision of continuing the online education practices. After examining these motivational factors, the next section looked at faculty members' descriptions of the successful practices as they made a transition to online teaching.

Successful Practices: Challenges, Concerns and Solutions

The purpose of the study was to gain concrete understandings of how the online teachers made a transition in the way that they implemented successful teaching practices. Therefore, this section particularly focuses on actual success factors that were described by the teachers. While describing the successful practices, teachers often mentioned their concerns and how they overcame the challenges of online teaching. Therefore, the concerns and solutions were described in the following sections in addition to the specific strategies mentioned by the instructors.

Knowing the course content.

Teachers' content knowledge was suggested as one of the most important characteristics of a successful online teacher. Teachers noted that they needed to know their content very well in order to organize and structure the class, to design the course activities,

and to transfer content into the online environment. For instance, Linda spent a lot of time creating her design course for the online environment. She commented:

You got to know what you are teaching or I don't know how you are going to do it. Because you can't organize the class well in terms of the structure if you don't know what's important, what you want them to know and how you want them to work with this. Because you have to know how to engage them in it. (Linda, Graphic Design)

Helen concurred with Linda regarding how important it is to be comfortable with the material she was teaching. She indicated that she was confident in teaching her course as she was so familiar with it that she knew the materials inside and out. She noted:

I wouldn't try to create a course about something that I wasn't really familiar with. I might be inclined to do that for face-to-face class. (Helen, Classical Studies)

Teachers' content knowledge impacted their choice of online pedagogies as they taught online. They often indicated that their content was special and allowed them to create engaging and interactive online learning environments. They also noted that since there was a lack of immediacy in giving feedback, the teachers' relationship to the content had to be communicative.

Breaking the content into manageable chunks was one of the common trends that teachers followed while designing their online courses. For instance, Linda created smaller chunks, because it was easier for students to watch her 10-minute online videos on the course content. Similarly, Justin and Helen recreated the course content into smaller units and

fragments in order to engage students in the course activities and present the materials in a manageable way. Justin commented:

When I teach a regular class like I try not to lecture for no more than 20 minutes at a time because people can't listen that all. Even me, 20 minutes I am thinking about, I got bills to pay, what are my kids doing maybe the baseball game this afternoon and whatever. 20 minutes is about the time span. So I try to break up the class into chunks. So there is something that breaks that up so people can kind of reset their mind. That is also true online. Just as well it is real class. So just the fundamental stuff about being a good teacher translates from the traditional face-to-face in to online environment. (Justin, Engineering)

Teachers used various sources to create the content for their courses. Using the course books, content from the face-to-face versions, content from the previous online versions, and online resources were some of the common methods. Furthermore, Robert shared a unique example of content creation. He experimented with gathering student input about the content before the course started by sending them the course objectives and asking them to send him suggestions as to what should be in the course. He explained the process:

So I am asking them to go out, identify good documentaries, good short reading assignments, good topics, case studies and send them to me and then we'll play with them and see if we can build a course from a lot of the material that the students are saying they think would be interesting. And still maintain control so that I make sure that the stuff that I know, I would like them to have still in there, because there is a certain outcomes, goal for each course that you teach and if their stuff is interesting

but it doesn't meet that role, then I adjust it. But I want more input... I want them to build the course and not just me build the course and me teach it. (Robert, Political Science)

Designing and structuring the online course.

Teachers spent considerable time on the design of the online courses. The course design processes showed variety depending on whether the course was going to be taught the first time, recreated from a face-to-face course, or duplicated from a previously taught online course. All teachers acknowledged the time spent on preparation for online teaching. Linda commented on the workload:

The first time I was really worried about, I was about to "oh my god, this is horrible, how did I get into this position." I understand people who would not want to do it. It is very much a lot of work. It is no less work. There is sort of that illusion it is less, it is not, it is more work. (Linda, Graphic Design)

All teachers indicated that online teaching required more preparation and structuring than teaching in a face-to-face classroom. They all felt the need for saving additional time on planning and developing the course materials in advance. While designing the courses, teachers started with envisioning the entire course from initiation to completion. As they pictured what the course might look like, they used various cues from their actual traditional teaching experiences. If they were teaching the online version of a face-to-face course, they wanted to keep it similar in terms of the content and core course activities, but with changes

and necessary adaption for the online course environment and online students. For instance, Linda wanted to simulate her studio design course in an online environment. Her studio courses required a lot of interaction and feedback during the design conversation, e.g., her students designed logos, worked with typography and color, and designed games, interfaces and websites. In order to engage them in the design conversation, she had to use methods with close individual contact and constant communication and feedback during the design process. Teaching the course for the first time online, she started with breaking down the tasks:

I tried to simulate the actual experiences as much as possible so I just broke it down in tasks...I sat down and said to myself, "what activities must I do to teach you?" And I kind of broke them down. I need to be able to see what you are doing and I need to be able to give you feedback on what you are doing, and kind of encourage you and guide you. And then I realize as an online teacher, I don't need to literally be in the same room with you to do those things. (Linda, Graphic Design)

Similarly, Erin started with creating a conceptual outline for her online teaching methods course. Since her area was educational studies, her background in teaching helped her during the course development. Her preparation included creating a conceptual outline while identifying the course projects and assignments, and going back and forth between the activities and the learning outcomes:

The student will create, describe, demonstrate, identify whatever it is I want them to gain from this and then there is usually probably five learning outcomes in my classes, what I want them to gain from this. And that I can measure, what they will

know and be able to do. Once I identify that, and it is a very fluid process for me, you think about textbooks, websites and that's fun. Finding those, finding new ones. And it is real fluid. And then you start saying all right so how is this going to work in the course? How are you going to break this up in the course if you have 16 weeks. How are you going to chunk these? (Erin, Teacher Education)

Teachers' level of detail and depth of structure varied depending on the nature of their course and their teaching styles. Two trends emerged toward increased course structure at the preparation phase. First, the courses that were content heavy and required less student-teacher interaction were structured in a more detailed fashion. For instance, Helen described her course design process:

For Latin having taught it so many times and having used the same book in face-to-face class, that we are using for online, I knew what I needed to accomplish and I broke that down into...helping students understand culture, helping them put it together, giving them sort of drills and homework, graded instruments. It is very content based and very in a way discreet. This is not a class, where they go out and do original research where you get in a chat and talk about ideas. There is no group project. So in a way I its very discreet and contained. That made it easy for me. I wouldn't want to start with something that didn't have those qualities. (Helen, Classical Studies)

While reimagining the class and anticipating the technical problems and student actions, Helen also created drills and presentations beforehand with help from a graduate student. As she taught the same class over and over again, she duplicated the previous course

content, and updated it with the necessary changes. Similarly, Robert, while spending a great amount of time structuring his online courses, kept the course fast-paced and fresh. Therefore, every semester, he updated the course materials with the current events and content. This was also partly because his course required the incorporation of current political, environmental, and societal events.

The second trend followed a less structured path. In order to be flexible while teaching, teachers preferred preparing some part of the course before, and adding the activities and content as they went along. Due to the interactive nature of their courses, these teachers wanted to be able to improvise, change, and update their courses with student input and based on the course happenings along the way. Molly, for instance, wanted to be more flexible in her course, constantly changing and tweaking the course flow when she saw that students were struggling. She commented:

I want the students to submit the questions to ask the farmer; I cannot prepare that ahead of time. In a way I only have to prepare half of the semester that I give to them and the other half we are preparing now. Because I am trying to be as interactive as I can, I don't have this prepared class, that here it is and technically you can read through the whole thing. I prepare half of the course in the fall and the other half is prepared in the spring. Because it is prepared I feel sometimes kind of trapped that I can't make a change in the course when I start the see students struggling or something new comes up In my campus class, if I see students struggling, we just slow down. Then when I see that they are comprehending really fast...I feel a little trapped and maybe that's ok because then you know it is more stable that way. The

compromise is that I do get some flexibility, I still can add something into the semester because the second part of the semester hasn't been sent yet. (Molly, Agronomy)

Similarly, Justin noted that every class was different and he therefore wanted to incorporate student feedback on the course flow as he taught. He needed to be receptive to the course happenings and students' needs and be flexible in terms of course structure:

I see some people who do their online classes, they got it laid out all semester and I don't know how they can do that. Because what I find is, every class is different. I'm getting feedback mainly from my face-to-face class. But they don't get this concept. This is an important concept and I got to figure out how to get it. That means I can't spend some time on something else. So my syllabuses are tentative outlines. And the idea that I have got every single problem set laid out, I can't teach that way. Be flexible. (Justin, Engineering)

While structuring the courses, teachers asked several design questions as they thought about their audience in the context of their learning outcomes. Justin noted that the answers to these questions were different than they were for face-to-face experiences. These questions included: What is the course description? What is the purpose of the course? What is important to be taught? What are my learning objectives? How am I going to measure the learning objectives? What kind of questions am I going to ask? What are the concepts that need to be in it? How am I going to chunk this? What are the assignments going to be that will create for them to be engaged in the learning? How do I start the class? What kind of project do I want them to come out of this with? How do I end the class?

One of the common characteristics of the teachers in this study was that they all placed students at the center of the online teaching. Their descriptions of the course structure and teaching all referred to the students' learning outcomes, interaction, and involvement in the course. They all agreed that knowing the students was a must for successful online teaching.

Knowing the students.

Teachers indicated it was essential to know the students in order to design rich learning experiences targeted to their needs. Most of them had students all over the United States, at different levels and places, and even sometimes in other countries. Because teachers didn't have a chance to meet their students face-to-face, knowing them in the preparation and early teaching phases became a priority in order to build strong relationships. For instance, Erin commented on how she became flexible in her online teaching, as she knew that her students were working graduate students. Linda's students were working professionals, or people who were trying to obtain another degree before going back into the workforce. Her design approach centered on students' needs and their involvement in the course. She commented:

I taught, "well, I need to talk to you. I need to know how you are thinking and how much you understand. I need to know a little bit about you. I need to have some way to understand you as a person. I need to be able to see what you are doing" What tasks do I do? and what do I need to do as a person and how can I keep extracting

that? Because I always feel like, I am trying to help you become a better you. So I have to know you. And I have to know what your goal is so I try to translate that task.

(Linda, Graphic Design)

Gathering information on the student profiles and characteristics, teachers were able to structure the courses. Having students in different time zones, teachers had to design the group activities, plan for the communication channels and decide on the asynchronous or synchronous components in the classes. Molly taught the final class in an online master's program. She used her knowledge of her students and their levels while designing the course. She explained:

You know in my class, the students have been in the program for years, so they are pretty used to all of this stuff. I think it would be very different if I was teaching the first class. And I know that the people who are teaching the first classes in the Program, do things a little slower. And they are doing more help sessions. By the time the students take my course, they are already in a comfortable pattern, and are used to this kind of learning. You need to ask, "Who are my students?" If you have a lot of young students, this whole technology would not be a problem. If you had older students, or the potential for older students it may or may not be. We have older students, 30s, 40s. They are in professions where this technology is used all the time. So that's not a problem. (Molly, Agronomy)

Teachers also emphasized the difference between the course dynamics, comparing the non-traditional student population with the undergraduate on-campus student population. For instance, according to Linda, non-traditional students were more interested, engaged, and

disciplined, because they brought their work habits to the classroom. According to Justin, on-campus college students taking the online courses were less likely to ask questions and search out answers than the students who were off-campus students. Teachers who were teaching the graduate online courses had doubts about whether online teaching would work with the undergraduate on-campus student population. Linda suggested doing research on this:

It would be interesting because, I see online teaching in sort of two different ways. One is, ok professionals. So these are professionals. The College of Engineering as more professionals, either continuing education or updating. Those are very different than I think undergraduates. I'm not convinced about the undergrad one. So it would be very interesting to be sort of keep that separate and see if there is a difference, if that's only true in my mind. Versus yea there is a difference and there isn't. With undergrads there is something about coming to college. Good or bad... (Linda, Graphic Design)

Helen thinks that online students can be categorized into two groups: (a) a smaller group that is really engaged and disciplined, (b) a larger group that is not as attentive. In traditional classes, teachers had more opportunities to get acquainted with each student and have a sense of who the students were. However, in the online class, the task of knowing the students is accomplished in a larger time frame, by interacting with them every day, tracking their performance and communicating with them to bring their social presence to the class. Therefore, an online classroom requires more effort on the teachers' side in terms of knowing the students and getting information about each individual student profile.

