

FACULTY TRANSITIONS TO ONLINE INSTRUCTION: A QUALITATIVE CASE STUDY

Charlotte E. Cochran, Ph.D. Albright School of Education, City University of Seattle

Lorraine T. Benuto, Ph.D. Department of Psychology, University of Nevada, Reno panque7@yahoo.com

Abstract: The introduction of technological tools has created a paradigm shift in the field of education. As such, online learning has become a popular method for students to access educational courses. Due to the increased demand by learners for online classes, administrators at American institutions of higher learning are faced with the challenge of moving faculty members to an online environment. However, transitioning to an online environment requires a role change for faculty members. Specifically, faculty members must shift their instructional methods from on-ground lecturer to online mentor, which can be challenging. Indeed, many faculty members transition to online instruction without the necessary training, support, or skills needed to be successful. The purpose of this qualitative, multiple case study was to develop a better understanding of how higher education faculty members transition from a face-to-face (i.e., on-ground) teaching format to an online teaching format. Participants included nine faculty members, representing different colleges and universities, who teach at post-secondary institutions within the United States. Participants had taught face-toface classes for one year or more, and had taught at least three classes using an online format. An in-depth, open-ended, semi-structured interview format was used to gather data. The data provided by the participating faculty members were collected, coded using a line-by-line format, and the codes were compared to one another with the goal of finding a pattern. The development of conceptual categories and data analysis continued until saturation was achieved. Based on the data analysis, transforming was the conceptual theme for how higher education faculty members transition from a faceto-face (i.e., on-ground) teaching format to an online teaching format. Faculty Transitions to Online Instruction: A Qualitative Case Study

Introduction

Online learning refers to a method of learning that uses technological tools (Moule, Ward, & Lockyer, 2011) while connected to the Internet and includes the incorporation of devices (e.g., iPads, Clickers) and Internet websites (e.g., YouTube, Podcasts, Blackboard, WebEx) to enhance learning (Rollag & Billsberry, 2012) and to share information (Moule et al., 2011). Online learning has grown tremendously over the past few decades (Jandric, 2012) resulting in changes in how students learn (Schubert-Irastorza & Fabry, 2011) by affecting how they access information, collaborate, and communicate (Marais, 2010; Siemens & Canole, 2011). Not surprisingly, technological tools, not limited to Web 2.0, social networking sites, cloud computing, and wikis (Namdev, 2012) and those mentioned above, have presented new opportunities for higher education institutions (Schulte, 2010) and online learning has become a viable option for many students (Kerr, 2011). In fact, as of 2011, there were more than 6.7 million learners enrolled in at least one online class (Allen & Seaman, 2013), and enrollment in online classes continues to grow (Hoskins, 2011) creating a need for more faculty members to teach online (Schubert-Irastorza & Fabry, 2011) and prompting administrators to encourage faculty to move into the online teaching environment (Buckenmeyer, Hixon, Barczyk, & Feldman, 2011).



In the United States approximately 300,000 faculty members teach classes using an online format (Mayadas, Bourne, & Bacsich, 2009). Teaching online requires faculty to shift their thinking and manner of instruction from lecturing to mentorship (Bair & Bair, 2011). This shift requires a change in roles (Tripple, 2010) and may leave faculty feeling unprepared to teach online (Bair & Bair, 2011). Although researchers have emphasized the importance of faculty receiving training when shifting from face-to-face to online teaching (Batts, Pagliari, Mallett, & McFadden, 2010), faculty continue to move to the online teaching environment not fully prepared (Allen & Seaman, 2012; Schubert-Irastorza & Fabry, 2011) making it critical for administrators and faculty to understand how to complete the transition to online instruction. Despite the existence of online best practices, faculty members continue to experience difficulties transitioning to online teaching. Indeed, post-secondary administrators do not have sufficient information about the skills faculty need for transitioning to online instruction and as a result administrators cannot design effective support and training programs (Buckenmeyer et al., 2011). Moreover, when faculty members experience a poor transition to online instruction, adverse consequences exist for students, including inadequate communication from the student to the instructor (Beebe, Vonderwell, & Boboc, 2010) and poor feedback to improve learning (Jordan, 2012). Thus a better understanding of how instructors transition was necessary to improve faculty training methods and in turn improve student learning experiences.

