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

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Background: *Although advances in distance learning have shown signs of a reconfiguration of the teacher's role in online environments, a large number of online teaching practices still do not show many signs of this shift. Given the need for a change in pedagogies, investigating how exemplary teachers transfer their thinking, pedagogical knowledge, and beliefs to successful online teaching is critical to understanding new online learning and teaching practices. The research on online teacher roles and practices, however, has been limited in terms of bringing teachers' voices into the research process and empowering them as autonomous professionals who constantly engage in a dialogue about solving complex problems and making decisions about online teaching.*

Purpose and Research Questions: *The purpose of this research was to look at exemplary online teachers' transition to online teaching with a focus on their successful practices. The research investigated two central questions: (1) What are the successful practices that exemplary online teachers employ in their online teaching? (2) How do exemplary online teachers make a transition to online teaching in such a way that they create successful practices?*

Research Design: *The study followed a qualitative multiple-case study approach examining six different cases of exemplary online teachers and their teaching contexts within a large*

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research university in the Midwestern United States. Using multiple cases allowed for comparison of similar and contrasting online teaching situations and conditions within the university's different colleges.

Participants, Data Collection, and Analysis: *The data sources of the study consisted of (1) semistructured interviews conducted with six online program coordinators to collect contextual information and gather nominations for successful online teachers in each college, and (2) ethnographic interviews conducted with 6 online teachers nominated as exemplary to gather teacher-expressed needs, knowledge, and successful practices. Within- and cross-case analyses were conducted to generate codes and identify the similarities and differences across the cases as well as common themes.*

Conclusions/Recommendations: *The findings of this study indicated that when teachers described their successful practices, they often linked them to their changing roles and new representation of their "selves" within an online environment. Their portrayal of the teacher self, both built on a plethora of previous experiences and reformed with the affordances and limitations of the online environment, went through a process whereby teachers were constantly challenged to make themselves heard, known, and felt by their students. This study showed that it was critical to listen to teachers' voices and give them a participatory role in the creation and use of their knowledge and experience in order to form their online teacher personas. As a result, programs that prepare faculty to teach online may need to encourage teachers to reflect on their past experiences, assumptions, and beliefs toward learning and teaching and transform their perspectives by engaging in pedagogical inquiry and problem solving.*

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, "The College of 2020," predicts that students will demand more online courses in the near future (Van Der Werf & Sabatier, 2009). The 7th Annual Sloan Survey on Online Learning (Allen & Seaman, 2007) indicated that 4.6 million college students were enrolled in one or more online courses in fall 2008. Additionally, a growing number of nontraditional students are working professionals who are unable to attend educational programs in conventional ways. For instance, to meet this demand, institutions started making their course content publicly available (e.g., MIT OpenCourseWare) and more recently initiated massive open online course (MOOC) offerings that provide people with opportunities to participate in course activities without credit or registration (Cormier & Siemens, 2010). As a recent example, Stanford University's "Introduction to Artificial Intelligence" course was offered free to online students worldwide and attracted more than 58,000 students around the world who signed up for the course and participated in the course activities (Markoff, 2011).

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). 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). Therefore, many online learning practices are employed as the replication of traditional classroom environments (e.g., offering video-recorded lectures as online courses). This occurs in part because of 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 is centered on "achieving classroom-like or classroom equivalent conditions as a source of legitimacy" (Natriello, 2005, p. 1898) reinforces the status quo in higher education (Garrison & Anderson, 2003). 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 new patterns for online pedagogy.

The main purpose of this study was to investigate exemplary online teachers'[1] transition to online teaching[2] with a specific focus on the successful practices. The following questions guided the research:

- What are the successful practices that exemplary online teachers employ in their online teaching?
- How do exemplary online teachers make a transition to online teaching in a such a way that they create successful practices?

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 online teaching environments and the challenges that faculty and institutions face along the way (Coppola, Hiltz, & Rotter, 2002; McShane, 2004). The experiences of early adopters created a discourse about online education and supported the notion that online teaching and learning differed from its face-to-face predecessor, requiring changes regarding the role and characteristics of online teachers (Bennett & Lockyer, 2004). Several researchers, therefore, have attempted to study the new skills and roles of 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).

Along with this line of studies, research focusing on the student–teacher relationship in the online environment has suggested a new role for the teacher: "guide on the side." Rather than becoming the center of the interaction or the source of the information, the teacher is now 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 in which 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).

Although these new roles have emerged from research and are suggested to online teachers, adjustment to these new roles, expectations, and behaviors has been limited. Several factors have led to this situation. 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 tend to 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). Second, teachers bring their conceptions, attitudes, dispositions, and beliefs about how they teach and how students learn in online environments. 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. Four areas in which teachers experience changes as they go through a pedagogical transformation in an online environment were identified: (1) increasing structure and

planning during course design, (2) increasing organization in course management, (3) increasing teacher presence for monitoring students' learning, and (4) reconstructing student–teacher relationships. These four areas are discussed in the following sections.

INCREASING STRUCTURE AND PLANNING DURING COURSE DESIGN

Several research studies acknowledged that teaching online changes teachers' activities regarding the design, organization, and management of 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 reimagine the entire course, from initiation to completion, especially when teaching it online for the first time (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). Whereas 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 setting up the learning environment, organizing and uploading files, collecting resources, and creating instructional materials (Samarawickrema & Stacey, 2007). Teachers in many studies noted an increase in the time and effort required to design and structure their online courses (Conceição, 2006; Lee & Tsai, 2010). 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).

INCREASING ORGANIZATION IN COURSE MANAGEMENT

An online 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 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 teachers' continual involvement in the management and organizational tasks in 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 and stay online frequently to answer student questions and clarify course expectations and assignments (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

The role of the teacher in an online community is to establish a teaching presence by designing, facilitating, and directing cognitive and social processes with the purpose of creating personally meaningful and educationally relevant student outcomes (Anderson et al., 2001). Research has 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 students' needs and questions in a timely manner and modeling good interaction and communication, teachers create a sense of teaching presence that is critical to the students' development of cognitive and social skills (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 an advantage because 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); these behaviors frequently have been used and studied in the online education literature (Baker & Woods, 2004). It was found that student satisfaction and learning are positively correlated with 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 and environments (e.g., chat, video conference, online classroom communities, and social networks) to show their energy and commitment to the student–teacher relationship (Coppola et al., 2002). Yet, these online systems may remain insufficient for teachers to establish sensory, expressive, and close relationships with their students (Major, 2010).

SUMMARY

In sum, teachers experience a number of changes in pedagogies while teaching online and transitioning from face-to-face to online teaching. Adjustments to new roles, expectations, and behaviors are anticipated. The preceding review of the literature shows four areas in which teachers experience changes as they go through a pedagogical transformation while teaching online: (1) increasing structure and planning in the course design, (2) increasing organization in the course management, (3) increasing teacher presence for monitoring student learning, and (4) reconstructing teacher–student relationships.