Enhancing teacher-student relationships.

While teachers in this study were identified as successful, they all commented that they were not that successful in terms of building relationships with the students because of the absence of immediacy, sensory and expressive information. These teachers were very sensitive about having constant interaction with the students and using affective components while teaching in their face-to-face classrooms. Consequently, they carried their expectations to the online environments. They felt the need to provide substitutes for the sensory and personal relationships that they established with the students in face-to-face classrooms. Molly, for instance, thought that her students who took her face-to-face classes would be disappointed if they took her online class because of the lack of energy in the online classroom. She commented:

I interact with the students but I don't interact with them the way I think I should. So I don't know. I don't feel successful in that aspect. Because face-to-face I do a lot of interaction. I love the classroom (emphasize). I love having the students around. So I feel like I am not giving them as much time and because I am typing, instead of speaking, it is not as much energy for me. So I feel like, oh I am not giving them time, not giving my energy, I am not giving them who I am. (Molly, Agronomy)

While teachers carried their notions of teaching and learning to the online environment, they were also challenged to reconsider their expectations. Molly, for instance, thought that she needed to change the course evaluation tool that she used in her on-campus courses, because they were two different environments. She explained the reason:

Maybe the distance students are different enough so I can say that energy can never be transmitted so I shouldn't expect that to happen. If I don't have that expectation then I will feel more successful. But if I have that expectation and it just can never happen, then I would always feel not successful. So that's where I think this is really interesting the kind of work you are doing because how can you help me know if I am successful, because I need a different kind of assessment. (Molly, Agronomy)

Keeping the similar expectations in an online teaching platform, teachers needed visual and auditory cues to picture their students. They acknowledged that staying engaged in the online conversation and guiding the discussions required intense effort to create a mental image of the students, especially during the first couple weeks of the course. Erin explained her challenge:

I always miss seeing their faces and hearing their voices. I miss that. Because it is hard for me to read their writing in their discussion especially in the early weeks when I don't quite have a face and a name yet. Some of the students in my online class now most of the students I had them in face-to-face. So when I see a name I pretty well know the face and I have a sense of the personality. (Erin, Teacher Education)

While the absence of nonverbal cues presented challenges, teachers used a number of methods to enhance their relationships with the students. The methods included using online synchronous video conferencing tools (e.g., Adobe Connect), creating teacher videos, and using wikis and social media channels. Erin, for instance asked her students to prepare PowerPoint slides at the beginning of the semester with their picture and information about

their majors, their reasons for taking the course, where they were located, and which time zone they were in. Similarly, Linda asked her students to post personal information about themselves on the course wiki. She explained the activity:

I had them the first assignment was who you are and what you do so they would have to do that. And it was kind of interesting because then they would find they had things in common. I'd say ok I want to know if you got kids, I want to see your dog, I want to see your house, I want to know where you go for vacation. I want to know everything about you. And you have to tell me where did you study, what you do each day...That was nice, because they would start talking back on fort. Oh are you also a programmer in this kind of engineering? Oh I have dogs too, I work for the humane society. They would start sharing the information because I think it is really important to immediately figure out your students as a person. Because first thing you walk in a classroom as a teacher, one of the first things you try to is where is everybody at. (Linda, Graphic Design)

The need for eliciting personal information about the students was more evident in the courses that required ongoing student-teacher interaction. For instance, in the case of Linda's online design studio course, she needed to know her students as on a more personal level, so they could bring unique cultural backgrounds to the design conversation. Linda explained her concern:

There is so much when you take a physical person and reduce some down to piece of email, you've taken away everything. You have taken away their personality, their gender, their culture, their attitudes there, their spirit, you just rob your student. So

online, I think you have to figure out how do I reinvest them in their personhood and their spirit. How do I give them a presence and how do I help everybody appreciate and the authenticity and presence of that person. So we have to remake us as persons online and I would tell them I'd say, you didn't show me your dog [giggling], things like that. Because I needed to sense their personality. (Linda, Graphic Design)

Teachers also saw the need for establishing trust in the online environment. The context of teaching for each faculty member had a big impact on building the trustful relationships with the students. Justin, for instance, while teaching online to the undergraduate students, found that it was necessary for students to contact him, do follow-ups in the course and ask for help. He believes that teachers need to communicate well about the students' responsibilities in the class, and just like in face-to-face classrooms, students need to act as professionals and be responsible for their own learning. Other teachers also commented that it was harder for a teacher to recognize students who were lurking in the online classes because of the absence of nonverbal cues.

Guiding student learning.

Another loss that several teachers identified was of the immediate exchange of conversation that would be found in face-to-face courses, noting that the latency could cause misunderstandings. Teachers argued that because they were unable to see the reactions of students right away during an immediate conversation, they had to interpret students' messages, which lacked sensory cues. The lack of these audio-visual elements challenged the

teachers in terms of identifying when students needed their help and acting immediately to address those needs. Linda explained her concern:

So I realize quickly I want to see a picture of them and I want to hear their voice. I want to see them hear how they talk and if I can hear them I can hear when they are hesitating or I can hear when they are confident and hey don't have to tell me that. Because a student who is very unconfident, who lacks confidence in something is going to have certain needs and you need to reassure that person, you need to say, hey its ok, don't panic, let's try this, you will be fine. But another student who maybe doesn't realize you know. (Linda, Graphic Design)

The methods teachers used to address the problem of immediacy varied. For instance, additional time in some of the courses was spent giving individual feedback to students. They used phone conversations frequently in order to help students with their frustrations. While some teachers preferred to have appointments for the call sessions and wait for students to call them at certain times, some of them called their students when they identified a problem and wanted to resolve the issue right away. Teachers used phone conversation as an opportunity to connect to their students in a more personal way and guide their learning by giving feedback and answering their questions directly.

While individual attention was given to the students through phone and e-mail conversation, teachers found that they had to repeat the same answer or topic each time they responded to a student. Moreover, there was a lack of group synergy in the one-on-one communications. Teachers used discussion boards or group e-mails to overcome this challenge. Another strategy used commonly by the teachers was setting up online office

hours. Generally, they scheduled one office hour time once per week in an online conferencing platform, where students visited and asked questions to the teachers. The office hour conversation was generally recorded and shared during a visit at a later time by the students who couldn't make it to the meeting. Molly sent some questions to her students before the office hour help sessions so that students could glance through and come prepared to the meetings with their questions. Justin used audio chat and a tablet pc connected to the computer, where he worked out the problems and calculations. He indicated that he had a chance to know the students during these office hours, having informal conversations about their lives and developing the relationships as they do during a hall talk in an on-campus course. Helen did audio announcements using the integrated tool in the online course management tool to share course reminders and summaries of the course units.

Teachers also recognized the importance of using emerging technologies for guiding student learning in the online courses. Molly, for instance used blogs as briefing tools. Linda used a wiki platform as a virtual classroom where students presented their ongoing progress in the individual and group design projects. Having a group wiki provided the synergy in which students could see each other's works. Various online communication tools provided teachers an opportunity to simulate the actual classroom experiences in the online environments. Molly commented:

We've got email, the discussion board, phone; I'm trying to find that balance. Using the technology to its best, and using the technology for the class content. Using videos and interactive avenues, giving them feedback in the course comparable to what we would be giving in the classroom. (Molly, Agronomy)

Linda combined e-mail, blog, phone calls and online critiques to simulate the actual classroom experience. When her students didn't feel confident about their drawings, she encouraged them to email their designs to her, and she would record a specific feedback session for the student on the Adobe Connect platform, using a screen sharing option and giving both visual and audio feedback on the design. Like Linda, the other teachers in this study spent a great amount of time communicating with students using various modes. It was easier for online students to "fall through the cracks;" hence, teachers all noted the increasing amount of time that was required for successful online teaching. Considering the workload required for deep and prolonged engagement with the students, teachers recognized the importance of technological and pedagogical support, especially with the increased number of online students in one classroom. Linda commented on these needs:

It is a lot of work and people who don't online teach or don't teach very high impact, don't get it...Add up your online hours, if you are having phone calls or conversation or troubleshooting, you should add up the hours. It takes you to prepare the materials, make the recordings, and like I said if I just add up the times I was on the phone or I answer emails. It was hours a day. And if I added up the time it took me to remake things to make it special, little things for people, or to tweak up and fix files, they send to me. That was an additional amount of time. Anytime you make anything, a prop time for the course and the first year that's enormous amount of time. Each time your repeat teaching of it, it gets a little more automated, a little more running itself. The same is true to a degree online but there is still that contact time and that

relationship building time and all of that teaching. Honestly teaching time. (Linda, Graphic Design)

Sustaining teacher presence.

One of the common concerns from teachers was not having physical interaction with the students and lacking the audiovisual elements for presenting and expressing themselves in the online environment. Teachers used various strategies to demonstrate teaching presence in their online courses. Most of the teachers used video to meet this challenge. While some of them preferred having the video recorded within the professional setting with the help of the support personnel, others recorded on their own. Some of the teachers indicated that recording video required a lot of preparation. Linda, for instance, used Adobe Connect platform to record 10-minute lectures on the class topics. She had to prepare her materials in advance and get ready for the recordings. On the other hand, Robert preferred making quick and short 3-minute digital comments about the course, things that happened, or about the materials for that module, and shared them on Youtube. He commented:

So the students therefore know that I am actually alive and I shoot them here, I use backdrops like this. I shoot them like on the scene. I'm going to be going to Florida and I shoot couple down there right at the Marine back harbor whatever. So that the instructor actually is on a setting that's connected to the class and not just to the classroom. And the students at a distance kind of get to know me because I have so much little digital video presence in the class. They actually get to know me. They get

to see me with a suit or with just blue jeans and a sweat shirt. They get to kind of really know me personally and I think that helps a lot. Distance learning classes can be very anonymous. I want them not to be because it alienates the students, they don't really get to know the instructor. I think that is the main reason probably. (Robert, Political Science)

Video provided a channel for the teachers to use affective strategies with their body language and tone of voice, make it more personal as a teacher, and give a chance to the students to get to know them. They could also use videos as a tool to give feedback on student progress and provide updates about the class materials.

Videotaped lectures were recorded in two mainstream ways: (a) being professionally recorded during the on-campus classes and shared with the online students through a DVD or an online platform for a later watch, (b) being professionally recorded in a classroom without a student audience. While video helped teachers to present themselves visually, many acknowledged their concerns about the approach. They complained that these approaches lacked interactivity, thus reducing the quality of the online courses and creating a negative impression towards online teaching and learning.

Another strategy that teachers used was conducting interviews with guest speakers and sharing the video recordings with their students. Linda, for instance, asked her students to send their questions to her beforehand so that she could ask them to the guest speaker during the interviews. Similarly, Molly conducted field trip interviews with farmers and shared the recordings with the students.

The degree of the teachers' presence also correlated with the immediacy of response and feedback to students' concerns and questions. Responding to the students became an important task for online teachers. Justin commented on this:

It is just like in face-to-face, there are instructors don't respond the students. They never respond. That's just extremely frustrating to students. So you have to be responsive even if it's a two-sentence email. I got your email, I will talk about this in class on Thursday. You got to be responsive to students because they deserve an answer just like face-to-face students do. So when you teach online you think about their questions online are as valuable as the ones you have on the class. (Justin, Engineering)

Evaluating the online courses.

Teachers, who were either teaching for the first time online or already had experience teaching a couple of classes online, wanted to make sure that their course was serving the students' needs. One of the common approaches to evaluating the courses was using a mid-semester course evaluation to gather student feedback on the courses, and immediately applying the feedback to the course design and activities. Because of the separation of time and space, teachers may not be aware of the problems that students face, and therefore may be late for the necessary interventions. Helen comments on this:

Students underestimate the amount they need to put in. They don't work hard enough. They don't see when they are having problems and they panic. And then they crash. I think maybe that's more likely to happen in an online class. (Helen, Classical Studies)

Around the middle of the semester, Helen, asked her students to write one paragraph identifying what was not working in the course so that she could try to fix the problems. However, as in the case of her Latin class, a lot of the course content and activities were prepared already and it was more difficult to change them during the remainder of the course term.