Methodology

The purpose of this qualitative, multiple case study was to develop a better understanding of how higher education faculty members transition from a face-to-face (i.e., on-ground) teaching format to an online teaching format so as to obtain an improved understanding of the training needs of faculty members who are transitioning from a traditional mode of teaching to an online platform. Transitioning between the two instructional environments can be challenging for some instructors (Barrett, 2010) and this study explored how higher education faculty members made the transition. An in-depth, open-ended, semi-structured interview format was used to gather data. Participant responses to the interview questions yielded data that, after analysis, answered the following research question: *How do higher education faculty members transition from a face-to-face (i.e., on-ground) teaching format to an online teaching format?* Within the context of this research question, a better understanding of the needs of faculty to successfully navigate this transition process was obtained.

Data Collection

Snowball sampling (i.e., one participant refers a researcher to the next participant and so forth [Tabak, Khoong, Chambers, & Brownson, 2013]) was used to recruit participants. A diverse group of nine participants from various colleges and universities across the United States participated in semi-structured interviews conducted via phone or Skype.

Materials

The data presented within this manuscript represents data collected as part of a larger study that included the administration of a 10-question interview protocol. For this manuscript only data from three of the 10 interview questions were analyzed:

- 1. What were your experiences transitioning from a face-to-face teaching environment to an online teaching environment?
- 2. Do you feel there were any skills you lacked that might have helped you make the transition to online instruction?



3. What skills from the face-to-face instructional environment do you think transferred directly to teaching effectively in the online instructional environment?

The interview was conducted in a semi-structured manner and follow-up questions were asked when appropriate.

Participants

While nine faculty members were interviewed, only eight of the interviews were recorded (due to a technological failure) and therefore only data from eight of the nine participants was analyzed. Participants were between the ages of 41 and 64; one participant was male and seven were female; and all participants had taught face-to-face for a minimum of eight years and online for a minimum of four years. Table 1 contains the demographic data of all the participants.

Data Processing & Analysis

Participation in the study was completely voluntary and participants did not receive any compensation for their participation. Participants were given the option to be interviewed via telephone or Skype and 4 opted to be interviewed via Skype and 6 opted to be interviewed by The interviews were recorded and transcribed by the researcher. telephone. However, technological difficulties prevented the interview for Participant 9 from being recorded; thus, data from only eight participants were used to answer the research questions (this was sufficient to reach saturation). Each participant was asked 10 interview questions and the responses to three of these interview questions yielded data that were analyzed, coded, and memoed [sic] to identify emergent themes using data analysis resembling grounded theory data analysis procedures (which is appropriate for case study; Yin 2014) to answer the research question How do higher education faculty members transition from a face-to-face (i.e., on-ground) teaching format to an online teaching format? Within the context of this research question, a better understanding of the needs of faculty to successfully navigate this transition process was obtained and several themes emerged from the data.

Results

There was one overriding conceptual theme that was generated from the analysis of the data regarding how instructors transition from face-to-face instruction to online instruction: *Transforming*. Transforming is comprised of two descriptive categories supported by subthemes (see Figure 1). The two descriptive categories were *Knowledge Acquisition* and *Experiential Learning*. Within the descriptive category of Knowledge Acquisition, the following subthemes were identified: 1) technology, 2) best practices, 3) subject specific, and 4) mentoring. The second descriptive category of Experiential Learning yielded the following two subthemes: 1) mirroring, and 2) overcoming challenges.

Transforming

When an instructor begins the process of transitioning to online instruction, he or she embarked on a new journey and experiences a personal transformation. Transforming was the main theme of how instructors transition to online instruction. The transformation was aided by the knowledge the instructor gained and the experiences he or she had during the online transition process.

It is important to note that transitioning can be viewed as being on a fluid continuum. Some instructors (Participants 1, 4, 5, 6, and 8), who transitioned to online instruction many years ago, still felt, based on the information gleaned from the interviews, as if they are still



transitioning in terms of trying to understand how to be successful in specific areas of transitioning such as how to encourage the students to work in collaborative groups or how to use specific software; whereas other instructors (Participants 2, 3, and 7) implied that the transition was relatively smooth and that the challenges were with the technology as opposed to their abilities to move to online instruction.

Based on the results of the study, the process of fully transitioning to online instruction is one that is based on a fluid continuum. For example, as new technologies and online learning theories are developed, current best practices may be expanded upon, and as such, there will be need for ongoing training along with the opportunity to apply the newly acquired information. Due to the continued need for knowledge acquisition and experiential learning opportunities, the process of transitioning remains on a sliding scale and instructors will be in various places on the continuum of transitioning and transforming.

Two themes were identified as pertinent to the transformation process and addressed the first research question: 1) *Knowledge Acquisition* and 2) *Experiential Learning*.