Teachers' activities on design, organization, and management of online courses differ from those in face-to-face teaching. Course planning is at the core of these activities, including tasks such as content organization,

course structure and flow, course outline, and instructional activities. In online teaching environments, teachers face numerous management activities that involve constant effort toward monitoring and assessing students' performance, course clarification and continuity, and managing students' technology conditions and related issues. Creating a teaching presence by designing, facilitating, and supporting cognitive and social processes allows for relevant learning outcomes. One of the most frequently reported facets of teacher presence is the feedback and frequent interaction with students. These are considered important success factors in online courses. The literature review also shows that student satisfaction and learning are positively correlated with teacher immediacy and social presence. Even though nonverbal communication is absent, teachers can develop close relationships with their students by using online tools in a way that increases trust and allows for an ever-present learning support system.

Given the need for a change in pedagogies while teaching online, it is critical to investigate and report faculty experiences on understanding the "challenges as well as opportunities for success" (Major, 2010, p. 2157).

METHODOLOGY

In the present study, a multiple-case study approach was followed. Using multiple cases allowed for comparison of similar and contrasting online teaching situations and therefore helped the authors to draw more compelling and robust conclusions (Yin, 2009).

SELECTION OF THE PARTICIPANTS

This research study was conducted within a large research university in the midwestern United States. As a first step, 6 online program coordinators and directors[3] who were leading or supporting online programs and online course offerings within the university colleges were identified and contacted for an interview. Online program coordinators, ranging in age from 45 to 60 years old, participated in semistructured interviews that included questions about program organization, student and faculty profiles, faculty support and professional development services, course design processes, and technology platforms. After gathering the information regarding each online teaching context, online program coordinators were then asked to nominate and rank 3 exemplary online teachers who had taught or were teaching at least one online course in their centers or programs. Instead of giving them prior criteria for selecting these teachers, they were asked to tell what their criteria for success were and

how the nominated teachers met these criteria. The purpose was to bring out the success criteria that emerged from each online teaching context, examine their commonalities and differences, and use them for further analysis. From the three nominations provided by each online program coordinator, 6 teachers who were the first-ranked nominees were contacted for the interviews, and all agreed to participate in this study (see Table 1). These faculty members were informed of the study goals of this research and anticipated involvement, and followed all the requirements of the university human subjects protection office.

Table 1. Online Teachers' Profiles

Name*	Age	College/Program	Years of Teaching Experience	Number of Online Courses Taught
Linda	40–50	Associate professor, College of Design/Art and Design	Face-to-Face: 20 Online: 3	1
Robert	60–70	Professor, College of Liberal Arts and Sciences/ Political Science	Face-to-Face: 41 Online: 25 (Distance)	6
Helen	60–70	Professor, College of Liberal Arts and Sciences/ Classical Studies	Face-to-Face: 30 Online: 4	3
Molly	50–60	Professor, College of Agriculture/ Agronomy	Face-to-Face: 24 Online: 10	2
Erin	50–60	Lecturer, College of Human Sciences/Family and Consumer Sciences Education	Face-to-Face: 21 Online: 10	2
Justin	50–60	Associate professor, College of Engineering/ Agricultural Engineering	Face-to-Face: 13 Online: 4	5

*The pseudonyms Justin, Linda, Molly, Robert, Helen, and Erin are used throughout this document to represent the voices of the online teachers and to ensure their anonymity.

DATA COLLECTION AND PROCEDURES

As mentioned, we conducted semistructured interviews with online program coordinators, and ethnographic interviews with online teachers. Data collection took place during the spring semester of 2010 (January 14, 2010, to March 11, 2010). This article's first author conducted all the interviews, which lasted between 45 and 80 minutes. The interviews took place at the program coordinators' and faculty members' office locations. They were all audio-recorded and transcribed for further analysis.

The first data source included semistructured interviews conducted with the online program coordinators to collect contextual information about how they were leading or supporting the online course offerings within the different colleges at the university. Additionally, the coordinators' responses were used to inform the content of a second series of interviews with nominated faculty teaching online courses (see Appendix A).

Second, we conducted ethnographic interviews with the nominated online teachers. To test the ethnographic interview protocol, we conducted a pilot ethnographic interview with a faculty member who taught online courses and was also an expert in qualitative research. The purpose was to determine if the interview questions served their purposes and if any revisions needed to be made. As a result of the feedback, we made changes on the initial interview protocol. For example, we revised the time allotted to each section and placed more emphasis on the section in which teachers described their transitions into successful online teaching practices. We also modified the interview closure by adding questions to help teachers summarize and wrap up their thoughts (see Appendix B).

We followed Spradley (1979)'s four stages for developing the rapport while constructing the ethnographic interview protocol: (1) apprehension, (2) exploration, (3) cooperation, and (4) participation. To minimize the feelings of uncertainty in the *apprehension* phase, we started with descriptive questions on online teaching contexts, teacher background, number of courses taught, and previous experience with online teaching. We initiated the *exploration* phase with a ground tour question that helped to set the stage with teachers' own descriptions of their online teaching. The purpose was to get teachers to talk about their teaching practices, stories, examples, beliefs, and perceptions as they relate to successful online teaching. At the beginning of the interviews, we set a tone of *cooperation* by informing the teachers that the purpose of the interview was to provide a comprehensive picture of what it was like for them to teach successfully online and not to try to judge the worth of their

teaching practices. This position encouraged teachers to *participate* by recognizing and accepting their role as informants on exemplary online teaching practices.

During the ethnographic interviews, while teachers were talking about their experiences related to online teaching, it was essential to impose minimal structure on their responses. However, we used probing questions when a great level of detail was needed.

DATA ANALYSIS

We started the data analysis with the program coordinators' interview transcripts. This process informed the write-ups of the case vignettes as well as cross-analysis of the nomination criteria for successful online teachers (see Table 2). This initial analysis indicated that four common success criteria were used to nominate teachers across online teaching contexts: (1) knowledge of students, (2) knowledge of content, (3) effective communication with the students, and (4) high scores on the course evaluations. This comparison helped in identifying the similarities and differences for success criteria, which later informed the comparison of the contextual factors during the cross-case analysis.