Teachers also used end-of-semester course evaluations. For instance, Molly asked her students to reply to reflection questions at the end of the semester in order to improve the class for next year and also to gather information about what they thought about the course, and if the course was valuable. While the feedback gathered from these evaluations helps teachers and other key actors make necessary revisions, the response rate and quality could be low. Helen expressed her concerns on the response rate:

We do an evaluation at the end of the semester and that has been a little bit odd...And not so many students completed the survey and that tended to be the ones who are having good experience in the class, because they were used to going on the site and using the tools so they were giving feedback. (Helen, Classical Studies)

Creating an online teacher persona.

All teachers who participated in this study indicated that they transferred their teaching philosophies, core values, and successful strategies from their traditional classrooms to the online environments, e.g., showing genuine interest in students, knowing the subject matter, etc. For instance, Molly thought it was important for her to connect with her students and provide them social learning environments. She commented on her teaching philosophy:

My thought is that education is social. Therefore, it is really important to me that students are interacting, not just with the faculty member, but with each other. Having as many opportunities, being very strategic about having these opportunities. In the classroom, it could just happen, because the students are sitting next to each other. However online, we have to be very strategic and very purposeful. As an instructor you have to have the skill of really understanding people and thinking strategically because it just doesn't happen automatically. It is important to have course content that is interactive and that is not a drain on someone to watch it.
(Molly, Agronomy)

Robert, on the other hand, followed a more controlled and direct teaching approach in his courses. Similarly, Helen, who was teaching Latin, used a content-centered approach because of the nature of the subject matter that she was teaching. Conversely, Linda used a student-centered approach in which students experienced the studio learning environment with constant feedback from their peers and teacher. Erin's approach followed applied learning because her students were teachers and needed to learn the strategies that they could apply in their classrooms. Teaching both online and on-campus sections to undergraduate

students in the engineering program, Justin followed a direct instruction approach because of the nature of the content and context of the classrooms.

During the transfer of these approaches, however, teachers were constantly challenged with the peculiarities of teaching in an online environment. While deconstructing and remaking their teaching personas, they had to rethink themselves as teachers and resolve the tensions of not having the conditions that they had in traditional classrooms. One of the reasons for this tension was that teachers were evaluating their online teaching performance with using criteria from traditional classrooms. Molly commented on her struggle of not being able to transfer her energy to the online environment as she does in face-to-face classrooms.

I'm using the same assessment tool that I use in on-campus for evaluating how well the class was going. With the online...so maybe the problem is I shouldn't use the same tool.. The situation is different enough so I can say that energy can never be transmitted so I shouldn't expect that to happen. And if I don't have that expectation then I will feel more successful, but if I have that expectation, it just could never happen. I would always feel not successful. (Molly, Agronomy)

Teachers took ownership of their courses by taking the majority of the responsibility for the teaching tasks, some emphasizing their concerns about canned online courses with content and activities but no teacher involvement during the learning process. Linda, for instance, explained it this way:

Think about what you are doing and think about your ownership of it. The role you play as a person versus the technology's role and the content's role. Don't ever factor yourself out. Because the minute you factor yourself out, you've just made your course book into a textbook. If there is no role for you as a teacher or you as human, you are not really teaching and you don't really exist. You become just like an automated grading machine. Don't let yourself just becoming a machine. You always have to take ownership of your class and ownership of the experience of those people, people-to-people and people to you. (Linda, Graphic Design)

Teaching online also impacted teachers' use of technologies in their face-to-face classrooms. For instance, Justin changed his teaching style by moving towards blended or hybrid courses, and integrated online technologies, such as podcasting, into his classes. He also shared his lectures on iTunesU and Youtube with people around the world. Like others, he emphasized that the core of teaching was not providing the content, but rather interacting with students; he didn't see any problem in providing access to his lectures:

Ok here is my theory. Information is cheap. We have electronic world. We have Google. I can go up online, there are excellent lectures on anything you could think of. It is not about the information, you can find that anyway. So why am I jealously protecting information. Where the value is as faculty is the higher-level stuff. You know how do you deal with ambiguity and lack of information. That's where as faculty we are really, particularly in the upper level courses, have a value. (Justin, Engineering)

By taking on different roles, teachers created their online teacher personas, building on the different types of organizational, historical, social and cultural factors within their contexts. The findings showed that online teacher persona is built on both teachers' traditional teaching experiences and also new conditions that they face as they move to online teaching. From this perspective, online teacher persona appears to be fluid and dynamic, as teachers constantly revisit their assumptions regarding learning and teaching within an ever-changing educational setting.

Discussion and Conclusion

The main purpose of this study was to look at exemplary online teachers' transition to online teaching by focusing on the motivational factors, successful practices, and contextual and support elements that they relate to the success of their online teaching. Using the multiple-case study, the research allowed for an in-depth look at the different successful online teachers' cases and understand the sources that support their success. The university, having a decentralized online education policy, was a good fit as a research site because it allowed for an examination of exemplary online teaching in different traditions, approaches and strategies within different colleges of the university.

Research on exemplary university teachers indicate that, when compared with other teachers, the exemplary teachers have "a more extensive, complex, and flexible repertoire of concepts of teaching effectiveness, they hold more developed concepts of self-efficacy, they use wider range of criteria for self-evaluation, and they draw upon almost twice as many

strategies for enhancing student learning” (Hativa, et al., 2001, p. 700). Investigating how exemplary teachers transfer their thinking, pedagogical knowledge, and beliefs regarding online teaching to successful teaching practices is critical to understanding new practices that occur in online learning environments. Moreover, systematically examining the teachers’ thinking about their transition to online teaching, motivational factors, successful teaching strategies, and responses to the challenges of teaching in an online environment could illuminate a rich vein of information about online teaching and provide important insights into how teaching can be best nurtured and supported in higher education institutions.

The findings of this multiple-case study showed that motivational factors played a critical role in the teacher’s adaption to online teaching. While all teachers who participated in this study were exemplary teachers and hold intrinsic motivations (e.g., trying new and alternative approaches, reaching out to the non-traditional students), the extrinsic factors (e.g., technological and pedagogical support, rewards and incentives) also played critical inhibiting and motivating roles in their decisions to teach online. The findings are in line with Cook, et al.’s (2009) results: “Faculty are intrinsically motivated to help students, but extrinsically motivated to meet their psychological needs through incentives, such as salary increases, course releases and technology support derived from teaching e-learning and DE courses” (p. 150). The findings showed that exemplary teachers had a strong inner drive to teach to and reach out to their students in different ways, create interactive learning environments, communicate through different channels, and provide students with educational opportunities as good as, and sometimes even better than, traditional face-to-face classrooms. Having this responsibility and motivation, they did not want to be part of a

‘canned’ or ‘pre-recorded’ lecture that lacked interactivity, quality, and teacher presence. Therefore, to provide high quality online courses, teachers experienced increasing length and depth of engagement while planning and teaching the online courses that involved “a strong cognitive and affective effort” (Conceição, 2006, p. 42). Hence, to continue reserving extra cognitive and affective effort into online teaching, teachers wanted to be supported and rewarded through various ways. This study also highlighted the importance of key contextual variables (e.g., amount of time spent on online teaching, overall teaching load, class size, organizational context) to teachers’ motivation to teach online, as well as to their perceptions of the challenges of teaching online.

Looking at how exemplary online teachers made a transition to online teaching, the results indicated changes in the roles and functions that teachers performed in the online environments. With the emergence of networked learning environments, researchers called for a shift in the online teacher’s role, from being at the center of the instruction to being on the side (Coppola, et al., 2002; Natriello, 2005). The findings of this study indicated that while holding on to their earlier assumptions on how students learn in traditional classrooms, teachers revisited these assumptions and beliefs for the conditions of online teaching environments. In other words, they prioritized and emphasized some of the tasks for online teaching, because they lacked the tools and conditions that existed in traditional classrooms. These tasks were:

- Knowing the course content for structuring and organizing the course,
- Planning and designing extensively to eliminate unanticipated problems,
- Knowing the students to tailor the course activities to their needs,

- Enhancing student teacher relationship to reduce the emotional and physical gap,
- Providing feedback on time to guide and monitor students' learning,
- Having constant communication to cope with the problems of latency and immediacy,
- Demonstrating teacher presence to eliminate students' frustrations and to be 'seen' and 'heard' in the online environment,
- Formatively evaluating the course to reflect on the teaching and learning experience and making necessary interventions before it is too late.

As a result, while the changes were recognized with more of a focus on several affective, cognitive, and managerial activities (Coppola, et al., 2002), teachers did not necessarily bring a separate notion of learning to the online environment. Rather, their online teaching persona was reconstructed and rebuilt upon their already established teaching beliefs and values. This finding is in line with Wiesenberg and Stacey's (2008) study which looked at the changes in teaching philosophy as teachers moved from face-to-face to online classrooms. In their study, both Canadian and Australian teachers also believed that "teaching modality does not affect teaching philosophy and that learning from both is not only reciprocal but also additive" (Wiesenberg & Stacey, 2008, p. 70).

The findings showed that while teachers hold on to their traditional teaching and learning assumptions at a more conceptual level, they were constantly confronted by the tensions and challenges that made them rethink their expectations and re-craft their teaching strategies at the practical level. For instance, while teaching a studio design course, Linda brought her design- based learning approach to the online classroom, but employed several

strategies to nurture studio learning experiences, e.g., creating online portfolios using wikis. Teaching an applied agronomy course, Molly recreated a field-based learning approach in the online environment, e.g., taking panorama pictures in the field to share with the students and conducting interviews with the farmers. The constraints and affordances of online technologies required teachers to transform their teaching strategies by taking into consideration the “complex interdependencies among a large number of contextually bound variables,” (Koehler & Mishra, 2008, pp. 10-11) such as student profiles, the subject matter, and technological and pedagogical support. By translating the principles of online learning to the demands and contingencies of their unique teaching subjects (Garrison & Anderson, 2003), all exemplary teachers in this study demonstrated expertise in reflecting on their practice and reacting to the uniqueness of their teaching contexts. They all went beyond what was provided to them initially, and searched for alternatives and new possibilities to create their ‘teaching persona’.

Teacher persona is a new emerging concept in the online teaching literature. Persona is the Latin word that is used for the masks in Greek drama. “It meant the actor was heard and his identity recognized by others through the sounds that issued from the open mask mouth” (Perlman, 1986, p. 4). Over time, the term is associated with the social role through which “a person makes himself known, felt, taken in by others, through his particular roles and actions ” (Perlman, 1986, p. 4). Similarly, in the online education literature, persona is used to define the roles that a teacher takes in an online environment. Some researchers describe it as the cumulative of affective, cognitive, and managerial roles that online teachers perform (Coppola, et al., 2002). Others argue that “each role can be a persona unto itself,

representing a different type of organization and communication that is required of the online instructor” (Dennen, 2007, p. 185). It is defined as a dynamic construct that comprises wide range of acts that “both confirm and present a different side of the persona. One’s persona may well reflect the sum or average of positions one has taken, with every speech act contributing to its development in some way” (Dennen, 2007, p. 95). Teacher persona was one of the emerging themes in this study, because when teachers described their successful practices, they often attended to their changing roles and representation of their “selves” within an online classroom. Their portrayal of the teacher self, both building on the plethora of previous experiences and being reformed with the affordances and limitations of the online environments, goes through a process where they are constantly challenged to make themselves heard, known and felt by the students and other actors. Therefore, worth considering are the many challenges that teachers face as they create their online teacher persona and make themselves visible in an online environment, especially during their transition from face-to-face teaching to online teaching.

While teachers were engaged in a series of activities to make themselves visible in the online environment for creating their teacher persona, they were also aware of the importance of the students’ presence in the online classrooms. Even though they were at distance from their students and needed to lean on technologies to build the connection, they put greater emphasis on getting to know their students. Exemplary online teachers believed that they played a significant role in their students’ learning, and they were notably inclined to develop teaching strategies with continuous reflection, practice and feedback over time. Online teaching in this context presented pedagogical advantages to the teachers with increasing

opportunities for choosing facilitative approaches and improved conditions for reaching out to the students (Major, 2010).