Knowledge acquisition. Knowledge acquisition was voiced by all eight participants as an integral component for transitioning from a face-to-face learning environment to an online environment; however, how the knowledge was acquired varied. Knowledge was either acquired via formal or informal training. The training provided the necessary support to improve the chances of being successful online. All the participants discussed the need for either formal or informal training to successfully transition to online instruction. Various training areas were discussed; 1) technology, 2) best practices, 3) subject specific, and 4) mentoring.

Technology. The need to learn new technology was voiced by all eight participants. The technology ranged from learning how to navigate the Learning Management System (LMS) such as Blackboard, Epic, or Canvas, to finding applications and learning how to use the applications (apps), to learning how to use interactive technologies, such as Skype. Understanding how to use the various LMSs, in addition to learning how to use interactive technologies, such as Skype, aided in the transition process.

Best practices. Many authors (Baghdadi, 2011; Foster, Shurtz, & Pepper, 2014; Kerr, 2011) have written about best practices in an online environment and not surprisingly, teaching an online course using best practices was discussed by all the participants. Using best practices in an online course increases the chances for success for both the online instructor and the online students. Finding a common language to use when communicating is also an integral part of best practices. People in the e-learning industry seem to have a common language that people outside e-learning may not be familiar with as indicated by Participant 5 who said, "In the beginning I wish someone had given me a vocabulary list. I have no idea what some of these people were talking about." When people are immersed in a subject specific language such as technology speak v. teacher speak, it may take effort to remember that vocabulary needs to be reviewed in order to ensure that the message being communicated is being received.

Communicating with students is an important component of online instruction (Vitale, 2010). There are various methods online instructors can use to communicate effectively with their students. Thirteen methods were identified by the participants and these methods included:

- (a) repeating instructions several times (Participant 6);
- (b) making him or herself available via a virtual office such as Skype (Participants 2, 5, and 6);
- (c) making him or herself available by email or phone (Participants 1, 3, 4, 5, 6, and 8);
- (d) providing feedback or information to the students that is clear and concise (Participants 1, 4, and 6);



- (e) creating videos to facilitate communication (Participants 3, 5, and 6);
- (f) using red tracking (feature in Microsoft Office) on a student's document (Participant 6);
- (g) providing written or audio feedback (Participants 1 and 6);
- (h) using humor to help connect with the students (Participants 1 and 4);
- (i) telling the students "that it is ok to make mistakes." (Participant 1)
- (j) using Voiceboard for oral assignments and oral feedback (Participants 1 and 5);
- (k) asking students for feedback in addition to the feedback asked for by the school (Participant 4);
- (l) writing a lot on a test (Participant 3);
- (m) using the Announcement feature in Blackboard. Participant 8 stated, "if I see that several students are making the same type of error, I'll put an announcement out in Blackboard that says, 'hey, a lot of you all doing this. Why don't you try this instead..."

By using a variety of different methods to communicate with students, an instructor will increase his or her ability to ensure the students are able to receive and process the information provided. The transition process is enhanced when there is effective communication between the instructor and the students.

Collaboration (Ishtaiwa & Abulibdeh, 2012; Pan & Franklin, 2011) has been identified as a method to improve an educational environment. This may be true in theory, but after analyzing the data, it seemed that the application of creating collaborative environments in an online class was challenging. Seven of eight participants found collaboration to be challenging. Collaboration is an integral part of online instruction as voiced by Participant 6, but identifying the best way to create a collaborative environment outside of theory and best practices remains a serious issue in the process of transitioning to online instruction. Understanding how to implement online learning theory and best practices would aid an instructor who is transitioning to online instruction.

Subject specific. Some courses are more difficult to teach using an online format as expressed by Participant 3, who stated that,

I have been so disappointed in some of the training that I have gotten in some areas, not specifically transitioning from face-to-face to online but a lot of the training that is out there seems to not really work well in math. Math is more like a foreign language . . . everything you hear from most math professors is that it sounds really good, but it didn't work for math.

This echoed what Participant 1 stated,

Formally, there was a 4 week introduction to Bb online learning class that I took at the school where I'm teaching, but it didn't focus on foreign languages. So while having a Webquest activity or a fish bowl activity is theoretically an excellent activity, it does absolutely zero good in a first semester foreign language class when the students can't say hello.

Developing training that targets specific course topics remains an issue that needs to be addressed in formal training sessions to support the transitioning instructor.

Mentoring. Working with another person who would be considered more experienced in the field can be really helpful during the transition process. Working together decreases the feelings of isolation that many students feel when they take an online course and through mentorship, feelings of isolation can be decreased among online instructors as well.