The second phase of the analysis included the within-case analysis that allowed us to become familiar with each case as a whole and generate a list of initial codes. During the cross-case analysis, we examined these codes in terms of their presence in or absence from the cases. This helped to identify the similarities and differences across the cases as well as common themes (Miles & Huberman, 1994). The analysis indicated that while describing their teaching strategies, teachers often started with their concerns regarding the nature of online teaching and then presented the strategies they employed to overcome these challenges. Therefore, the codes that emerged under the categories of concerns/challenges and teacher strategies were collapsed and formed the final themes. They were: (1) knowing and creating the course content, (2) designing and structuring the online course, (3) knowing the students, (4) enhancing student–teacher relationships, (5) guiding student learning, (6) evaluating online courses, and (7) maintaining teacher presence. Table 3 presents these themes with related categories and emerging codes. These were a result of the within- and cross-case analysis. As shown in Table 3, teachers suggested different strategies for meeting the challenges and addressing the concerns while teaching online. The data analysis was mainly conducted by this article's first author with the participation of the coauthors, especially during the final

stage of coding. The initial themes generated by the first author were then reviewed by the coauthors. Any disagreements or additional themes were discussed among the three authors, consensus was reached, and adjustments were made accordingly.

Table 2. Cross-Comparison of the Program Coordinators' Criteria for Nominating Exemplary Online Teachers

	Linda (Art and Design)	Robert (Political Science)	Helen (Classical Studies)	Molly (Agronomy)	Erin (Family and Consumer Sciences Education)	Justin (Agricultural Engineering)
Selection Criteria for Nominating the Teachers	• Create group work projects • *Know and care about students • *Provide the tools for communication • Get student feedback regularly • Be willing to learn and change • Have clear schedule and expectations • *Get high student evaluations • *Know the subject matter	• *Be student-centered • *Have constant communication with students • Provide ongoing feedback • *Be expert in the subject matter • Provide engagement • Provide student engagement • Be well-organized • Design visually appealing courses • *Get high student evaluations	• Set the tone naturally • *Communicate well • *Be expert in the subject • Have clear goals • *Know the students • Have good functional tools • Be quick to respond to questions • Feel when something is not going well • Manage the time effectively • *Get high student evaluations	• *Communicate well with the students • Grade timely • Have motivation to teach • *Know and care about the students • Use constructivist methods • Be available • Be involved • Use case-based learning • *Bring subject expertise • *Get high student evaluations	• Be organized • Be motivated to teach • Be kind and caring • *Communicate well with the students • *Thinks about student experience • Be descriptive about the responsibilities and roles • Bring student life experiences • Respond to individual students • *Get high student evaluations • *Know the content	• Be dynamic and energetic • *Respond to the students in a timely manner • Have a good-quality syllabus • *Care about the students • Be flexible with students • *Have a good understanding of the discipline • Do not be afraid to try new technologies • *Get high student evaluations

* Common nomination criteria for exemplary online teaching across cases.

Table 3. Emerging Codes and Themes

Concerns and Challenges	Teaching Strategies	Theme
		
➢ Changing content organization ➢ Creating content for new online courses	➢ Breaking the content into manageable chunks ➢ Adopting the content from face-to-face courses ➢ Getting student input in the course creation	**Knowing and creating the course content**
➢ Time and workload in designing online courses ➢ Need more preparation and structuring ➢ Lack of flexibility in changing the phase of the course ➢ Need support on instructional design, technology, and online pedagogies.	➢ Planning and developing course materials in advance ➢ Envisioning the course ➢ Adopting activities from face-to-case courses ➢ Breaking down the learning tasks into activities ➢ Creating conceptual outline ➢ Providing flexibility in modifying the course activities ➢ Incorporating student feedback into the course	**Designing and structuring the online course**
➢ Lack of student social presence ➢ Students' diverse technology expertise ➢ Different time zones ➢ Sustaining online student motivation ➢ Differences between on-campus and off-campus students	➢ Gathering information on students' profiles and characteristics ➢ Having frequent online interaction and communication with the students ➢ Using video and text chat in communicating and understanding their profiles and characteristics	**Knowing the students**
➢ Lack of immediate feedback ➢ Lack of group interaction ➢ Latency in communication ➢ Lack of sensory and audio-visual cues to interpret student reactions ➢ Number of students enrolled in the course and scalability	➢ Giving frequent feedback ➢ Resolving issues right away ➢ Using discussion boards and group e-mails to provide group synergy ➢ Using online office hours ➢ Using telephone to respond immediately ➢ Using wikis and blogs for demonstrating student progress	**Guiding student learning**
➢ Absence of immediacy ➢ Absence of nonverbal cues ➢ Carrying face-to-face expectations to online environments ➢ Lack of student–teacher interaction	➢ Using video conferencing ➢ Sharing personal information on course wikis ➢ Communicating the responsibilities ➢ Establishing trust with frequent communication ➢ Using social media channels to enhance social presence	**Enhancing student–teacher relationship**
➢ Low student response rate to online course evaluation ➢ Using face-to-face course evaluation tools for evaluation of online courses	➢ Using midsemester course evaluation to incorporate early feedback into the course ➢ Using end-of-semester course evaluation ➢ Constructing and implementing evaluation tools designed specifically for online courses	**Evaluating the online courses**
➢ Immediacy of teacher responses ➢ Teacher workload and time spent on online interaction ➢ Limited interactivity on video-recorded lectures	➢ Using online teacher videos to present the content ➢ Using short videos to update the students about course activities and news ➢ Using videos to give feedback ➢ Responding to student e-mails on time ➢ Prioritizing communication with online students	**Sustaining teacher presence**

TRUSTWORTHINESS

We followed Lincoln and Guba's (1985) criteria for establishing trustworthiness. To establish credibility, we collected data on different aspects of online teaching, involved a wide range of participants, including online program coordinators and faculty members, and used several colleges to reflect different approaches to online teaching. This helped to triangulate data from the teacher and program coordinators' interviews as a strategy to ensure that the accounts were rich, robust, and comprehensive. The use of multiple researchers (this article's authors) allowed for triangulation and added "to the probability that findings will be found to be credible" (Lincoln & Guba, 1985, p. 307).

Furthermore, we used member checking to support this study's credibility (Lincoln & Guba, 1985). As an example, we sent the findings of this research study to the participant faculty and asked them to review it for accuracy to rule out the possibility of misinterpretations and inaccuracies. Three of the six online teachers responded to this request, and only one teacher provided minor grammatical suggestions and revisions regarding the quotes from his interview.

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 a decision regarding how the results can apply (or not) to his or her specific context (Lincoln & Guba, 1985). As a result, describing the context of the university's online teaching structure, support systems, and centers was central in understanding the transferability of the findings. Moreover, 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).

FINDINGS

Teachers' individual stories illustrated their unique journeys during transition to online teaching that were influenced by a variety of professional, personal, and organizational factors.

This section presents our case study descriptions of each online teacher, the courses he or she taught, topics covered, student profiles, and types of course activities and evaluation methods used (see Table 4 for online course descriptions). The themes that emerged from the data analysis are explored in each case description. These have been organized to focus on the topic of exemplary practices, including challenges, concerns, and solutions.