Understanding how teachers develop online teacher persona as they move from a traditional to a virtual classroom is critical in providing them with the necessary support and conditions for successful online teaching. While some teachers are experiencing online teaching for the first time, many others are drawing pedagogical conclusions from their own experiences as learners in blended or online classes (Dennen, 2007). Moreover, many teachers, after teaching online, start to reconsider their traditional teaching approaches with a refreshed orientation towards learning (Dennen, 2007). In fact, when asked about the effect of their online teaching in their face-to-face teaching, the teachers in this study mentioned the changes in their confidence towards teaching with technology in the classrooms, moving to a more blended type of course design, reacting quickly to the technology problems within the class, seeing more quickly what works and what does not with face-to-face students, and exploring new ways for learning, participation and community-building through emerging technologies. Considering the impact of online learning on traditional classrooms, it is critical to prepare and support teachers for online teaching so that they know what to expect and how to establish their online teacher persona through online pedagogies, and also develop positive attitudes towards online teaching.

This multiple-case study contributes to the body of knowledge by investigating the successful online teaching within five different colleges of the university. Ethnographic interviews provided rich data on motivational and contextual factors that supported teachers' online teaching practices. The results also documented common successful practices with

accompanying challenges, concerns, and solutions. As the results demonstrate, teachers reconstructed their teacher roles as they revisited their approaches to knowing the course content, designing and structuring the online course, knowing the students, enhancing teacher-student relationships, guiding student learning, sustaining teacher presence, evaluating the online courses, and creating an online teacher persona. Teachers struggle to make themselves visible and heard in an online environment, by constantly challenging their already established roles and creating their online teacher persona. Whether they create successful online teaching practices depends on whether and how they harness personal, professional, contextual and organizational factors regarding to teaching online. The findings of this research provide opportunities to guide future research as well as to inform current practice on online teaching, mainly for those working in similar contexts.

Implications for Research

A growing body of quantitative research literature emerged in the last decade on examining the trends on faculty's perceptions of advantages and disadvantages of online learning. However, as Major (2010) stated, few of them examined the perceptions of teachers who actually taught online and they "do not convey rich, thick description about the lived experiences of faculty teaching online or the changes they experience in the online environment" (p. 2161). Therefore, it is important to systematically examine how online teachers apply new practices in different online teaching contexts and cultures.

A number of qualitative studies investigated teachers' experiences with online teaching (Conceição, 2006; Coppola, et al., 2002; Major, 2010) and examined the roles enacted, changes that occurred and challenges faced while teaching online. "Several scholars have acknowledged that teaching online changes faculty work and asserted the importance of understanding these changes, particularly so that institutions may encourage faculty participation and improve course success" (Major, 2010, p. 2157). While "the advance of distance learning has already shown signs that point to an unbundling and reconfiguration of the faculty/teacher role" (Natriello, 2005, p. 1895), a large number of online teaching practices still do show the signs of this shift. In other words, the research on online teaching has been limited in terms of informing the practices of online teachers. Therefore, there is a need for research that actually focuses on online teachers' lived experiences with the success factors and conditions that nurture their online teaching experiences. Thus, this research study was an attempt to listen the voices of exemplary teachers in different disciplines and interdisciplinary contexts in order to deepen the understanding of how different discipline cultures influence teachers' online teaching experiences and what common themes are apparent among those different contexts that foster successful online teaching. Extending this research into several different online teaching contexts that are part of different institutional structures, additional focused studies would deepen the understanding of online teaching and the changing role of online teachers in higher education.

While the results of the study are bound to the contextual dynamics of this higher education institution, conclusions gathered from different online teaching contexts can be applied and implemented in different settings. Building on the results of this study, future

studies could focus on single aspects of online teaching and their relationships to the changing practice of teachers, e.g., changes in online course planning and design patterns, or changes in the student-teacher relationship. Research has focused on teaching presence, social presence, and immediacy (Anderson, et al., 2001; Baker & Woods, 2004; Richardson & Swan, 2003), yet many of the pedagogical strategies described were built on the patterns borrowed from classroom-based learning (Natriello, 2005). However, social and open online learning environments are becoming commonplace in the higher education culture. Hence, future studies could explore emerging pedagogies and the shifting roles of teachers in this networked world.

This multiple-case study should also be followed up with larger sample studies that examine the interrelationships between institutional and workplace variables and teachers' beliefs about online teaching and their actual teaching practices, as these factors have a strong impact on students' learning in online courses.

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APPENDIX 1-DETAILED CASE VIGNETTES**Case Vignette 1: Teaching Visual Design Online**

Linda is nominated as the most successful online teacher in the Engineering Distance Education Program at Iowa State University. She has more than 20 years of teaching experience in face-to-face and three years in online environments. She has a dual appointment both in the Graphic Design and Human Computer Interaction programs and she has been teaching online visual design courses in the HCI graduate program for three years. The HCI graduate degree program is targeted to professionals in business and industry, and is supported by Engineering Distance Education (EDE) that offers a wide-ranging suite of tools, communication technologies, virtual labs and classrooms to support faculty in their online teaching.

Brian, the program coordinator at EDE, is responsible for online course management, professional development, program development and online course development for off-campus courses. According to Brian, full-time and half-time students are completely different in terms of their goals and expectations from online classes. Half-time students come from a wide range of backgrounds and want to learn and experience more practical information that they can use in their professional lives. He indicates the characteristics of a successful online teacher as: providing collaboration and team work opportunities, encouraging students to explore beyond what they learn in the class, providing them with research and project work opportunities, helping them to learn certain concepts that they can apply to their work, and having students get the big picture from the class. In terms of course

activities, he lists the successful teaching components: Communicating the objective of the class, having a clear schedule of expectations, communicating clearly, providing office hours and communication platforms where on-campus and off-campus students collaborate and communicate, providing online live feedback sessions. Considering these, Brian nominated Linda as the most successful online teacher in EDE and elaborated on her characteristics as a successful online teacher: Patient, willing to learn and try, not afraid to let people know that she doesn't know, enjoying teaching, changing, communicating with the students and providing frequent feedback to the students.

Linda is a full-time, tenured associate professor in the College of Design. She has had more than 20 years of face-to-face teaching experience. She started teaching while she was obtaining her MFA degree in College of Design about 20 years ago. She has taught undergraduate classes in multimedia, animation and graphic design. She has been teaching the "Visual Design for HCI" online course in the College of Engineering's online HCI degree program during the summer terms. The course is targeted to the working professionals and non-traditional students who are enrolled in an online certificate program in HCI. Her students are either working professionals, stay at home moms, or people who just left their workplace and are trying to obtain another degree before going back into the workforce.

Although she has offered the same class to the on-campus graduate students, keeping the course content the same, she changed the course structure and teaching methods to adapt to the needs of her distance students. She finds herself teaching in three or four different time zones at once in her online classes. "I try to group my students in their time zones, try to think who is awake now".

Linda's visual design class requires her students to engage in design activities, such as designing logos, typography, working with colors, game design, interface and web design. She thinks that her class is unique and different than other classes (which usually include reading a book, taking a test, giving handouts, listening to a lecture, writing a paper etc.) as the nature of the design course requires more individual contact. For this reason, she recreates a studio experience for her students using Adobe Connect, bringing groups together in synchronous feedback sessions and sending desktop-shared Adobe Connect recordings to individual students with feedback. The Distance Education center provides her technical support. Her thinking and design process included several brainstorming sessions on content design (breaking down the content), interaction (student-teacher, student-student), student understanding and characteristics, and collaborative working.

Case Vignette 2: Teaching Coastal Policy and E-democracy Online

Robert is nominated as the most successful online teacher in the College of Liberal Arts and Sciences. He teaches online courses within the Online Master in Public Policy and Administration program. The online program aims to prepare students for public service leadership in public administration and is designed to prepare or improve the performance level of mid-career public managers and administrators. Robert teaches Coastal Policy and E-democracy, which has been offered asynchronously to students all over the world. He has been teaching at distance for 40 years and was one of the first teachers who tried online teaching at the university.

Sean, the director of College of Liberal Arts and Sciences Center for Distance and Online Learning (CDOL), manages the online education support activities within the center,

such as offering teachers resources and best practices, having course planning and design meetings, helping with the student support, providing testing services and course evaluations, and helping with the technical platforms. According to Sean, successful online teaching starts with laying out the course needs very carefully and designing visually appealing courses with easy navigation. He emphasizes the importance of constant communication with the students, engaging them with the course activities with the mixed delivery options, providing constant feedback, keeping the course exciting, bringing experts to the online class, providing collaborative activities, assessing course needs and refreshing the course on a continuous basis. According to Sean, a successful online teacher knows the subject matter very well and is aware of the best practices. David nominated Robert as the best online teacher within the program because Robert follows many of the principles of developing successful online courses, such as using creating visually appealing short modules to organize the course on the course LMS, communicating with the students, and creating a student-centered learning environment. Robert's expertise in the subject matter, ability to incorporate various activities and evaluation methods into the online courses were also mentioned as characteristics that make him a successful online teacher.

Robert has been an active teacher in the distance education courses and programs for twenty-five years. Previously, he taught distance courses by correspondence and by airplane. He used to fly to course sites all over the state, teach and fly back on the same day. Therefore, teaching at a distance and to non-traditional students has always been something he has done until he started working with computers. He was one of the early adopters of teaching with computers and the Internet, when in the early days, he took all the courses and attended workshops on HTML to learn the computer and Internet operations. When the

university started working on the possibility of using Internet for distance education, he was one of the first professors to experiment online teaching. Robert developed five courses and taught them both within the university and for another institution where he works as an affiliate. The institution's investment in online education provided him the support to develop online courses specifically for that center.

Robert teaches a summer Coastal Policy course, which is cross-listed for both undergraduate and graduate students. He also teaches an "E-democracy" course online, which deals with the impact of the Internet on government and politics. He also develops short online courses and workshops on identity theft protection. Robert's classes include students from all around the world who are interested in the topics presented in his courses. He teaches his courses asynchronously and this attracts people from different time zones and locations to take his class. Robert spends a lot of time on the preparation, design and teaching of his online courses. For instance, he records short 3-minute digital comments about the course materials for the weekly modules and shares them on Youtube with his students. Since the nature of his courses requires up-to-date materials, he builds the course content with the students by identifying the documentaries, readings, topics and case studies. He values teacher presence, flexibility, student involvement, interactivity, instructor motivation and autonomy, and paced and updated course structure.

Case Vignette 3: Teaching Latin and Classical Studies Online

Helen is nominated as the most successful online teacher in the World Languages and Cultures Center within the College of Liberal Arts and Sciences. Helen has been teaching face-to-face for 30 years and online for four years. She teaches Latin and Classical Studies

courses online as part of the Classical Studies program. Students from diverse backgrounds who are interested in ancient languages take these courses. Helen created the Latin course starting with the content she used in her face-to-face courses. She created the Classical Studies Terminologies class content for face-to-face and online teaching formats from scratch.

Oscar, the director of Languages Studies Resource Center (LSRC) at the Department of World Languages and Cultures, nominated Helen as the most successful online teacher within the department. Oscar directs LSRC, the technology language-learning hub for the department, and has been actively involved in the planning, design and implementation of the online courses that were developed as a result of successful grant proposals. He usually helps teachers with the instructional design and graphic design of their courses, supporting them with the technical issues as well. According to Oscar, successful online teachers have natural teaching skills by setting the tone at the beginning and creating immediate presence in the course. He describes teacher presence and communication as the two most important characteristics of successful online teaching, along with creating different modes of communication channels such as videos, creating a social presence, having clear goals, nurturing interactivity within functional platforms. Oscar nominated Helen as the best online teacher, not only because she has been involved in the development and teaching of the online courses, but also because she is quick to respond to her students' questions and problems. She identifies problems and changes the direction of the activity and the course to answer the needs and solve the problems. According to Oscar, she "does it very gracefully and naturally".