Experiential Learning

While many authors (Baghdadi, 2011; Foster et al., 2014; Kerr, 2011) have written about best practices and theory for online instruction, there is a problem when instructors try to apply best practices and theory as Participant 1 stated, "best practices don't align with constraints of online classes." Learning about how to teach online may be very different from the reality of teaching online and new-to-online instructors may not fully understand what is happening or what is expected until they are in the middle of it and experiencing it. Thus, *experiential learning* was identified as a key theme for how faculty members transition to online instruction. This theme is supported by two subthemes. The two subthemes are as follows: 1) *mirroring* and 2) *overcoming challenges*.

Mirroring. Participant 2 summarized this subtheme very well when she said, "if you don't know what to expect or how anyone else does it, you are starting from a blank screen." An instructor will often provide templates for how to submit an assignment and students are expected to copy (mirror) the template. The same is true for new-to-online instruction instructors. Without seeing an example of what an online course looks like, it is challenging for an online instructor to meet the requirements or to be successful. It can also mean that an educator is unable to anticipate errors and inadvertently creates challenging situations for him or herself as well as for the students such as creating documents or templates too late in the course for them to be useful. Mirroring ties in with the need for mentorship during the transition process as discussed previously in the section called Knowledge Acquisition.

Overcoming challenges. When moving to an online instructional environment, instructors should expect some changes to their instruction and be willing to make adaptations. Adapting to a new situation such as online instruction can be facilitated by starting with a course that an instructor has "already been teaching" (Participant 8). As such, according to Participant 8, only the format changed; the content was not new. Without the ability to adapt to a new environment (online), or having the ability to learn new technologies or various means of communicating, online instruction can be very daunting as voiced by Participant 2.

Many challenges were identified by the participants. Challenges made the transition to online instruction more difficult for faculty members. These challenges included timing, technology, course development, and connecting.

When training sessions were offered by administrators, the timing needed to be considered. The timing of formal training could be improved if the training sessions were scheduled closer together and not over a period of years. In addition to timing the training sessions in a manner more conducive to learning, technology should be addressed in the training sessions.

Technology was perceived as taking time to learn and without support it could be very challenging. Developing a course was seen as taking time and an instructor needs to repeat him or herself in a number of different areas in the course shell. In effect, an online instructor needs to "create a course that is stupid proof" (Participant 6). If the students are not able to find the necessary materials in the course shell, it will be difficult for them to be successful; thus, the instructor needs to take the time to ensure that the course has been well developed and that it meets the needs of the students.

Connecting with students was perceived as an important part of encouraging engagement in a classroom and connecting or developing rapport with online students could be challenging. When an educator is not able to connect with students, creating collaborative groups can also be challenging. Using humor such as graphics of "people smiling and laughing" is a method Participant 1 and 4 used to connect to their online students.



Discussion

This study represents an important first step in developing a bettering understanding of how higher education faculty members transition from a face-to-face (i.e., on-ground) teaching format to an online teaching format. The information gleaned from this study can be used to help administrators better understand the transformation process that faculty undergo and within that context a better understanding of the training needs of online faculty who are transitioning was obtained. Ultimately when the training needs of online faculty members are met, faculty are better able to meet the needs of their students. The results from this study have several important implications that offer administrators a better understanding of what faculty members need to effectively transition (and transform) to the online environment and be effective online instructors.

Implication1: The Transformation Process

Administrators who understand that faculty members need to transform themselves during the transition to online instruction process will be better prepared to develop training sessions to support these instructors. Administrators who seek to support faculty members in transition to online instruction will be required to provide formal or informal training opportunities. Results from the current study suggest that knowledge acquisition can take two forms. First, knowledge acquisition can be in the form of formal training provided by the administrators at schools of higher education. Second, knowledge acquisition can be in the form of an online instructor taking the initiative to find workshops or finding relevant current scholarly articles or books on a specific topic germane to the current area of need.