Table 4. Online Course Descriptions

	Online Course(s) and Topics	Student Profile	Types of Course Activities	Major Assessment Methods
Linda **(Art and Design)**	**Visual Design for Human Computer Interaction:** Human interaction design as it applies to Human-Computer Interaction. Aspects of audience analysis, design methodologies for creating concepts and solutions, techniques of concept prototyping, etc.	Professionals or full-time students enrolled in online master's program in human computer interaction. Students from across the U.S. and Europe.	• Create designs through rapid prototyping • Online design critiques on Adobe Connect • Collaborative design projects on course wiki • Recorded teacher feedback on Adobe Connect • Interactive online guest lectures • Phone communication • Online office hours	• Design critiques • Design portfolios
Robert **(Political Science)**	**Coastal Policy and Politics:** Coastal zone management issues, carrying capacity, zoning, regulation of human development activities, tradeoffs between conservation and jobs, ways in which citizens participate in policy for coastal areas, etc. **E-democracy:** The impact of computers, the Internet, and the World Wide Web on politics and policy.	Both on-campus and off-campus students from biology, political science, history, security, engineering, and computer science from Europe, Hawaii, Africa, Latin America, Asia.	• Discussion forums on the current events • Teacher recorded 3-minute video lectures shared on YouTube • Online office hours	• Online tests • Discussions • Research papers • Online quizzes with randomized questions
Helen **(Classical Studies)**	**Latin:** Grammar and vocabulary of classical Latin, within the context of Roman culture. **Technical Terminologies:** Emphasis on grammatical principles, composition and reading Latin texts.	Diverse off-campus and on-campus students who are interested in ancient languages.	• Presentations of stories and grammar representations • Drills for linguistic analysis • Online discussion posts on sharing ancient stories • Voice announcements • Online office hours	• Assignments • Quizzes

Molly **(Agronomy)**	**Agronomics Systems Analysis:** Analysis of cropping systems from a problem-solving perspective. Case studies are used to develop the students' ability to solve agronomic problems.	Professionals working in the industry and government, enrolled in the master's program, majority from the U.S. and Canada.	• Case studies • Simulated field trips • Online case discussions • Adobe Connect office hour meetings • Phone communication	• Rubric for evaluating cases and discussion • Reflections
Erin (Family and Consumer Sciences Education)	**Occupational, Career, and Technical Programs.** Planning and implementing programs in occupational family and consumer sciences. **Models for Teaching Family and Consumer Sciences.** Selecting teaching strategies and instructional materials based on theories of learning and human development that reflect a professional philosophy of family and consumer sciences.	On-campus and off-campus students across the U.S.	• Structured online discussions • Student-created and shared video interviews	• Discussion participation • Final reflection assignments
Justin **(Agricultural Engineering)**	**Biorenewable systems:** Converting biorenewable resources into bioenergy and biobased products. Biorenewable concepts as they relate to drivers of change, etc. **Preservation of Grain Quality:** Principles and management for grain quality preservation, grain drying and grain storage, etc.	On-campus and off-campus graduate and undergraduate students from engineering, agriculture, liberal arts and sciences, and accounting fields.	• Online office hours • Weekly podcasts shared • Lectures shared on iTunesU	• Online quizzes • Online tests

CASE VIGNETTES

Teaching Art and Design Online

Linda was nominated as the most successful online teacher in the Engineering Distance Education Center, which supported the delivery of online courses within the M.S. program in human computer interaction

(HCI). Linda was nominated because she provided frequent feedback to the students and communicated with them using several methods. Her course was targeted toward working professionals and nontraditional students.

Linda offered the "Visual Design for HCI" course to the on-campus graduate students in previous semesters. Keeping the course content the same, she changed the course structure and teaching methods to adapt to the needs of her distance students. Linda's visual design class required her students to engage in several design activities, such as designing logos, games, and web platforms and working with typography and colors. She believed that her design course was unique because it required more individual contact compared with other classes that usually required reading a book, taking a test, receiving handouts, listening to a lecture, or writing a paper. Therefore, she recreated online studio experiences using several tools for communication, collaborative work, and frequent feedback on students' works. For instance, she used Adobe Connect to record her feedback on students' design works and later shared the audio-visual recording with them. She also organized Adobe Connect class meetings to have the critique sessions and provide students with a platform where they could see and critique each other's works. She had students work in team projects and use a wiki platform for collaborative design space. She found herself teaching in three or four different time zones at once in her online class. She tried to group her students in their time zones and considered who was likely to be awake at certain meeting times.

Linda's course planning, design, and evaluation process included several brainstorming and implementation sessions with the technical support team at the Engineering Distance Education Center. While teaching, she had received constant support on making decisions related to designing the content (breaking down the content), providing the interaction (student–teacher, student–student), and setting up and maintaining the technology platforms.

Teaching Political Science Online

Robert was nominated as the most successful online teacher in the College of Liberal Arts and Sciences. He taught online courses within the Online Master's in Public Policy and Administration program. The online program aimed to prepare students for public service leadership in public administration and was designed to prepare or improve the performance level of midcareer public managers and administrators. Robert taught Coastal Policy and E-democracy courses, which were

offered asynchronously to students all over the world. He had distance-taught for 40 years and was one of the first teachers who tried online teaching at the university.

Robert was nominated as the most successful online teacher within the program because he created visually appealing short modules to organize the course on the learning management system (LMS), communicated frequently with the students, and created a student-centered learning environment. Robert developed five courses and taught them both within the university and for another institution where he worked as an affiliate.

Robert taught his courses asynchronously, which attracted people from different time zones and locations to take his class. He spent a lot of time on the preparation, design, and teaching of his online courses. For instance, he recorded 3-minute digital comments about the course materials for the weekly modules and shared them on YouTube with his students. He also used online polls on an issue or opinion, which provided interactivity in his classes. Because the nature of his courses required up-to-date materials, he asked for student input on course content by asking them to identify documentaries, readings, topics, and case studies related to the topics. He found teacher presence, flexibility, student involvement, interactivity, instructor motivation and autonomy, and a paced and updated course structure to be important elements of a successful online course.

Teaching Classical Studies Online

Helen was nominated as the most successful online teacher at the World Languages and Cultures Center within the College of Liberal Arts and Sciences. Helen 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 was nominated as the most successful online teacher not only because she was involved in the development and teaching of the online courses, from initiation to completion, but also because she was quick to respond to her students' questions and problems. She identified the problems and changed the direction of the activities to address the needs. According to the online program coordinator, she "did it very gracefully and naturally."

Helen used several online learning activities for students to engage in learning units of Latin and classical studies. Because these courses had discrete and contained content, she designed series of units with learning activities in a course management platform with the help of the

online program coordinator and teaching assistants. She also created online presentations and drills to present to students how to perform a linguistic analysis of a text. She emphasized less student–student interaction, but more student–content interaction because of the nature of the content in her courses. She asked students to attend the online discussions by sharing stories from ancient literature and comparing them to recent events. She used voice announcements embedded into the LMS to communicate with the students and also organized online synchronous office hours every week.