Helen uses various online learning activities for students to engage in learning units of Latin and Classical studies. Since these courses have discreet and contained content, she designed series of units with learning activities in a course management platform with the help of Oscar and teaching assistants. She also created online presentations and drills to present to students how to perform a linguistic analysis of a text with the help of an instructional designer. She emphasized less student-student interaction, but more student-content interaction due to the content nature of the courses.

Case Vignette 4: Teaching Agronomics Systems Analysis Online

Molly teaches agronomy to graduate students across the United States in an Online Masters of Agronomy program. The masters program is aimed at professionals working in industry and government; it emphasizes the development of superior problem-solving and communication skills. The majority of her students are from the U.S., and the rest are from Canada. Molly has 24 years of teaching experience in face-to-face and 10 years of teaching experience in online environments. Molly teaches the Agronomics Systems Analysis course. In this last course in the program, she connects all the previous courses and what students have learned in the program.

Jude works as a program coordinator and instructional development specialist for the M.S. in Agronomy program. His works with students on the coordination of the information, answers their e-mails, prepares online orientation materials, course information, and job aids, plans for on-campus meetings, conducts the evaluations of the program and the courses, and creates reports and performing the tasks related to the program management. He also works with teachers to help them with their needs of the technology platforms and other student

issues that teachers may have. Jude associates successful online teaching with the student course evaluations. He thinks providing educational opportunities for non-traditional students already results in success as those students would not have the opportunity to get their degrees otherwise. He also emphasizes the importance of building relationships between faculty-students and student-students, learning from each other in a diverse program, communicating well and often with the students, grading in timely fashion, giving feedback on the grades, being available (e.g., office hours), and having an interest in getting to know the students. Jude nominated Molly as the best online teacher in the program based on the feedback received from student evaluations.

In contrast to the other teachers in the program, Molly uses a constructivist approach in her teaching. She teaches the last course in her program by trying to connect all the previous courses through real-life uses and decision case studies where students work with real farmers, simulating face-to-face field trips with virtual asynchronous field trip experiences. For instance, she creates virtual field trips and elicits questions from her students for the farmers before the trip; she goes to the field to record interviews with the farmer; and she collects field information by taking 360 degree panorama pictures of the field, aerial photos, soil test results, etc. She then incorporates cases within discussion forums with peer-critiques of the decisions made. The development lab supports her on the development of the technologies.

Case Vignette 5: Teaching Models of Teaching Online

Erin has been a lecturer and instructor in the Family and Consumer Sciences Education program since 2000. She earned her Master's degree and PhD from the same

department in which she is now teaching. She has 10 years of teaching experience in online environments. Her online courses show variety in terms of student profile, content and the organizational structure. Her students include teachers who are taking courses online to fulfill the requirements of the Family and Consumer Science Teaching License and students earning their degrees through a consortium that offers online degree, certificate and course share programs. Her university is one of the universities that is involved with this consortium.

Kim works as the College of Human Sciences online course coordinator within the Office of Distance Education and Educational Technology (ODEET) that provides logistical support for online education courses and programs to the departments, instructors, and students. The office's services include maintenance of the class websites collection, LMS support, Adobe Connect support, technical assistance with the streaming audio and video, instructor training for online and distance hardware and software. She is the instructional designer and works with teachers who design and teach online courses within the college. Kim emphasizes the importance of organization and planning as important elements of successful online teaching. Other characteristics include thinking about student experiences, communicating student roles and responsibilities, bringing students' life experiences to the activities, considering different learning styles, helping students evaluate their own progress, being thoughtful, thinking of alternative ways to solve when things don't work, responding to individual student needs, being motivated and interested, and knowing the content very well. Kim nominated Erin as the most successful online teacher within the college based on the aforementioned characteristics and the student evaluations. Erin gives a lot of individual

attention to her students, thinks about her students' experiences and anticipates their problems.

Erin designed and taught four online classes and has created various activities for students to engage in online discussions. Taking students through seven steps, she organizes them in teams according to their personalities and abilities. She gives them a handout with the discussion activities in that week, including the readings and other additional resources. She wants them to apply the theoretical readings to real-life and classroom experiences in their discussions and facilitates group discussions throughout the week. She provides a rubric for the discussion evaluation to clarify expectations.

Case Vignette 6: Teaching Biorenewable Systems Online

Justin is nominated as the best online teacher within the College of Agriculture and Life Science's Center for Technology and Distance Education. He started teaching after 10 years of working in a company. He is now the Director of Assessment in the College of Engineering and serves as the Interim Director of Online Learning at College of Engineering. He has been teaching online for 3 years and face-to-face for 13 years. Justin teaches an online cross-listed biorenewables course to undergraduate students from various majors. His course has both online and face-to-face sections with around 80 students taking it per semester. He also teaches the Preservation of Grain Quality course to undergraduate students with both face-to-face and online formats.

Luis, is the director of College of Agriculture and Life Science's Center for Technology and Distance Education for seven years. He has been providing technology

support for on-campus and off-campus courses. The services include capturing live courses and recording them for delivery, helping with the design of online course platforms, providing help with the online program delivery and student support. Luis thinks that successful online teaching includes many elements of successful face-to-face teaching, such as having a good quality syllabus, communicating the course expectations to the students, responding to students in a timely manner, using various methods to organize the course content, being conscious of the course activities, having a good understanding of the discipline, doing adequate research and bringing in current research findings, looking at what peers are doing, listening to technology support staff and not being afraid to try new methods. Based on these criteria and student evaluations, he nominated Justin as the most successful online teacher. Luis thinks that Justin is dynamic, fun and full of energy. He also teaches brand new, cutting-edge courses, which received high marks from his students.

Justin uses a video recording platform in his face-to-face course with video, audio, and tablet pc components so that he can later post class recordings with the notes online. Since he teaches technical subjects, he uses online tools for students to engage in working problems and exercises. For instance, he creates online, calculated problems for students to solve with different combinations of problem sets.

APPENDIX 2: DEMOGRAPHICS QUESTIONNAIRE

Title of the Project: *Investigating Successful Online Teaching*

Principal Investigator: *Evrin Baran* (evrimb@iastate.edu)

Date: _____

Participant #: _____

- Gender: Female Male
- Age: _____
- Race: _____
- Nationality: _____
- Country of birth: _____
- Highest degree earned: _____
- Center/Department/College: _____
- Faculty Status (full time, part time, adjunct): _____
- Years of teaching experience face-to-face: _____
- Years of teaching experience online: _____

APPENDIX 3: PROGRAM COORDINATOR INTERVIEW PROTOCOL

Date: _____
 Start Time: _____
 End Time : _____
 Participant: # _____

Warm-up

- 1) Sign “Informed consent statement.”
- 2) Give “Demographic sheet” to fill in.
- 3) *[Instructions to the interviewer: “Thank you very much for making time for this interview. The goal of this study is to understand the context of online teaching in your department/institution. Since you work with faculty on the design and development of online courses, you are an ideal candidate who would provide us details on how faculty teach online, their needs and how you help or consult them during this process. Everything that will be said in this interview will be kept confidential. Please feel free to ask for any clarification at any time. If any question will make you uncomfortable, just say that you prefer not to answer.”*
- 4) *Ask permission to tape the interview. If the interviewee does not give permission to tape the interview, take notes.]*

Introductory questions

[Don’t look for in-depth answers here. If the interviewee gives you short answers, no need to ask for elaboration, unless you do not understand something. But if they want to give you a comprehensive idea about their background, let them talk if it does not take more than 10 minutes.]

- Could you give me some information on your academic background?
- Could you give me some information about your professional experience prior to coming to the University? (e.g., Field of study, Company, Job title/Function, Years with this company, etc.)
- Could you describe your current position? (e.g., Company, Job title/Function, Years with this company, etc.)
 - Allen Green: Instructional Development Specialist for the Master of Science in Agronomy distance education program.

- Could you give me some information about your experiences related to online teaching/learning experiences prior to coming to this university?

Focused questions

Q1-How do program coordinators work with the faculty who teach online?

- I want to learn a little bit about the context of the distance program that you are involved in. Tell me the context of the program you are working in.
 - Master of Science in Agronomy at a distance.
 - How is it structured?
 - How long has it been offered?
 - Student Profiles?
- Tell me how you work with the faculty who teach online?
 - How many faculty do you support?
 - What is your role in the analysis, design, development, implementation or the evaluation of an online course?
 - How do you interact with the faculty during this process?
 - How often?
 - How do you help or consult faculty?
 - What is your role in the online teaching context?
 - Pedagogical support
 - Technological support
 - Content support
- What types of technologies are you and faculty using in the online courses you design and develop? (e.g., WebCT, Moodle, Web 2.0 tools)? Please describe the types of technology and how you are using it to support student learning?

Q2-How do program coordinators define successful online teaching?

- How do you describe successful online teaching?
 - What do you think online educators need to know in order to teach online successfully?
- Based on your criteria on successful online teaching, could you please provide 3 nominations for faculty who you think teach online successfully?
 - Having taught at least one online course or teaching an online course this semester
- How do you think they perceive their teaching process as an online instructor in the online environment? What are their teaching approaches?
 - Examples: (Community centered, Content centered, Assessment centered, Teaching centered?)
- What types of professional development experiences does online faculty need?
- Are you providing any professional development activities to help faculty teach online?
 - What format are you providing these professional development experiences to take to best meet faculty needs?

Closing question

[Instructions to the interviewer: With this question, I would like to address some of the issues that could have been left out and that are important for the research.]

12. Is there anything else you think will be helpful for me to know about online teaching and learning?

APPENDIX 4: ONLINE TEACHER INTERVIEW PROTOCOL

Date: _____
 Start Time: _____
 End Time : _____
 Participant: _____

Warm-up

- 5) “This is the typical IRB consent with all the elements, do you mind to read and agree to sign?” [*Sign “Informed consent statement.”*]
- 6) Do you mind to fill in this demographics questionnaire? [*Give “Demographic questionnaire” to fill in.*]
- 7) “Thank you very much for making time for this interview. The goal of this study is to understand how successful online teachers teach online. Since you are identified as the most successful online teacher in this college, I would like to learn how you teach online and what you think about your online teaching experiences. I am particularly interested in a comprehensive picture of what it is like for you to teach online. Your experiences and opinions are extremely valuable for this study. Therefore, I would like you to share as much information as you can about your online teaching experiences. Everything that will be said in this interview will be kept confidential. Please feel free to ask for any clarification at any time. If any question will make you uncomfortable, just say that you prefer not to answer. Could you give me the permission for taping the interview”
- 8) [*Ask permission to tape the interview. If the interviewee does not give permission to tape the interview, take notes.*]

1. Initial Background Questions

- Could you list the degrees you earned as of today?
- Could you list professional positions you have held as of today?
- Can you tell me which courses you teach online? Which context? Who are your students?

2. Grand Tour Questions and Probes

Ask the following open-ended questions, imposing absolute minimum amount of structure upon the faculty response.

- **You were nominated as the most successful online teacher in the ____ College. What do you do that makes you the most successful online teacher?**

- **Tell me how you teach online and what you think about successful online teaching?**
 - What are the best practices in your teaching? Please give examples.
 - How do you prepare for online teaching?
 - What is your involvement in the online course design?
 - How do you design learning activities to engage students?
 - How do you communicate with the students?
 - How do you do course evaluation?

- **How did you make a transition from face-to-face to the online teaching in a way that you bring a successful practice to live?**
 - What differences in terms of your roles do you perceive between face-to-face teaching and online teaching?
 - How is your role as teacher different online?
 - How is the roles of students different online?
 - What were the challenges? How did you meet them?
 - Has becoming an online teacher changed your face-to-face teaching? How?

- **How do you get the support you need?**
 - What resources have you found to be valuable when you teach online? (people, web sites, workshops etc.)
 - With what aspects of teaching online do you need instructional assistance? How would you like to receive the assistance? Can you give some examples?
 - What aspects of your online teaching do you feel could be improved?