A review of the extant literature revealed that training for faculty members generally involved the use of best practices (Batts et al., 2010; Haar, 2010). For faculty members new-toonline instruction, understanding teaching strategies has been documented to be beneficial (Northcote, Reynaud, & Beamish, 2012). Per the literature, effective online teaching strategies included maintaining open lines of communication (Baghdadi, 2011; Foster et al., 2014) and using reflective thinking via discussion questions (Pedro, Abodeeb-Gentile, & Courtney, 2012). Moreover, researchers have documented that best practices such as modeling appropriate responses for students in the online forum, encouraging students to use social networking sites such as Facebook to improve feeling part of a group and avoiding feelings of isolation, and ensuring the students understand the technological tools needed in the course (Kerr, 2011) are useful strategies that online instructors can use in the online classroom. Instructional design skills, content-area expertise (Foster et al., 2014), and using collaborative activities (Lewis, Koston, Quartley, & Adsit, 2011) are also touted as online instructional best practices. Results from the current study support the importance of best practices and the development of effective online teaching strategies. However, results from this study also provide a stepping stone for administrators who are responsible for supporting their online instructors. Armed with the information from the results of this study, administrators can apply these strategies to help improve the ability of the online faculty to meet the needs of their students; thus, improving the academic experience of the instructor and students.

Implication 2: Best Practices and Practical Application of Collaborative Activities:

Findings from this study also revealed a conflict between best practices and practical application of collaborative activities. Based on the data analysis of this study, online faculty members did not yet understand how to effectively engage online students in collaborative



activities and thus, it remained challenging to develop online collaborative activities. For an instructor to cultivate collaboration in an online course, the use of technology is paramount (Marmon, Vanscoder, & Gordesky, 2014). However, based on the findings of this study, there was a disconnect between understanding what collaborative activities entailed and applying established effective online collaborative activities. The challenge stems from an online instructor's lack of understanding of how to support and encourage online collaboration.

The benefits of collaborative activities are plentiful (Agosto, Copeland, & Zach, 2013; Ruey, 2010) and while online instructors in this study were aware of the benefits of collaborative work, they were unsure of how to apply them making it challenging for the instructors to encourage collaboration among online students. Thus, one important implication that can be drawn from the current study is that instructors may need training in the area of how to support online students in their attempts at collaborative work and on how to guide students in collaborative activities. Training may include hands-on activities where the instructor is given the opportunity to practice supporting students and helping them create an engaging collaborative environment online.

Implication 3: Learning and Applying New Technology

Participants in the current study also identified the need to learn the LMS and its features in order to instruct online learners effectively. This finding is consistent with findings by other researchers (e.g., Hoffmann & Dudjak, 2012). Instructors who are new to the online environment need to understand the technology tools available to them and the best strategies for teaching online. Faculty members also need to obtain the skills needed to navigate the challenges they will face as they transition online.

Curiously, while the extant literature identified the need for training (Fish & Gill, 2009; Lee & Tsai, 2010; Marmon, et al., 2014; Shattuck, Dubbins, & Zilberman, 2011; Vaill & Testori, 2012) and the findings of this study supported the need for training, the need for subject specific training was also identified after data analysis; yet, subject specific training was not raised as a need in the extant literature. Results from this study indicate that faculty members who teach mathematics or foreign language courses online need training specific to their subject areas. Knowledge acquisition is fundamental for an online instructor to be successful both with regard to the technology that is being used (i.e., the LMS) and with regard to knowledge that is subject-matter specific.

Implication 4: Gaining Experience in the Virtual Environment

In addition to knowledge acquisition, online instructors also need to gain experience working in a virtual environment. Inexperienced online instructors tend to use traditional teaching strategies, which are ineffective in the online teaching environment (Allen & Seaman, 2010). Many on-ground faculty members have transitioned to online instruction without identifying the need for subject specific training is significant because administrators are now aware of its importance and can develop training sessions to address the needs of faculty members. If online faculty members are trained properly, then the students will benefit from better course design and instruction.

Administrators who implement the aforementioned training suggestions will be able to tailor their training to meet the needs of their online faculty in an effective manner. This is significant because such tailoring will improve instruction and thus lower attrition rates of faculty and students. As online faculty members become more proficient in online instruction, students will also benefit.



Limitations

There were several limitations in this study: a) the participants represented the field of education and specifically, only data from faculty members from institutions of higher education were used, b) the participants were all over the age of 41 years, which meant that the participants did not grow up with the Internet and, as such, they may not be as fluent with new technologies as millennials (persons born "roughly to the beginning of the 1980s through the end of the 1990s" [Levenson, 2011, p. 257]) may be, and c) each participant had been teaching in the online environment for a minimum of four years. Due to the number of years of experience in the online environment, participants may have discussed the skills needed to transition based on their current situation as opposed to when they first began their transition to online instruction. Also, the participants may not have been able to recall events from four years ago or longer.