Teaching Agronomy Online

Molly taught agronomy to graduate students in the Online Master's of Agronomy program, which was aimed at professionals working in the industry and government. A majority of her students were from the United States, and the rest were from Canada. Molly was nominated as the most successful online teacher in the program because she communicated well with the students, graded in a timely fashion, and had an interest in getting to know the students.

Molly used a constructivist approach in her teaching. She taught the agronomics systems analysis course, the last course in her program, by trying to connect all the previous courses through real-life uses and decision case studies. She simulated face-to-face field trips by creating virtual asynchronous experiences that included her design team visiting a farm, taking 360-degree panoramas, taking pictures of crops and soils, conducting video interviews with farmers, and sharing those with the students in the LMS. Before the farm visits, she also had students provide questions that she could ask the farmers during the interviews. She then incorporated cases within the discussion forums in which students provided anonymous peer critiques to each other's case studies. The development lab supported her in developing and maintaining the technologies used in the course.

Teaching Family and Consumer Sciences Online

Erin was nominated as the most successful online teacher in the Family and Consumer Sciences Education program because she communicated student roles and responsibilities effectively, incorporated students' life experiences into the activities, considered different learning styles, helped students evaluate their own progress, and thought of alternative ways to solve problems when things didn't work. Her online courses showed variety in terms of student profile, content, and organizational structure.

Erin designed and taught four online courses, including the Models for Teaching course offered to teachers in the licensing program. She created several activities for students to engage in online discussions, monitoring their responses closely and providing feedback in an organized and timely fashion. She assigned students to discussion teams according to their personalities and abilities. She also had them apply the theoretical readings to real-life and classroom experiences in their discussions. Providing a rubric for the discussion evaluation, she clarified the expectations.

Teaching Agricultural Engineering Online

Justin was nominated as the most successful online teacher within the College of Agriculture and Life Science's Center for Technology and Distance Education because he was fun, full of energy, and taught brand-new and cutting-edge courses, which received high marks from his students. He started teaching after 10 years of working at a company. He also served as the interim director of online learning at the College of Engineering. Justin taught an online cross-listed biorenewables course to undergraduate students from different majors. His course had both online and face-to-face sections with around 80 students per semester. He also taught the Preservation of Grain Quality course to undergraduate students in both face-to-face and online formats.

Justin used a video-recording platform in his face-to-face course with video, audio, and tablet PC components so that he could later post class recordings with the notes online for the online students. He organized these recordings as short lectures on the topics of the course. Because he taught technical subjects, he used online tools for students to engage in working problems and exercises. For instance, he created online calculated problems for students to solve with different combinations of problem sets. He also scheduled online synchronous office hours, created short podcasts on the course topics, and shared his lectures on iTunes U.

EXEMPLARY PRACTICES: CHALLENGES, CONCERNS, AND SOLUTIONS

Although each teacher had a unique online teaching context, the cross-case analysis of the ethnographic interviews showed that their stories had common threads. The common threads were defined to be: (1) knowing and creating the course content; (2) designing and structuring the online course; (3) knowing the students; (4) enhancing teacher–student relationships; (5) guiding student learning; (6) evaluating online

courses; and (7) maintaining teacher presence (see Table 3 for emerging codes and themes).

Teachers interviewed employed exemplary practices to overcome the challenges and concerns related to teaching online. They also offered inventive and innovative solutions to overcome these challenges. We now consider each common thread in turn.

Knowing and Creating the Course Content

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

Helen concurred with Linda regarding how important it is to be comfortable with the material that one is teaching. She indicated that she was confident in teaching her course because she was so familiar with it that she knew the materials inside and out. Teachers' content knowledge impacted their choice of online pedagogies as they taught online. They often indicated that their content allowed them to create engaging and interactive online learning environments.

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 to engage students in the course activities and present the materials in a manageable way.

All teachers used various sources to create the content for their courses. Using the course books, taking content from the face-to-face versions and from the previous online versions, and using 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 regarding what should be in the course.

Designing and Structuring the Online Course

All teachers spent considerable time on the design of the online courses. The course design processes showed variety depending on whether the course would be taught for the first time, recreated from a face-to-face course, or duplicated from a previously taught online course. 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—for example, her students designed logos, worked with typography and color, and designed games, interfaces, and websites. To engage them in the design conversation, Linda 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, Art and Design)

Similarly, Erin started with creating a conceptual outline for her online family and consumer sciences education course. Her conceptual outline

included the initial information on course description, purpose, important concepts to be taught, course projects, major assignments, and learning outcomes. She aligned the learning outcomes with the course activities. She described this process:

> I have to go at quite seriously where I had to think: "I have to find websites, I have to think about the conceptual outline and then I find what my learning outcome is after I really struggle through and eliminate a lot of things and then I play with that final project which I find so exciting." You know what the discussions are going to be about and how am I going to keep them focused. But all that takes really a creative process for me. There is nothing linear about that for me. And that takes a little time. I have to focus on it. I can't just pull them out from my pocket. (Erin, Family and Consumer Sciences 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 that 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 discrete. 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 it's very discrete 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)

The second trend followed a less structured path. To be flexible while teaching, 3 of the 6 teachers preferred preparing some part of the course before, and adding the activities and content as they went along. Because of 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. . . . Because, if it is prepared I sometimes feel kind of trapped that I can't make a change in the course when I start and see students struggling or something new comes up. In my campus class, if I see students struggling, we just slow down. (Molly, Agronomy)

Similarly, Justin noted that every class was different, and therefore he wanted to incorporate student feedback in 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, Agricultural Engineering)

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.

Knowing the Students

All teachers indicated that it was essential to know the students in order to design rich learning experiences targeted to their needs. They all had students at different levels and in different places. Three of the six teachers had students taking their courses online from other countries (i.e., Canada, India, and France). 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 to build strong relationships. For instance, Erin commented on how she became flexible in her online teaching because 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 thought: 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, Art and 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.

Four of the six teachers emphasized the difference between the course dynamics, comparing the nontraditional student population with the undergraduate on-campus student population. For instance, according to Linda, nontraditional 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. Two of the six teachers who were teaching the graduate online courses had doubts about whether online teaching would work with the undergraduate on-campus student population.

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 required more effort on the teachers' side in terms of knowing the students and getting information about each individual student profile.

Enhancing Teacher–Student Relationships

Although teachers in this study were identified as successful, they all commented that they were not that successful in terms of building relationships with students because of the absence of immediacy and sensory and expressive information. The teachers were already 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.

All teachers 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 of weeks of the course. The absence of nonverbal cues presented challenges, and teachers used a number of methods to enhance their relationships with 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 major, 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 on the course wiki. She needed to know her students 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 a piece of e-mail. You've taken away everything. You have taken away their personality, their gender, their culture, their attitudes there, and 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. (Linda, Art and Design)

All 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 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 believed that teachers needed to communicate well about the students' responsibilities in the class, and just like in

face-to-face classrooms, students needed to act as professionals and be responsible for their own learning.