- **How do you describe successful online teaching?**

- What specific experiences, qualities, or knowledge do you consider to be most important to success as an online teacher?
 - What aspects of your role are particularly effective in leading to better student learning or meeting diverse needs?
 - You mentioned ... and as critical for successful online teaching. Is there any other advice you find critical that you would share with people considering becoming online teachers?
-
- **What else do I need to know to understand what you feel is important to preparing and supporting online teachers?**

Very little research has been done on what successful online teachers do. Your willingness to share your experiences demonstrates your commitment to the teaching profession. Thank you for sharing your expertise.

APPENDIX 5: CROSS-ANALYSIS OF PROGRAM COORDINATOR INTERVIEWS

| Program Coordinator | Criteria for Successful Online Teachers | Selection Criteria for Nominating the Teachers |
|------------------------------|---|--|
| Jude Agronomy | <ul style="list-style-type: none"> • Communicates well with the students • Grade timely • Faculty involvement • Motivation to teach • Get to know the students • Faculty availability | Molly <ol style="list-style-type: none"> 1. Use constructivist methods 2. Use case study approach |
| Kim Human Sciences | <ul style="list-style-type: none"> • Be organized • Think about student experience • Be descriptive about the responsibilities • Focus on learning not testing • Bring student life experiences • Make things work • Consider different learning styles • Provide ways for students to evaluate their progress • Present materials in different ways • Think alternative ways if things don't work • Respond to individual students • Explain roles | Erin <ol style="list-style-type: none"> 1. Fundamentally great teacher 2. Very motivated to teach 3. Kind and Caring 4. Thinks about student experience |
| Oscar Modern Languages | <ul style="list-style-type: none"> • Set the tone naturally • Communication • Instructor presence • Have clear goals • Have good interaction tools • Functional tools • Quick to respond to the questions • Feel when something is not going well • Time management | Helen <ol style="list-style-type: none"> 1. Quick to respond to the questions 2. Feel it when something is not going well 3. Doing teaching very gracefully and naturally |

| Program Coordinator | Criteria for Successful Online Teachers | Selection Criteria for Nominating the Teachers |
|----------------------|---|---|
| Brian Engineering | <ul style="list-style-type: none"> • Collaboration between on campus and off campus students • Teamwork across time zones and places • Give opportunities for students to explore beyond what they learn • Provide the tools to communicate among team members • Get student feedback regularly • Give work related applied information • Be clear • Clear schedule expectations • Clear communication • Do office hours or discussion forums | Linda <ol style="list-style-type: none"> 1. Patient 2. Willing to try anything 3. Not afraid to let know that she doesn't know 4. Want to learn and try more 5. Enjoys teaching 6. Feedback 7. Communication 8. Always changing |
| Sean Liberal Arts | <ul style="list-style-type: none"> • Course laid out very carefully, easy to follow • Visually appealing, uncluttered • Constant communication with students • Engaging with students • Provide feedback to students • Keep course exciting • Know the subject matter • Continuous assessment | Robert <ol style="list-style-type: none"> 1. Visually appealing courses 2. Broken into short modules 3. Organized well 4. Provide discussion between students and the instructor 5. A lot of communication 6. Use tools and make it easy to follow 7. Well done tests 8. Student centered 9. Expert in the subject matter 10. Incorporates fun things to the course for engagement aimed for students |

| Program Coordinator | Criteria for Successful Online Teachers | Selection Criteria for Nominating the Teachers |
|----------------------------|--|---|
| Luis Agriculture | <ul style="list-style-type: none"> • A good quality syllabus • Responds to the students in a timely manner • Use variety of methods to present the content • Give feedback to students • Be very conciseness • Value students • Do course evaluations • Good understanding of the discipline • Collaborate with peers • Not afraid to try new technologies | Justin <ol style="list-style-type: none"> 1. Dynamic person 2. Energetic 3. Get high student evaluations 4. Respond back in a timely manner 5. Good quality syllabus 6. Be flexible with students |

CHAPTER 4: IMPLICATIONS FOR PRACTICE: SUPPORTING ONLINE TEACHERS

Abstract

This article presents a framework that can be used as a guide the design, development, and sustainability of online teacher support and professional development programs. This framework intends to recognize successful online teaching as the outcome of interaction of factors at three different levels—teaching, community, and organization. Because teachers hold key roles in determining whether online learning is implemented successfully in higher education institutions, their preparation and support for online teaching need to be ensured with the combination of multiple layers within this multilevel support ecosystem.

Supporting Online Teachers

The rate at which higher education institutions are entering the online learning is increasing rapidly. However, in spite of the growing popularity and dissemination of online learning opportunities, distinct pedagogies for online learning have not yet emerged (Levine & Sun, 2002). While universities embrace online education, having the lack of preparation and readiness, teachers find it challenging to adopt a new and unfamiliar educational territory where the interactions between the student, teacher, content, and the learning environment show a greater change from what they are used to in their traditional teaching environments.

Moreover, because pedagogy for online teaching is not fully established, having a little (if any) prior experience on teaching online, teachers tend to transfer traditional approaches to the online classrooms, and continue teacher-centered approaches that are already present in traditional classrooms.

Developing online learning that is centered on achieving classroom-like conditions resulted in “the status quo and reinforced the defensive strategy in higher education” (Garrison & Anderson, 2003, p. 8). Moreover, the technical and functionalist orientation towards online teaching viewed online teachers as passive agencies who were expected to take the given roles and have limited voices in defining and shaping their experiences (Rennert-Ariev, 2008). When teachers are confronted with the challenges of interacting and representing their teacher self in a new environment, they need training and ongoing support programs to address their needs, individual dispositions, external social demands and capabilities/constraints within their unique teaching contexts.

Because teachers hold key roles in determining whether online learning is implemented successfully in higher education, their preparation and support for online teaching need to be ensured at different levels. Similarly, because their role in the online environment is dynamic and multi-dimensional, professional development approaches need to focus on teacher transformation with an ecological perspective as they inquire into their practice and “engage in pedagogical problem solving and discovery about online teaching” within their disciplines (Kreber & Kanuka, 2006, p. 122). An ecological perspective of online teaching support and development recognizes successful online teaching as the outcome of interaction among many factors at three levels—teaching, community, and organization.

Figure 4.1 depicts this layered perspective of professional development and support and suggests a framework where online teaching is nested within a multilevel support ecosystem: (a) Support in teaching (e.g., help in the design and teaching level), (b) Support in building community (e.g., nurturing and supporting a learning community among the teachers), (c) Support in organization (e.g., motivating faculty through the rewards, incentives, and recognition). This framework evolved from the lessons learned from conducting the critical review presented on Chapter 2 and the research on successful online teaching presented in Chapter 3. It also represents my own insights as a graduate student taking online courses and my significant experiences on online teaching.

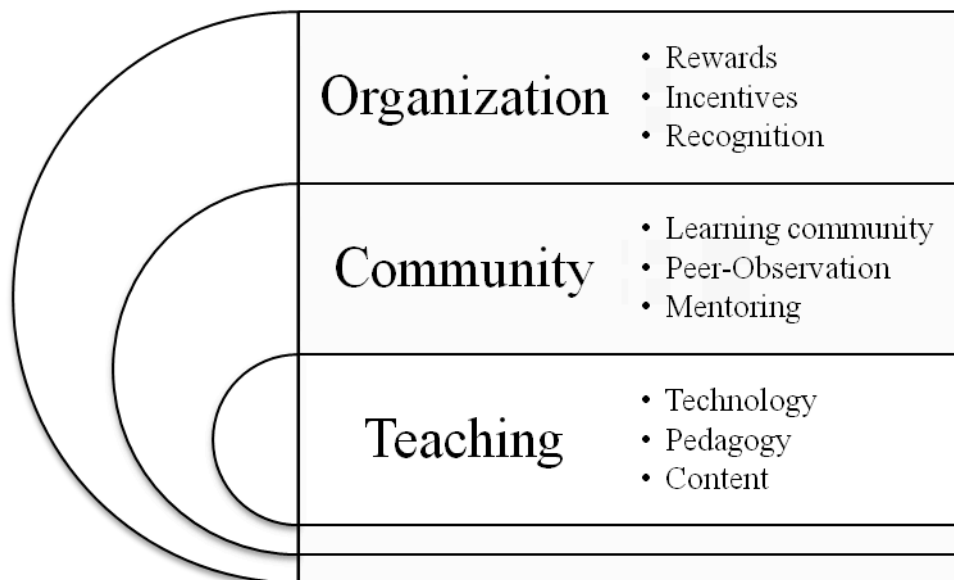


Figure 4.1 Levels of teacher support

Levels of Teacher Support

Support at the Teaching Level

Supporting online teachers at the teaching level is critical in the creation of transformative learning experiences for faculty who find themselves empowered and challenged in a new teaching environment (Major, 2010). Teachers may feel uncertain, uneasy, and unprepared for the challenges of teaching online, lacking the tools and conditions that they use to establish their expertise and teacher persona in the traditional classrooms (Major, 2010). Support and development programs, therefore, are critical in helping teachers engage in the process of pedagogical inquiry and problem solving as they reflect upon the interactions between content, online technologies, and pedagogical methods within their unique teaching contexts.

Technology support is a key factor in nurturing successful online teaching practices. Teachers, especially during the transition phase, need ongoing help in terms of making decisions about which technology platforms to use, structuring the course in the online learning environments, making sure that technologies work, troubleshooting when unexpected problems occur, helping students with their technology issues, and setting up the technological infrastructure. While some teachers may feel comfortable with a single online learning platform, others may want to have different options available to use and experiment with. Moreover, as teachers advance in their online teaching practices, they may want to explore alternative tools for different pedagogical purposes. Therefore, providing them help

in terms of support with tools based on their technology proficiency levels, and guiding them as they explore new ones, is crucial in enhancing the excellence of online teaching.

While setting up the technology structures and providing training on using the technologies are critical in increasing teachers' familiarity with the online tools, technology-focused professional development and support approaches may be limited in helping teachers transform their pedagogical methods into the online environments. Literature indicates that teachers are more concerned about the issues regarding the design and development of their online courses more than the skills related to the use of technology tools (Taylor & McQuiggan, 2008). Moreover, treating technology separate from pedagogy and content within a particular online teaching setting may not be enough in equipping teachers with the necessary knowledge and skills for effective online teaching.

What teachers need is understanding of how their existing pedagogical methods can (or cannot) transfer to the online environment and how they can create new teaching methods with learner-centered approaches. Additionally, knowing what online technologies exist for particular pedagogical tasks (e.g., enhancing collaboration, fostering reflection), and how online pedagogies address the needs of the students are also critical as teachers make design and teaching decisions in their teaching contexts. Teachers not only need support with the technology, but also with understanding of what online technologies can afford in terms of the representations of the course content, and how the online courses can be designed to engage students with the learning activities.

Teachers generally consult to the local or university-wide support centers and get help from instructional support specialists, instructional designers, teaching assistants, library

specialists, or audio-video producers (Lee, 2001). One of the most common methods that these centers or offices offer is conducting workshops or showcases about information regarding the features of target content management platforms, details on building a syllabus, video editing, online content design, and course evaluation. Training programs vary from the offerings of required intensive courses to the voluntary training modules created and implemented within the universities (Taylor & McQuiggan, 2008).

Training and workshop methods seem to be helpful in terms of equipping teachers with necessary pedagogical and technical skills. Although they help teachers build confidence and stimulate their interest in online teaching methods and platforms, they may become inadequate in terms of answering individual teacher needs. Since teachers are at different levels of understanding and using technology based on their experiences and knowledge regarding online teaching and learning, their needs require different levels of support and training (Samarawickrema & Stacey, 2007). Moreover, the design of online teaching experiences requires understanding of the complex interactions between several elements within a particular teaching context. Therefore support and professional development approaches should not treat online teaching as a context free “one-size-fits-all” solution (Rovai & Downey, 2009). Instead, individual teacher’s prior learning and teaching experiences, attitudes, teaching methods, visions and working styles need to be addressed with customized solutions. Therefore, teachers need to be provided with one-on-one assistance in terms of course design and scaffolded learning opportunities that are customized for their schedules and learning styles (Tallent-Runnels, et al., 2006).