Recommendations

Practical Applications. Recommendations for practical applications exist based on the implications expressed in this study. First, participants explained the need to align themselves with a mentor who supports them through the transition process and beyond. While researchers (Lackey, 2011; Williams, Sunderman, & Kim, 2012) have noted issues with mentorship, other researchers (Barczyk, Buckenmeyer, & Feldman, 2010; Herman, 2012) supported the use of mentors. Aligning oneself with a mentor is also supported by the results of this study. Because a mentor is an integral part of the transition process, he or she would be of great benefit to the transitioning online faculty member. A mentor should be willing to share how he or she set up his or her online course so that the transitioning instructor could mirror his or her class. This is significant in that online faculty members would have an ally during their transition to online instruction. The online faculty member would not feel isolated or feel that he or she was expected to learn how to teach online on his or her own if he or she were aligned with a mentor.

A second recommendation based on the results of this study addressed the process of transitioning. Participants explained the need for post-secondary administrators to include a course on collaboration in a program for aspiring teachers. Collaboration has been identified by researchers as a method to support student learning (Barczyk et al., 2010; Marmon et al., 2014). Since the education field is expanding to the online environment, K-12 teachers and post-secondary faculty members will need to understand how to organize and maintain collaborative online groups in an effective manner. Managing conflict within collaborative groups is also an area that should be addressed in training. A course that focuses on collaboration is significant because it would support the beginning teacher and transitioning online instructor.

A third recommendation based on the results of this study addressed the process of transitioning. Participants explained the need for post-secondary administrators to provide training that includes a course shell where transitioning instructors can practice their collaboration skills with their colleagues and also to practice how to maintain collaboration with their students. Transitioning faculty members need experiential learning opportunities.

Future Research. There were two recommendations for future research and application can be made based on the data analysis and findings of this study.

Recommendation 1. A missing piece to current training and support practices for online faculty was the absence of addressing subject specific areas. While training and support address best practices, based on data analysis administrators were not offering transitioning instructors subject specific training. For example, while a French, Spanish, or mathematics online instructor would benefit from learning about the best practices in the field of online instruction, additional



support and training is needed for teaching French and Spanish language instructors and mathematics instructors in terms of how to communicate more effectively with their students. A future area of research should include how foreign language instructors develop asynchronous communicative collaborative activities.

Recommendation 2. A second area of future research should include how administrators could add specific subject area needs into their training programs or workshops. For example, a mathematics online instructor would benefit from training in the area of how to communicate with students using mathematical symbols.

Conclusion

The purpose of this multiple case study was to understand how faculty members transition to online instruction and to gain a better understanding about the transition process. With a better understanding of the transition process, educators and administrators could focus on specific training needs to improve the success of transitioning. The results from the data analysis have also helped explain how faculty members would be able to transition more effectively. As supported by the results from the data analysis, additional studies in the areas of online collaboration and subject specific training are needed.

Partici- pant	Age	Sex	Description Of Work Area	Location of College	YT F2F	YT online	Taught Blended Classes?
1	41-55	М	Urban	МО	8	4	No
2	56 -64	F	Rural	TX	26	14	Yes
3	56 -64	F	Rural	TX	30	15 or 16	Yes
4	56 -64	F	Suburban	PA	8	5	Yes
5	56 -64	F	Suburban	VA	33	7	Yes
6	41-55	F	Urban	PA & MD	12	8	Yes
7	56 -64	F	Suburban	PA	33	Since the 80's	No
8	41-55	F	Urban	TX	15	7	Yes
9	56 -64	М	Urban	AL	10	7	Yes

Table 1: Participants' Demographic Data

Note. M=male; F=female; MO=Missouri; TX=Texas; PA=Pennsylvania; VA=Virginia; MD=Maryland; AL=Alaska; YT F2F=years teaching face-to-face; YT online=years teaching online.



References

- Agosto, D. E., Copeland, A. J., & Zach, L. (2013). Testing the benefits of blended education: Using social technology to foster collaboration and knowledge sharing in face-to-face LIS courses. *Journal of Education for Library and Information Science*, 54(2), 94-107. Retrieved from http://www.alise.org/jelis-2
- Allen, I. E., & Seaman, J. (2010). *Learning on demand: Online education in the United States,* 2008. Needham MA: Sloan-C. Retrieved from http://sloanconsortium.org/publications/survey/pdf/learningondemand.pdf
- Allen, E., & Seaman, J. (2012). Digital faculty: Professors, teaching and technology, 2012. Inside Higher
 Ed.
 Retrieved
 from