Guiding Student Learning

Another loss that all teachers identified was the lack of immediate exchange of conversation. They noted that the latency could cause misunderstandings. Teachers indicated that because they were unable to see the reactions of students right away during an immediate conversation, they had to interpret students' messages that lacked sensory cues. The lack of these audiovisual elements challenged the teachers in terms of identifying when students needed their help and acting immediately to address those needs.

The methods that 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. Although 4 of the 6 teachers preferred to have appointments for the call sessions and wait for students to call them at certain times, 2 of them called their students when they identified a problem and wanted to resolve the issue right away.

Although individual attention was given to the students through phone and e-mail conversations, all 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 one-on-one communications. These teachers used discussion boards or group e-mails to overcome this challenge. Another strategy commonly used by the teachers was setting up online office hours. Four of the six teachers scheduled one office hour time once per week in an online conferencing platform, where students visited and asked questions. The office hour conversation was recorded and shared during a visit at a later time by the students who couldn't make it to the meeting.

Four of the six teachers recognized the importance of using new 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.

All teachers noted the increasing amount of time required for successful online teaching because it was easier for online students to "fall through the cracks." 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 enrolled in the courses.

Evaluating Online Courses

All 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 courses were serving the students' needs. One of the common approaches to evaluating the courses was using a midsemester course evaluation to gather student feedback on the courses and immediately applying the feedback to the course design and activities.

Two of the six teachers also used their own 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 to gather information about what they thought about the course and whether it was valuable. Although the feedback gathered from these evaluations helped 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)

Maintaining Teacher Presence

One of the common concerns from all the teachers was not having physical interaction with the students and lacking the audiovisual elements to present and express themselves in the online environment. Teachers used various strategies to demonstrate teaching presence in their online courses. Three of the six teachers used videos to meet this challenge. One of the teachers preferred having videos recorded within a professional setting and with the support of technical personnel, and others recorded videos on their own. Videos provided a channel for the teachers to use affective strategies through body language and tone of voice, make the teaching experience more personal, and give the students a chance 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 and assignments.

Although videos helped teachers present themselves visually, they all acknowledged their concerns about the video-recorded lectures. They noted that this approach lacked interactivity, reduced the quality of the online courses and created a negative impression of online teaching and learning.

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

> It is just like in face-to-face, there are instructors that don't respond to 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 in the class. (Justin, Agricultural Engineering)

All teachers took ownership of their courses by taking complete responsibility for the teaching part of it, 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 a 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 become 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, Art and Design)

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—for example, showing genuine interest toward the students and knowing the

subject matter. During the transfer of these approaches, however, teachers were constantly challenged with the new dynamics 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 using criteria from traditional classrooms. Molly commented on her struggle: "I'm using the same assessment tool that I use on campus for evaluating how well the class was going. . . . So maybe the problem is I shouldn't use the same tool. The situation is different" (Molly, Agronomy).

Teaching online also impacted teachers' use of technologies in their face-to-face classrooms. Two of the six teachers indicated that they changed their teaching style by moving toward blended or hybrid courses, and they integrated online technologies, such as podcasting, into their classes. For instance, Justin 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.

DISCUSSION

The main purpose of this study was to look at exemplary online teachers' transition to online teaching by focusing on successful practices. Using the vehicle of multiple-case studies, the research allowed for an in-depth look at different exemplary online teachers' cases. As a result, we gained a better understanding of the reasons for 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.

Looking at how exemplary online teachers made a transition to online teaching, the findings of this study indicated that while holding on to their earlier assumptions about how students learn in traditional classrooms, they 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 exist in traditional classrooms. These tasks were identified as common threads across the teachers studied:

- 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 the 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

The findings of this study showed that although teachers held 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 recraft 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, for example, creating online portfolios using wikis. Teaching an applied agronomy course, Molly recreated a field-based learning approach in the online environment, for example, taking panorama pictures in the field to share with the students and conducting interviews with 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 apply them 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 "online teacher persona."

Teacher persona is a new emerging concept in the online teaching

literature. *Persona* is a Latin word that refers to 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 has become 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 have described it as the cumulative of affective, cognitive, and managerial roles that online teachers perform (Coppola et al., 2002). Others have argued 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 a 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).

The findings of this study indicated that 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, went through a process whereby they were constantly challenged to make themselves heard, known, and felt by the students. Moreover, 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. From this perspective, online teacher personas appeared to be fluid and dynamic, as teachers constantly revisited their assumptions regarding learning and teaching within an ever-changing educational setting.

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 a distance from their students and needed to lean on technologies to build the connection, they said they put greater emphasis on getting to know their students than they did in their face-to-face classes. 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 their online teacher persona as they move from a traditional to a virtual classroom seems critical to providing them with the necessary support and conditions for successful online teaching. Some teachers are experiencing online teaching for the first time, and many others may be drawing pedagogical conclusions from their own experiences as learners in blended or online classes (Dennen, 2007). Moreover, after teaching online, teachers start to reconsider their traditional teaching approaches with a refreshed orientation toward learning (Dennen, 2007). In fact, when asked about the effect of their online teaching on their face-to-face teaching, the teachers in this study mentioned the changes in their confidence toward teaching with technology in the classrooms, moving to a more blended type of course design, reacting quickly to technology problems within the class, seeing more quickly what works and what does not with face-to-face students, and exploring new approaches to student-centered learning. Considering the impact of online learning on traditional classrooms, it will be important 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 develop positive attitudes toward teaching with online technologies.

CONCLUSIONS AND RECOMMENDATIONS

Research on exemplary university teachers indicates that, when compared with other teachers, 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, Barak, & Simhi, 2001, p. 700). Similarly, investigating how exemplary teachers transfer their thinking, pedagogical knowledge, and beliefs regarding online teaching to successful teaching practices was critical to understanding new practices that occur in online learning environments. This research study listened to 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.

Although our sample included only 6 online teachers, choosing them

from different colleges within a university that had a decentralized online education policy allowed for an examination of different contexts and conditions of exemplary online teaching. By analyzing the six ethnographic interviews conducted, we found that teachers struggled to make themselves visible and heard in online environments by constantly challenging their already established roles and assumptions toward learning and teaching. They build their teacher personas by drawing their knowledge and experiences from different sources, such as their own experiences as learners in online classrooms and observations of other online teachers. It makes sense that as a next step, these sources of online teacher knowledge and practice need to be explored; at stake is a better understanding of why teachers follow certain roles and practices that form their online teacher personas. The research on online teacher roles has been limited in terms of bringing teachers' voices into the research process and empowering them as autonomous professionals who constantly engage in a dialogue about solving complex problems and making decisions about online teaching (Baran, Correia, & Thompson, 2011). Further research could therefore follow action or participatory research and have online teachers play a participatory role in the creation and use of their knowledge and experiences that form their online teacher personas. Moreover, involving online teachers in the research process could help them investigate their own transformation as well as reflect on their practices, perspectives, and assumptions regarding their online teacher roles.