One of the barriers with regard to preparing teachers to teach online is the element of time. Due to their busy schedules, teachers may be reluctant to spend time on professional development activities. Teachers prefer learning experiences that are variable and informal, supported with “flexible scheduling, short sessions, and one-on-one support for anytime, anywhere professional development” (Taylor & McQuiggan, 2008, p. 35). For online teaching to be integrated and embraced by the teachers, higher education institutions should provide various opportunities for them to find the support and ongoing help as and when required. Furthermore, readily available and accessible key support center/personnel are needed for teachers whenever they need to discuss their questions, issues and problems.

Support at the Community Level

Supporting teachers at the teaching level with customized assistance and one-on-one consulting is critical for enhancing their transformative learning about online teaching. Such transformation, yet, need to be encouraged within a collaborative learning community in which teachers explore their online teacher persona while “negotiating practical issues, collaborating, reflecting, ‘revealing’ personal work to other faculty members, risk taking and exposure—all of which challenge their basic assumptions and former points of view” (Zellermayer & Margolin, 2005, p. 1277).

Incorporating collaborative work groups, community building, and group discussions into the professional development programs, and sustaining their continuity is crucial for online teacher support and development. Teachers, having the opportunity to participate in

communities of practice, can transform their teaching by socially constructing their knowledge and practices (King, 2002). Peer observation, peer-evaluation, and formal and informal networks are some of the ways that can help teachers adapt to the online teaching environment easily (Samarawickrema & Stacey, 2007).

Investigating the factors affecting the adaptation of web-based learning and teaching, researchers found that “collegial learning groups were strong enabling actors that contributed to experimentations with technology, cross-fertilization of ideas, problem solving and, continuing dialogues on the topic” (Samarawickrema & Stacey, 2007, p. 325). Similarly, the findings of this case study also indicated that teachers who belong to both formal and organized social networks and collegial learning groups as well as informal groups, adapt better to the web-based teaching environments. Therefore, creating an online community of practice with a special focus on peer-support has a potential for extending learning communities outside of the formal professional development programs and sustaining the conversation on effective online teaching environments (Rovai & Downey, 2009). Moreover, along with getting support with teaching methods and tips, teachers can engage in a “psychological and emotional support to relieve some of the frustrations they experience with distance education (Lee, 2001, p. 39).

The development of peer support programs varies depending on the organizational culture and teachers’ needs. Common practices include pairing an experienced online teacher with a novice, or less experienced teacher, and allowing them build a mentoring relationship to nurture and share their best practices (Milheim, 2001; Taylor & McQuiggan, 2008).

Having novice teachers teach with experienced teachers is also another method that can be used to support novice online teachers.

Building a community around online teaching is also fostered through formal channels, in which teachers share ideas during annual university conferences held specifically on online education. Teachers share successful stories and best practices, review and evaluate the online courses and build a community focusing on the issues of online education (Howell, Saba, Lindsay, & Williams, 2004). Communities of practice can also be created by initiating teamwork and facilitating the collaboration between instructional designers, media specialists, librarians, and technology specialists (Howell, et al., 2004). Observing other online teachers' quality courses help teachers visualize their own online teaching and develop their strategies for online teaching.

Teachers value the opportunities for participation into the learning and professional development communities as they make a transition from face-to-face to online teaching environments. However, they also need to be supported at the organizational level in order to ensure their commitment and sustained interest for online teaching.

Support at the Organization Level

The support and recognition at the administration level were stated as the critical motivational factors of teachers' participation to online teaching (Cook, Ley, Crawford, & Warner, 2009). Because teachers experience workload increase as they prepare and teach online, they spend extra time adopting to new work habits and learning new technologies

(Samarawickrema & Stacey, 2007). Therefore, higher education institutions must build teacher reward systems to recognize the extra effort that is necessary for teaching high quality online courses. Rewards can be provided in the forms of credits towards tenure and promotion, financial stipends, or release of time for course development (Chen & Chen, 2006; Maguire, 2005; Samarawickrema & Stacey, 2007). When teachers see online learning as academically respected within their organizations, they will be more motivated and confident to teach online which will not delay, or prevent their tenure process.

Positive organizational culture towards online education is another critical factor in the development of positive attitudes towards online teaching. If teachers observe that online teaching is respected, rewarded, accessible, and flexible within the organizational culture, they can be more motivated to teach online. Moreover, providing a technology infrastructure is not enough for faculty to be motivated to teach online effectively. Distance education “is fundamentally an academic issue, not a technological one. Although IT may be the stimulus or change agent, the essential matters are complex and will be the purview of academics” (Oblinger, Barone, & Hawkins, 2001, p. 15).

The quality of online programs is strongly correlated with how the development approaches respond to the needs of the teachers. These needs should be addressed from the orientation phase when teachers are prepared to teach online until the implementation and evaluation phases when they are supported through various channels. Teachers need to be equipped with information about the school culture, policies and procedures, online student characteristics and needs, online pedagogies that they can employ in their particular teaching contexts, recognition methods for quality work, and ways to develop a sense of collegial

spirit among the online teaching actors (Rovai & Downey, 2009). Moreover, the policies related to intellectual property and ownership need to be communicated in order to address concerns and potential problems in future practice.

Final Remarks

The purpose of this section was to present a framework that can be used as a guide to design, develop, and sustain online teacher support and professional development programs. This framework intends to recognize successful online teaching as the outcome of interaction among many factors at three levels—teaching, community, and organization. It is not just one level that brings the results of successful online teaching, but rather the combination of many layers within this multilevel support ecosystem.

Each teacher brings a unique set of needs and expectations to the online teaching context. During their transition to online teaching, they may feel apprehensive as they revisit their persona as a teacher, as well as their statuses and roles in an unfamiliar teaching environment. Therefore, it is particularly important to prepare teachers for these challenges and support them as they reconstruct their teacher persona in a new environment.

Online teacher professional support and development programs need to consider teachers as adult learners and professionals who are empowered to make decisions and “connect not only with each other but also with the administrators around important decisions regarding” online teaching (Wan, 2005, p. 848). Online teachers are key participants in reforming online learning, and their knowledge and access to decisions are

important factors in empowering teachers. By recognizing their critical role in successful online learning and bringing their voices to the design decisions at different layers of support and development, teachers will feel empowered and be motivated as they work on constructing learner-centered and innovative learning environments.

The approaches of online teacher preparation and support need to regress from the technology-centered programs, which treat technology as a separate entity to be learned, and an isolated role to be performed. What is needed, however, is the creation of transformative learning experiences for faculty who would “engage in pedagogical problem-solving and discovery about online teaching” within their disciplines (Kreber & Kanuka, 2006, p. 122). Recognizing the importance of teacher support at teaching, community, and organizational levels, higher education institutions can apply similar approaches to the support and development of other personnel involved in online education at different levels. It is through this simultaneous professional development and support efforts that quality in online teaching and learning can be achieved.

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CHAPTER 5: SYNTHESIS AND RECOMMENDATIONS

Introduction

This dissertation focuses on successful online teaching in the context of higher education. Three key problems were identified in the literature that became the basis for conduction of this research.

First, the literature on online teaching is lacking the frame of investigation that considers teachers as active agents in the online environment who constantly shape and reconstruct their teacher roles and persona. Although the literature on the roles and competencies of online teachers added richness to the online teaching literature, it was still lacking in terms of sharing strategies for transforming teacher practices for online teaching and helping teachers understand and adapt to the new teaching environment. This dissertation argues that online teachers need to be considered as adult learners who bring range of experiences and learning preferences to the online environment (McQuiggan, 2007), and thus these experiences need to be examined with a closer look in order to understand challenges as well as opportunities for success (Conceição, 2006; Major, 2010).

Second, this dissertation argues that current standard-driven, technical, and one-size-fits-all approaches to preparing and supporting teachers for online teaching has been insufficient in addressing teachers' needs as they make a transition to online teaching and creative a distinctive pedagogy for online learning. Because of these unstable and non-established patterns of online learning both at the institutional and faculty level, many online

learning practices are employed as the replication of traditional classroom environments, carrying conventional expectations and practices to an environment that has a potential to afford fundamentally different experiences for learning and teaching. With respect to this problem, it is found that the literature is lacking empirical studies dedicated to investigating the pedagogical transformation of teachers as they move from face-to-face teaching to online teaching and explore new pedagogies for online learning.

Third, the research has been limited in terms of bringing teachers' voices into this process, which created a potential to oblige them to regress to passive roles. Therefore, this dissertation is an effort to fill the void by researching the transformation of online teaching practice with a critical look at the current literature and an examination of the successful online teaching patterns the higher education contexts.

This dissertation was conducted to fill in the gaps in the literature on online teaching by addressing these three key problems. Chapter 2 presented a critique of the standards- and competency-driven vision of online teaching and provided an alternative view that considers teachers as adult learners who continuously transform their meaning of structures related to online teaching through the ongoing process of critical reflection and action. Chapter 3 aimed to provide an in-depth understanding of online teachers' lived experiences with the success factors and conditions that nurture their teaching experiences. Chapter 4 provided a practical framework that can be used as a guide to design, develop, and sustain online teacher support and professional development programs.

This chapter aims to summarize the major findings of the three articles presented as part of the dissertation, discuss implications of the results for educational research and practice and concludes with the limitations and recommendations for future research.

Summary of the Findings

Researchers often argue that online learning environments are fundamentally different from traditional classrooms, creating new conditions, possibilities, constraints, and issues regarding the roles of the teachers and students (Mandinach 2005). Because, online environments are characterized by anytime anywhere learning that happens without the boundaries of face-to-face interactions, teachers and learners are not bound by the traditional conventions of face-to-face classrooms (Anagnostopoulos, Masmadjian, & McCrory, 2005). At the heart of this new discourse on online learning and teaching, teachers have a critical role in exploring the potentials of the online environments and constructing learning experiences for their students. This requires asking fundamental questions about how students learn, how learners and teachers interact, socialize and communicate, how teachers' expectations and behaviors change, and how online learning is supported and sustained within the learning communities, organizations, and institutions.

Recognizing the significant role played by teachers in answering these questions, this dissertation aimed to challenge the current literature on online teaching, which is dominated by the technical and functionalist orientation towards teaching that views online teachers as passive agencies who are expected to take the given roles and have limited voices in defining

and shaping their experiences (Rennert-Ariev, 2008). This dissertation therefore included studies that looked at online teaching from an alternative perspective—a view that focuses on the critical role and transformation of online teachers as they move from face-to-face classrooms to the online teaching environments.

The first article, “Transforming Online Teaching Practice: A Critical Analysis of the Online Teaching Literature”, formulated a critique of the standards- and competency-driven vision of online teaching from the perspective of transformative learning theory (Mezirow, 1997). According to Mezirow (1991) transformative learning “involves an enhanced level of awareness of the context of one’s beliefs and feelings, a critique of their assumptions and particularly premises, an assessment of alternative perspectives” (p. 161). Therefore, using transformative learning theory as a frame, this critical review proposed three important dimensions for online teacher transformation: (1) Empowerment of online teachers, (2) promoting critical reflection, (3) integrating technology into pedagogical inquiry.

While the literature tends to downplay the importance of online teachers in defining and shaping the terms of their experience as they go through a perspective transformation, the critical review emphasized the importance of *empowering* teachers as autonomous and self-directed professionals who constantly engage in a dialogue about solving complex problems, making decisions, reflecting in action, and collaborating with other key actors. Another important dimension in teachers’ transformation is *critical reflection* through which teachers’ personal empowerment is realized by challenging assumptions, questioning established values and beliefs, and engaging in a pedagogical problem solving process. This pedagogical problem solving process includes revisiting traditional teaching methods by

reshaping the existing methods, and creating new ones in order to explore the pedagogical potential of a learning environment that is fundamentally different from traditional learning settings. Online learning environments have the capability of enabling the exploration and discovery of new pedagogical approaches, such as encouraging participatory, inquiry-based and social learning practices (Kreber & Kanuka, 2006). Therefore, the focus of online teacher preparation and development programs needs to be geared towards encouraging online teachers' reflective practices, through which they engage in transformative learning practices with their students. Another problem related to the existing literature is treating technology as a separate entity that needs to be learned and performed in isolation from the pedagogy, content, and the context of the online teaching environment. It is through the integration of *technology into the pedagogical inquiry* that teachers can go through a transformative process of examining the pedagogical potential of online technologies and constructing online learning experiences within their content areas.