http://www.insidehighered.com/sites/default/server_files/DigitalFaculty.htm

- Allen, I. E., & Seaman, J. (2013). Changing Course: Ten years of tracking online education in the United States. *Sloan Consortium*, 1-42. Retrieved from http://sloanconsortium.org/
- Baghdadi, Z. D. (2011). Best practices in online education: Online instructors, courses, and administrators. *Turkish Online Journal of Distance Education*, 12(3), 109-117. Retrieved from https://tojde.anadolu.edu.tr/
- Bair, D., & Bair, M. (2011). Paradoxes of online teaching. *International Journal for the Scholarship of Teaching and Learning*, 5(2), 1-15. Retrieved from http://academics.georgiasouthern.edu/ijsotl/index.htm
- Barczyk, C., Buckenmeyer, J., & Feldman, L. (2010). Mentoring professors: A model for developing quality online instructors and courses in higher education. *International Journal* on E-Learning, 9(1), 7-26. Retrieved from www.aace.org/pubs/ijel
- Barrett, B. (2010). Virtual teaching and strategies: Transitioning from teaching traditional classes to online classes. *Contemporary Issues in Education Research*, 17-20. Retrieved from http://journals.cluteonline.com/index.php/CIER
- Batts, D., Pagliari, L., Mallett, W., & McFadden, C. (2010). Training for faculty who teach online. *The Community College Enterprise*, *16*(2), 21-31. Retrieved from http://www.schoolcraft.edu/cce/
- Beebe, R., Vonderwell, S., & Boboc, M. (2010). Emerging patterns in transferring assessment practices from F2f to online environments. *Electronic Journal of e-Learning*, 8(1), 1-12. Retrieved from www.ejel.org
- Buckenmeyer, J., Hixon, E., Barczyk, C. C., & Feldman, L. (2011). Invest in the success of online programs at the university? Mentor professors. *Contemporary Issues in Education Research*, 6(6), 1-6. Retrieved from http://journals.cluteonline.com/
- Fish, W. W., & Gill, P. B. (2009). Perceptions of online instruction. *The Turkish Online Journal* of *Educational Technology*, 8(1), 53-64. Retrieved from https://tojde.anadolu.edu.tr/tojde18/about.html
- Foster, M. J., Shurtz, S., & Pepper, C. (2014). Evaluation of best practices in the design of online evidence-based practice instructional modules. *Journal of the Medical Library Association*, 102(1), 31-40. http://dx.doi.org/10.3163/1536-5050.102.1.007
- Haar, M. (2010). Transitioning traditional programs to online programs. *Department Chair*, 20(4), 24-26. doi:10.1002/dch
- Herman, J. H. (2012). Faculty development programs: The frequency and variety of professional development programs available to online instructors. *Journal of Asynchronous Learning Networks*, 16(5), 87-106. Retrieved from http://sloanconsortium.org/publications/jaln_main



- Hoffmann, R. L., & Dudjak, L. A. (2012). From onsite to online: Lessons learned from faculty pioneers. *Journal of Professional Nursing*, 28(4), 255-258. http://dx.doi.org/10.1016/j.profnurs.2011.11.015
- Hoskins, B. (2011). Demand, Growth, and Evolution. *The Journal of Continuing Higher Education*, 59(1), 57-60. http://dx.doi.org/10.1080/07377363.2011.546267
- Ishtaiwa, F., & Abulibdeh, E. (2012). The impact of asynchronous e-learning tools on interaction and learning in a blended course. *International Journal of Instructional Media*, 39(2), 141-160. Retrieved from http://www.adprima.com/ijim.htm
- Jandric, P. (2012). Curriculum development for e-learning: A conceptual framework. *Problems of Education in the 21st Century*, 39, 62-71. Retrieved from http://www.jbse.webinfo.lt/Problems of Education.htm
- Jordan, S. (2012). Student engagement with assessment and feedback: Some lessons from shortanswer free-text e-assessment questions. *Computers & Education*, 58(2), 818-834. http://dx.doi.org/10.1016/j.compedu.2011.10.007
- Kerr, S. (2011). Tips, tools, and techniques for teaching in the online high school classroom. *TechTrends*, 55(1), 28-30. Retrieved from http://www.springer.com/education+%26+language/learning+%26+instruction/journal/115 28
- Lackey, K. (2011). Faculty development: An analysis of current and effective training strategies for preparing faculty to teach online. *Online Journal of Distance Learning Administration*, 14(4), 8. Retrieved from http://www.westga.edu/~distance/ojdla/winter144/lackey144.html
- Lee, M., & Tsai, 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, 1-21. http://dx.doi.org/10.1007/s11251-008-9075-4
- Levenson, A. (2010). Millennials and the world of work: An economist's perspective. *Journal of Business & Psychology*, 25(2), 257-264. doi:10.1007/s10869-010-9170-9
- Lewis, L. A., Koston, Z., Quartley, M., & Adsit, J. (2011). Virtual communities of practice: Bridging research and practice using Web 2.0. *Journal of Educational Technology Systems*, 39(2), 155-161. http://dx.doi.org/10.2190/ET.39.2.e
- Marmon, M., Vanscoder, J., & Gordesky, J. (2014). Online Student Satisfaction: An examination of preference, asynchronous course elements and collaboration among online students. *Current Issues in Education*, 17(2), 1-11. Retrieved from edu/ojs/index.php/cieatasu/article/view/1280
- Mayadas, A., Bourne, J., & Bacsich, P. (2009). Online education today. *Journal of Asynchronous Learning Networks*, 13(2), 49-56. http://dx.doi.org/10.1126/science.1168874
- Moule, P., Ward, R., & Lockyer, L. (2011). Issues with e-learning in nursing and health education in the UK: Are new technologies being embraced in the teaching and learning environments? *Journal of Research in Nursing*, 16(1), 77-90. http://dx.doi.org/10 .1177/1744987110370940
- Namdev, D. (2012). ICT and web technology based innovations in education sector. *Turkish Online Journal of distance Education*, 13(4), 256-268. Retrieved from http://files.eric.ed.gov/fulltext/EJ1000427.pdf
- Northcote, M., Reynaud, D., & Beamish, P. (2012). Teaching the lecturers: Academic staff learning about online teaching. US-China Education Review, 4, 384-393. Retrieved from http://www.davidpublishing.com/journals_info.asp?jId=853