Whether online teachers create successful online teaching practices depends on how they harness personal, professional, contextual, and organizational factors regarding teaching online. Although "the advances in distance learning have 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 not show signs of this shift. The findings of this study indicated that one of the factors that played a critical role in teachers' selection and implementation of the successful practices was their context and various support mechanisms within the context that encouraged and sustained their successful online teaching practices.

Different disciplines, organizational cultures, and support mechanisms within the programs impacted how teachers employed successful practices and created their online teacher personas. Extending this research into several different online teaching contexts that are part of different institutional structures, additional focused studies could deepen the understanding of online teaching and the changing role of online teachers in higher education. Moreover, the findings of this study could provide

a background for the studies that examine online teachers' role at the K–12 level, particularly in the virtual schooling contexts.

Building on the results of this study, which included the voices of 6 teachers, future studies could focus on single aspects of online teaching and their relationships to the changing practice of teachers—for example, changes in online course planning and design patterns, or changes in the student–teacher relationship. Moreover, future studies could explore emerging pedagogies and the shifting roles of teachers in a new higher education culture that is more networked and connected with the vast adoption of social media channels and mobile technologies. Given that the online teaching environment differs from the traditional classroom and has its own set of conditions, a systematic approach is needed in constructing evaluation instruments that are specifically designed to evaluate online courses. Future studies could use these findings of the successful online teacher practices for constructing these evaluation instruments.

IMPLICATIONS FOR PRACTICE

Although the results of the study are bound to the contextual dynamics of one particular higher education institution, conclusions gathered from different online teaching contexts can be applied and implemented in different settings. Programs that prepare faculty to teach online could encourage them to reflect on their past experiences, assumptions, and beliefs toward learning and teaching, and transform their perspectives by engaging in pedagogical inquiry and problem solving (Baran et al., 2011). Through this process, teachers could be provided with a collaborative working environment in which their needs are listened to and solutions are suggested according to the variables in their teaching contexts, such as their level of technology use, schedules, students' profiles, and their teaching methods in the face-to-face classrooms.

Support programs could also consider teachers as active agents during this process. Instead of building courses for them, a collaborative culture around course design and development could be supported. Technology staff and instructional designers could find ways to engage in a dialogue about solving problems and making decisions regarding the design and teaching processes of online courses.

Support and development programs are critical in helping teachers engage in the process of pedagogical inquiry and problem solving as they reflect on the interactions between content, online technologies, and pedagogical methods within their unique teaching contexts. The approaches of online teacher preparation and support, therefore, could follow a more integrated approach toward technology rather than treating it as a

separate entity to be learned and an isolated role to be performed. Although learning about online technologies is important, teachers will also need opportunities in which they can 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.

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 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 (Anangnostopoulos, Basmadjian, & McCrory, 2005). This notion of decentering the teacher in the online classroom presents challenges to online teachers. Teachers, therefore, could be guided in finding ways to support learners' independence and autonomy in the online environment.

Considering the impact of online learning on traditional classrooms, it seems critical to prepare and support teachers for online teaching so that they know what to expect and how to establish their online teacher personas through online pedagogies and also develop positive attitudes toward teaching with online technologies. 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.

Notes

1. It is important to note that there was no single title definition for online program coordinators or directors because the job titles, roles, and responsibilities were described in a variety of ways. They were, however, considered as the primary contact people in each college because they worked closely with the online teachers. For practical reasons, they are referred to as "online program coordinators" in this article.

2. For the purpose of this article "online teacher" is defined as the faculty member who teaches online in higher education institutions.

3. "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. In this article, 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.

References

Allen, I., & Seaman, J. (2007). *Online nation: Five years of growth in online learning*. Needham, MA: Sloan-C Consortium. Retrieved fromhttp://sloanconsortium.org/publications/survey/online_nation

Anangnostopoulos, D., Basmadjian, K. G., & McCrory, R. S. (2005). The decentered teacher and the construction of social space in the virtual classroom. *Teachers College Record, 112*(8), 1699–1724.

Anderson, T., Rourke, L., Garrison, D., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks, 5*(2), 1–17.

Baker, J., & Woods, R. (2004). Immediacy, cohesiveness, and the online classroom. *Journal of Computing in Higher Education, 15*(2), 133–151.

Baran, E., & Correia, A. P. (2009). Student-led facilitation strategies in online discussions. *Distance Education, 30*(3), 339–361.

Baran, E., Correia, A. P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education, 32*(3), 421–439.

Bennett, S., & Lockyer, L. (2004). Becoming an online teacher: Adapting to a changed environment for teaching and learning in higher education. *Educational Media International, 41*(3), 231–248.

Berge, Z. (2009). Changing instructor's roles in virtual worlds. *Quarterly Review of Distance Education, 9*(4), 407–415.

Berge, Z., & Collins, M. (2000). Perceptions of E-moderators about their roles and functions in moderating electronic mailing lists. *Distance Education, 21*(1), 81–100.

Conceição, S. (2006). Faculty lived experiences in the online environment. *Adult Education Quarterly, 57*(1), 26–45.

Conrad, D. (2004). University instructors' reflections on their first online teaching experiences. *Journal of Asynchronous Learning Networks, 8*(2), 31–44.

Coppola, N., Hiltz, S., & Rotter, N. (2002). Becoming a virtual professor: Pedagogical roles and asynchronous learning networks. *Journal of Management Information Systems, 18*(4), 169–189.

Cormier, D., & Siemens, G. (2010). Through the open door: Open courses as research, learning, and engagement. *Educause Review, 45*(4), 30–39.

Dennen, V. P. (2007). A chorus of online voices: Reflections on the future of online instruction. In J. M. Spector (Ed.), *Finding your online voice: Stories told by experienced online educators* (pp. 183–196*)*. Mahwah, NJ: Erlbaum.

Garrison, D., & Anderson, T. (2003). *E-learning in the 21st century: A framework for research and practice*. New York, NY: Routledge Falmer.

Goodyear, P., Salmon, G., Spector, J., Steeples, C., & Tickner, S. (2001). Competences for online teaching: A special report. *Educational Technology Research and Development, 49*(1), 65–72.