This study, opening up the discussion about online teacher transformation, argued that, if the potential of online learning is to be reached, there is a recognized need to understand online teachers' transformative learning process as they become actively involved in pedagogical problem-solving in their teaching practices. The results of this study combining with the identified gap in the literature created a need for conducting the second research study that focused investigating successful online teaching in different disciplines with the success factors and conditions that nurtured online teachers' teaching experiences.

To further understanding as to how teachers make a transition to online teaching in a way they create successful practices, and the motivational elements as well as contextual

factors that influence this transition, **the second article**, “Tracing Successful Online Teaching in Higher Education: Voices of Exemplary Online Teachers”, presented a multiple case study conducted within the university setting. The results of ethnographic interviews conducted with six online teachers, who were identified through nominations of the online program coordinators and directors within five different colleges of the university, indicated that teachers went through a transition process as they built on the plethora of previous teaching experiences and transformed their teaching practice with the affordances and limitations of the online environments. During this transition, teachers were constantly challenged to make themselves heard, known and felt by the students and other actors.

The findings of this multiple-case study showed that motivational factors played a critical role in the teacher’s adaption to online teaching. While all teachers who participated in this study were exemplary teachers and hold intrinsic motivations (e.g., trying new and alternative approaches, reaching out to the non-traditional students), the extrinsic factors (e.g., technological and pedagogical support, rewards and incentives) also played critical inhibiting and motivating roles in their decisions to teach online. Moreover, as teachers reconstructed their teacher roles, they revisited their approaches to (a) understanding the course content, (b) designing and structuring the course, (c) knowing their students, (d) enhancing teacher-student relationship, (e) guiding student learning, (f) increasing teacher presence, (g) conducting the course evaluation, and (h) creating an online teacher persona.

This study also highlighted the importance of key contextual variables (e.g., amount of time spent on online teaching, overall teaching load, class size, institutional context) to teachers’ motivation to teach online, as well as to their perceptions of the challenges of

teaching online. Therefore, considering the importance of contextual and support factors in creating successful online teaching practices, a framework emerged as the outcome of the two studies and is presented in the Chapter 4 of this dissertation.

The third article, “Implications for Practice: Supporting Online Teachers”, provided a practical framework that can be used as a guide to design, develop, and sustain online teacher support and professional development programs. Because teachers hold key roles in determining whether online learning will be implemented successfully in higher education institutions, their preparation and support for online teaching need to be ensured with the combination of many layers within this multilevel support ecosystem. Using ecological perspective as a base, this framework intended to recognize successful online teaching as the outcome of interaction among many factors at three levels—teaching, community, and organization within a multilevel support ecosystem: (a) Support in teaching (e.g., help in the design and teaching level), (b) Support in building community (e.g., nurturing and supporting a learning community among the teachers), (c) Support in organization (e.g., motivating faculty through the rewards, incentives, and recognition).

This article argued that online teachers are key participants in reforming online learning, and their knowledge and access to decisions are important factors in empowering teachers. By recognizing their critical role in successful online learning and bringing their voices to the design decisions at different layers of support and development, teachers will feel empowered and be motivated as they work on constructing learner-centered and innovative learning environments. Recognizing the importance of teacher support at teaching, community, and organizational levels, higher education institutions can apply

similar ecosystems approaches to the support and development of other personnel involved in online education at different levels. It is through this simultaneous professional development and support efforts that quality in online teaching and learning can be achieved.

Implications

The findings of the dissertation provides opportunities to guide future research on online teaching and learning as well as to inform current practice, particularly for those working in similar higher education contexts.

Implications for Research

Future studies could use transformative learning theory as a frame for investigation.

The critical review chapter of the dissertation used transformative learning theory as a lens for examining the gaps in the literature and proposing alternative perspectives on looking at teacher transformation. Different from the functionalistic and technical perspectives towards teacher knowledge and practice, transformative learning theory can provide us a perspective on considering teachers as adult learners who continuously transform their meaning of structures related to online teaching through the ongoing process of critical reflection and action (Taylor, 1998). According to Mezirow (1991), “the problem facing the researcher who wishes to study transformative learning is finding a way to gain access to the meaning schemes and perspectives of the subjects of the research” (p. 221). Some of the research methods can be used to overcome this problem such as participant observation, ethnographic

interviews, and reflective journals. Moreover researchers could conduct action or participatory research by actively participating into the online teaching activities, observing what happens, critically reflecting on the results and outcomes, and further planning the action, and reflection. It is particularly important to consider online teachers as researchers who constantly explore and investigate online pedagogies within their content area and act upon the results. Therefore, future work could examine the online teachers' transformative learning process by actively engaging them in the research process, which could also have direct impact on their teaching practice.

While existing studies about teacher experiences with online teaching represent important exploratory research, the literature is lacking the research on how collective transformation occur within the communities and organizations. The multiple case study conducted as part of this dissertation indicated that observing other teachers' online teaching practice and participating into the peer-mentoring activities motivate teachers as they make decisions to teach online. Moreover the third article, presenting a framework on supporting online teachers, argued that incorporating collaborative work groups, community building, and group discussions into the professional development programs, and sustaining their continuity is crucial for online teacher support and development. While there are studies of community development through professional development activities, no study looked at how teachers go through a perspective transformation in a social environment. Such focused research is critical to understand the varied ways that teachers, communities, and organizations transform through the online learning initiatives.

Future studies could use the findings of the successful online teacher practices for constructing the evaluation instruments. This dissertation particularly focused on how online teachers made a transition in the way that they implemented successful practices such as designing and structuring the online course, knowing the students, enhancing teacher-student relationships etc. Given that online teaching environment differs from traditional classroom with its own set of conditions, a systematic approach is needed in constructing the evaluation instruments that are designed specifically for the online courses. The successful practices identified in this dissertation could be used as a guide in constructing instruments for online teacher and course evaluations.

Future research could provide information about online teaching at different higher education and K-12 contexts. This dissertation was an attempt to listen the voices of exemplary teachers in different disciplines and interdisciplinary contexts in order to deepen the understanding of how different discipline cultures influence teachers' online teaching experiences and what common themes are apparent among those different contexts that foster successful online teaching. Future qualitative studies could extend this research into different online teaching contexts that are part of different institutional structures. Additional focused studies would deepen the understanding of online teaching and the changing role of online teachers, looking at “various interconnected cultures and subcultures, whether disciplinary, departmental, or student, may influence faculty experiences with online teaching” (Major, 2010, p. 2189).

Future studies could focus on single aspects of online teaching. Conclusions gathered from different online teaching contexts can be applied and implemented in different settings.

Building on the results of this study, future studies could focus on single aspects of online teaching and their relationships to the changing practice of teachers, e.g., changes in online course planning and design patterns, or changes in the student-teacher relationship. Research has focused on teaching presence, social presence, and immediacy (Anderson, et al., 2001; Baker & Woods, 2004; Richardson & Swan, 2003), yet many of the pedagogical strategies described were built on the patterns borrowed from classroom-based learning (Natriello, 2005). However, social and open online learning environments are becoming commonplace in the higher education culture. Hence, future studies could explore emerging pedagogies and the shifting roles of teachers in this networked world.

Future qualitative research should address the issues of credibility, transferability, and confirmability. Many research studies on online education are lacking the necessary information on credibility and transferability (Major, 2010). Future research studies need to explain the strategies used to establish credibility and transferability in order to demonstrate the rigor and trustworthiness of their findings. Findings from qualitative studies could be applied to other settings and it is researchers' responsibility to design, execute, and fully report studies that could "greatly increase the likelihood that the results will apply outside of the boundaries of the original study or that research methods may be transferred for use on other studies" (Major, 2010, 2190). Moreover, sufficient details about the participants, participant selection process, data collection and analysis methods need to be provided in order to demonstrate how the researcher approached to answer the research questions. Providing rich description about the online teaching and learning context will help judgments about the transferability of findings to other contexts. Finally, qualitative studies should

elaborate on the perspectives of the researcher with regard to positions, values, and beliefs that play an important role during the research process. More studies need to offer information about researchers' position and relationship of the researcher to the data in order to help readers evaluate the research findings

Implications for Practice

Collaborate with faculty and listen their voices as they change and create a new online teacher persona. As teachers move from traditional to online classrooms, they are faced with a constant challenge of finding their teacher self by interacting within the dynamics of a new teaching environment. While they may lean to their traditional practices as reference points, the affordances and limitations of online environments pose new challenges to them as they try to operate with their existing sets of beliefs and practices. Programs preparing faculty to teach online need to encourage them to reflect upon their past experiences, assumptions, and beliefs towards learning and teaching, question them, and transform their perspectives by engaging in pedagogical inquiry and problem solving. Through this process, teachers need to be provided a collaborative working environment where their needs are listened and solutions are suggested according to the variables in their teaching contexts such as their level of technology use, schedules, student' profiles, and their teaching methods in the face-to-face classrooms.

Support programs need to consider teachers as active agents during this process. Instead of building courses for them, a collaborative culture around course design and

development need to be supported. Technology staff and instructional designers may constantly engage in a dialogue about solving problem and making decisions regarding the design and teaching processes of online courses.

Encourage pedagogical inquiry and creativity. Teachers may feel uncertain, uneasy, and unprepared for the challenges of teaching online lacking the tools and conditions that they use to establish their expertise and teacher persona in the traditional classrooms (Major, 2010). Support and development programs, therefore, are critical in helping teachers engage in the process of pedagogical inquiry and problem solving as they reflect upon the interactions between content, online technologies, and pedagogical methods within their unique teaching contexts. The approaches of online teacher preparation and support, therefore, need to regress from the technology-focused programs, which treat technology as a separate entity to be learned and an isolated role to be performed. While learning about online technologies is important, teachers need opportunities where they could explore the ways to transform their existing pedagogies to the online environment, thinking about the limitations and affordances of the online technologies for their pedagogical purposes.

Engage teachers in learner-centered teaching approaches. Online learning environments have the capability of enabling the exploration and discovery of new pedagogical approaches, such as encouraging participatory, inquiry-based and social learning practices (Kreber & Kanuka, 2006). Teachers who follow are teacher-directed approaches may find it challenging to adapt to the learner-centered teaching methods. In an online environment, teachers don't have traditional tools for monitoring and controlling participation and interaction, and also lack the cues related to sights, gestures, and social

intuition (Anagnostopoulos, Masmadjian, & McCrory, 2005). This notion of de-centering of the teacher in the online classroom presents challenges to the online teachers. Teachers, therefore, need to be guided in finding ways to support learners' independence and autonomy in the online environment.

Encourage community building around online teaching. Considering the impact of online learning on traditional classrooms, it is critical to prepare and support teachers for online teaching so that they know what to expect and how to establish their online teacher persona through online pedagogies, and also develop positive attitudes towards online teaching. Moreover, by incorporating collaborative work groups, community building, and group discussions into professional development programs, and sustaining their continuity, teachers will have an opportunity to participate in communities of practice and thus transform their teaching by socially constructing their knowledge and practices

Limitations

Research presented in Chapter 2 and 3 of this dissertation looked at online teaching from an alternative perspective—a view that focuses on the critical role and transformation of online teachers as they move from face-to-face classrooms to the online teaching environments. While the research contributes to the body of knowledge on online teaching, limitations emerged that require future investigation.

First, the multiple case study (Chapter 3) research was conducted within a particular university setting using the ethnographic interview as a method for data collection. Even

though ethnographic interview provided rich data on exemplary online teachers' transition to online teaching with a specific focus on the motivational factors, successful practices, and contextual and support elements, teachers' actual teaching environment could be observed while they were teaching online in order to gather supportive evidence. The observational data could provide information on the implementations of the successful practices.

Second, while the suggestions could be transferable to other higher education institutions having similar contexts, researchers should be cautious in applying the findings into other institutional types that have a differing student population and organizational culture. Examining online teaching aimed at different student populations (e.g., traditional, nontraditional, graduate, undergraduate), researchers could focus on whether teaching with different student levels and profiles influences online teacher experiences.

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