- Pan, S., & Franklin, T. (2011). In-service teachers' self-efficacy, professional development, and Web 2.0 tools for integration. *New Horizons in Education*, 59(3), 28-41. Retrieved from http://www.hkta1934.org.hk/NewHorizon/index2.html
- Pedro, J., Abodeeb-Gentile, T., & Courtney, A. (2012). Reflecting on literacy practices: Using reflective strategies in online discussion and written reflective summaries. *Journal of Digital Learning in Teacher Education*, 29(2), 39-48. Retrieved from http://www.iste.org
- Ruey, S. (2010). A case study of constructivist instructional strategies for adult online learning. *British Journal of Educational Technology*, 41(5), 706-720. http://dx.doi.org/10.1111/j.146-7-853 5.2009.00965.x
- Schubert-Irastorza, C., & Fabry, D. L. (2011). Improving student satisfaction with online faculty performance. *Journal of Research in Innovative Teaching*, 4(1), 168-179. Retrieved from http://www.nu.edu/OurPrograms/ResearchCouncil/The-Journal-of-Research-in-Innovative-Teaching.html
- Schulte, M. (2010). Faculty perceptions of technology distance education transactions: Qualitative outcomes to inform teaching practices. *The Journal of Educators Online*, 7(2), 1-34. Retrieved from http://www.thejeo.com/
- Shattuck, J., Dubins, B., & Zilberman, D. (2011). MarylandOnline's [sic] inter-institutional project to train higher education adjunct faculty to teach online. *International Review of Research in Open and distance Learning*, *12*(2), 40-61. Retrieved from www.irrodl.org
- Tabak, R. G., Khoong, E. C., Chambers, D., & Brownson, R. C. (2013). Models in dissemination and implementation research: Useful tools in public health services and systems research. *Frontiers in Public Health Services and Systems Research*, 2(1), 1-6. Retrieved from http://uknowledge.uky.edu/frontiersinphssr/vol2/iss1/8
- Tripple, R. (2010). Effective leadership of online adjunct faculty. *Online Journal of Distance Learning Administration*, 13(1). Retrieved from http://www.westga.edu/~distance/ojdla/
- Vaill, A. L., & Testori, P. A. (2012). Orientation, mentoring and ongoing support: A three-tiered approach to online faculty development. *Journal of Asynchronous Learning Networks*, 16(2), 111-120. Retrieved from http://sloanconsortium.org/publications/jaln main
- Vitale, A. T. (2010). Faculty development and mentorship using selected online asynchronous teaching strategies. *The Journal of Continuing Education in Nursing*, 41(12), 549-556. doi:10.3928/00220124-20100802-02
- Williams, S., Sunderman, J., & Kim, J. (2012). E-mentoring in an online course: Benefits and challenges to e-mentors. *International Journal of Evidence Based Coaching and Mentoring*, 10(1), 109-124. Retrieved from http://www.business.brookes.ac.uk/research/areas/coachingandmentoring/