Gorsky, P., & Blau, I. (2009). Online teaching effectiveness: A tale of two instructors. *International Review of Research in Open and Distance Learning, 10*(3). Retrieved from http://www.irrodl.org/index.php/irrodl/article/viewArticle/712

Graham, C., Cagiltay, K., Lim, B., Craner, J., & Duffy, T. (2001). Seven principles of effective teaching: A practical lens for evaluating online courses. *The Technology Source*. Retrieved from http://www.technologysource.org/article/seven_principles_of_effective_teaching/

Guasch, T., Alvarez, I., & Espasa, A. (2010). University teacher competencies in a virtual teaching/learning environment: Analysis of a teacher training experience. *Teaching and Teacher Education, 26*(2), 199–206.

Hativa, N., Barak, R., & Simhi, E. (2001). Exemplary university teachers: Knowledge and beliefs regarding effective teaching dimensions and strategies. *Journal of Higher Education, 72*(6), 699–729.

Hislop, G., & Ellis, H. (2004). A study of faculty effort in online teaching. *The Internet and Higher Education, 7*(1), 15-31.

Kanuka, H., Collett, D., & Caswell, C. (2002). University instructor perceptions of the use of asynchronous text-based discussion in distance courses. *American Journal of Distance Education, 16*(3), 151–167.

Knowlton, D. S. (2000). A theoretical framework for the online classroom: A defense and delineation of a student centered pedagogy. *New Directions for Teaching and Learning, 2000*(84), 5–14.

Koehler, M., & Mishra, P. (2008). Introducing TPCK. In AACTE Committee on Innovation and Technology (Ed.), *Handbook of technological pedagogical content knowledge (TPACK) for educators* (pp. 3–31). New York, NY: Routledge.

Kreber, C., & Kanuka, H. (2006). The scholarship of teaching and learning and the online classroom. *Canadian Journal of University Continuing Education, 32*(2), 109–131.

Laat, M., Lally, V., Lipponen, L., & Simons, R. (2007). Online teaching in networked learning communities: A multimethod approach to studying the role of the teacher. *Instructional Science, 35*(3), 257–286.

Lao, T., & Gonzales, C. (2005). Understanding online learning through a qualitative description of professors and studentsí experiences. *Journal of Technology and Teacher Education, 13*(3), 459–474.

LaPointe, D., & Gunawardena, C. (2004). Developing, testing and refining of a model to understand the relationship between peer interaction and learning outcomes in computer-mediated conferencing. *Distance Education, 25*(1), 83–106.

Lee, M.-H., & Tsai, C.-C. (2010). Exploring teachers' perceived self efficacy and technological pedagogical content knowledge with respect to educational use of the World Wide Web. *Instructional Science, 38*(1), 1–21.

Levine, A., & Sun, J. (2002). *Barriers to distance education*. Washington, DC: American Council on Education.

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Major, C. (2010). Do virtual professors dream of electric students? College faculty experiences with online distance education. *Teachers College Record, 112*(8), 2154–2208.

Markoff, J. (2011, August 15). Virtual and artificial, but 58,000 want course. *The New York Times*. Retrieved from http://www.nytimes.com/2011/08/16/science/16stanford.html

McKenzie, B., Mims, N., Bennett, E., & Waugh, M. (2000). Needs, concerns and practices of online instructors. *Online Journal of Distance Learning Administration, 3*(3). Retrieved from http://www.westga.edu/~distance/ojdla/fall33/mckenzie33.html

McShane, K. (2004). Integrating face-to-face and online teaching: Academics role concept and teaching choices. *Teaching in Higher Education, 9*(1), 3–16.

Mehrabian, A. (1971). *Silent messages*. Wadsworth, CA: Belmont.

Miles, M., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.

Natriello, G. (2005). Modest changes, revolutionary possibilities: Distance learning and the future of education. *Teachers College Record, 107*(8), 1885–1904.

Perlman, H. H. (1986). *Persona: Social role and personality*. Chicago, IL: University of Chicago Press.

Richardson, J., & Swan, K. (2003). Examining social presence in online courses in relation to studentsí perceived learning and satisfaction. *Journal of Asynchronous Learning Networks, 7*(1), 68–88.

Russo, T., & Benson, S. (2005). Learning with invisible others: Perceptions of online presence and their relationship to cognitive and affective learning. *Educational Technology & Society, 8*(1), 54–62.

Salmon, G. (2004). *E-moderating: The key to teaching and learning online.* London, England: RoutledgeFalmer.

Samarawickrema, G., & Stacey, E. (2007). Adopting web-based learning and teaching: A case study in higher education. *Distance Education, 28*(3), 313–333.

Schrum, L., & Hong, S. (2002). Dimensions and strategies for online success: Voices from experienced educators. *Journal of Asynchronous Learning Networks, 6*(1), 57–67.

Smith, T. (2005). Fifty-one competencies for online instruction. *Journal of Educators Online, 2*(2), 1–18.

Spradley, J. (1979). *The ethnographic interview.* New York, NY: Holt, Rinehart and Winston.

Thurmond, V., Wambach, K., Connors, H., & Frey, B. (2002). Evaluation of student satisfaction: Determining the impact of a web-based environment by controlling for student characteristics. *American Journal of Distance Education, 16*(3), 169–190.

Van der Werf, M., & Sabatier, G. (2009). *The college of 2020: Students.* Washington, DC: Chronicle Research Services, Chronicle of Higher Education.

Visser, J. (2000). Faculty work in developing and teaching web-based distance courses: A case study of time and effort. *American Journal of Distance Education, 14*(3), 21–32.

Yin, R. (2009). *Case study research: Design and methods.* Thousand Oaks, CA: Sage.

APPENDIX A: ONLINE PROGRAM COORDINATOR INTERVIEW QUESTION EXAMPLES

All questions are followed by prompts for elaboration, examples, and clarification.

- **I want to learn about the context of the distance program that you are involved in. Please describe the context of the program you are working in.** (Prompt for contextual information: structure, course offerings, student profiles.)
- **Tell me how you work with the faculty who teach online.** (Prompt for interaction and role distribution: support, roles in the analysis, design, development, and evaluation of the online courses; interaction frequency.)
- **How do you describe successful online teaching?** (Prompt for criteria on successful online teaching, nomination, and the descriptions of the online teachers who meet the criteria.)
- **What types of professional development experiences do online faculty need?** (Prompt for professional development activities provided to the faculty.)

APPENDIX B: ONLINE TEACHER ETHNOGRAPHIC INTERVIEW QUESTION EXAMPLES

All questions are followed by prompts for elaboration, examples, and clarification. The questions are asked imposing an absolute minimum amount of structure on 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.** (Prompt for examples of best practices in online teaching: 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 online teaching?** (Prompt for transition: 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 role 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?** (Prompt for support provided within the programs: What resources have you found to be valuable when you teach online? With what aspects of teaching online do you need instructional assistance? How would you like to receive the assistance? Can you give some examples?)
- **How do you describe successful online teaching?** (Prompt for the descriptions of successful online teaching: What specific experiences, qualities, or knowledge do you consider to be most important to be successful 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?)

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