

UC San Diego

UC San Diego Electronic Theses and Dissertations

Title

Transitioning from Lectern to Laptop: Faculty Experiences in Online Instruction

Permalink

<https://escholarship.org/uc/item/6gf0r497>

Author

Rohland-Heinrich, Nancy Lee

Publication Date

2016

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA, SAN DIEGO
CALIFORNIA STATE UNIVERSITY SAN MARCOS

Transitioning from Lectern to Laptop:
Faculty Experiences in Online Instruction

A dissertation submitted in partial satisfaction of the
requirements for the degree of Doctor of Education

in

Educational Leadership

by

Nancy Lee Rohland-Heinrich

Committee in Charge:

University of California, San Diego

Carolyn Huie Hofstetter, Chair

California State University, San Marcos

Rong-Ji Chen
Pat Stall

2016

Copyright

Nancy Lee Rohland-Heinrich, 2016

All rights reserved.

The Dissertation of Nancy Lee Rohland-Heinrich is approved, and it is acceptable
in quality and form for publication on microfilm and electronically:

Chair

University of California, San Diego
California State University, San Marcos

2016

DEDICATION

I dedicate this dissertation to my family, friends and colleagues for supporting my passion for lifelong learning and increasing opportunities for educational access to all. I appreciate my parents, Donald and Crystal Ruckmar, who instilled in their six children the importance of education, the pursuit of knowledge, and a strong Midwest work ethic and values that have guided all of us throughout life. I appreciate and adore my children, Brianna and Bill, for their unwavering support and patience of their mother's professional career and educational pursuits while balancing the needs of our family and being a good mom. I value the support of my husband, Jeffrey, for his tolerance in understanding my dedication to my career, community and seeking a doctorate, which all have taken an inordinate amount of time and energy. I cherish my stepson, Daniel, who is talented and has encouraged me to fulfill this lifelong dream.

EPIGRAPH

“Tell me and I forget, teach me and I remember. Involve me and I learn.”

— **Benjamin Franklin**

TABLE OF CONTENTS

Signature Page	iii
Dedication	iv
Epigraph	v
List of Figures	x
List of Tables	xi
Acknowledgements	xiii
Vita	xiv
Abstract of the Dissertation	xv
Chapter 1: Introduction	1
Background	2
Evolving Role of Faculty	3
Statement of the Problem	5
Purpose of the Study	6
Research Questions	6
Research Methodology	7
Significance of the Study	9
Definition of Terms	10
Chapter 2: Literature Review	13
The Changing Landscape of Higher Education and Online Education	13
Faculty Transition to Online Teaching	14
Key Differences in Traditional Versus Online Teaching	16
Role Changes	17
Establishing Faculty Presence in an Online Environment	19
Lack of Transferable Teaching Experiences	21
Pedagogical Shift and Student Engagement	22
Expanded Set of Competencies	23
Mixed Perceptions of Quality	24
Positive Faculty Perceptions Teaching Online	25
Intrinsic Benefits	26
Professional Flexibility	27
Expanded Levels of Engagement	27
Perceived Inhibitors to Online Instruction	28
Increased Time Commitment	29

Workload Implications and Lack of Recognition	30
Course Development and Design.....	30
Technology Challenges and Support	31
Classroom Dynamics	31
Importance of Institutional Support	32
Adequacy of Infrastructure	33
Incongruent Institutional and Faculty Perceptions	33
Faculty Incentives and Recognition.....	35
Importance of Faculty Development	35
Theoretical Frameworks	37
Conclusion	42
Chapter 3: Methodology	45
Introduction.....	45
Research Design.....	46
Quantitative Design Methods	48
Qualitative Design Methods	49
Context for the Study.....	51
Participant Selection	52
Data Collection and Instrumentation	55
Phase One: Quantitative Data Collection	56
Phase two: Qualitative Data Collection	58
Data Analysis	58
Analysis of Quantitative Data.....	59
Analysis of Qualitative data	60
Summary	60
Chapter 4: Findings.....	62
Research Questions.....	64
Quantitative Findings.....	64
Motivators and Inhibitors of Faculty Participants	65
Frequency distribution for motivating factors	66
Frequency distribution for Inhibiting factors.....	67
Central tendency of motivating variables	69
Central tendency of inhibiting variables	70
Characteristics of faculty with online teaching experience	71
Bivariate Analysis of Motivators and Inhibitors.....	74
Motivating factors of faculty participants.....	75
Inhibiting factors of faculty participants.....	81
Multivariate Analysis of Faculty Characteristics and Factors	86
Logistic regression of online faculty characteristics.....	86
Logistic regression of motivating and inhibiting variables.....	86
Qualitative Findings.....	87
Qualitative Data Analysis from Online Survey Comments.....	87
Online Survey Comments: Data Analysis	89

Factors that would encourage or discourage teaching online	89
Development needs for faculty teaching online.....	91
Perceptions of online teaching	93
Synthesis of themes from online survey comments.....	95
Qualitative Analysis: Interview Data.....	96
Qualitative Findings from Online Interview Questionnaires.....	99
Migrating to online teaching.....	99
Online persona	100
Functions in online teaching	100
Barriers and challenges teaching online	101
Rewarding attributes of online teaching	102
Techniques to enhance teaching and learning	103
Support required for online teaching	104
Professional development opportunities.....	104
Self-reflection of adopting innovation	105
Rogers’s adoption of innovation theory.....	105
Online education as being a disruptive innovation.....	106
Online faculty shared experiences	107
Synthesis of Qualitative Online Interview Findings.....	107
Conclusion of Findings.....	108
Chapter 5: Discussion and Conclusion	111
Summary of Study	111
Discussion of Findings.....	112
Research Question Findings	114
Research Sub-Question One	114
Research Sub-Question Two.....	118
Research Sub-Question Three.....	120
Research Sub-Question Four	123
Research Sub-Question Five.....	124
Online Education and Innovation	126
Discussion and Recommendations	127
Recommendations for Actions.....	128
Recommendations for Institutional Support.....	130
Limitations and Considerations	131
Limitations and Positionality	133
Implications of the Study	135
Implications for Practice	135
Implications for Social Justice	137
Implications for Policy.....	139
Recommendations for Future Research	140
Conclusion	142
Appendices.....	144

Appendix A: Instrument One: Faculty Survey Instrument	145
Appendix B: Emails to Online Survey Participants.....	149
Appendix C: Invitation for Interview/Questionnaire Participants	151
Appendix D: Online Questionnaire	153
References.....	154

LIST OF FIGURES

Figure 1: Rogers's innovation adoption curve.....	40
Figure 2: Convergent parallel mixed methods design model	47
Figure 3: Data collection process.....	56

LIST OF TABLES

Table 1:	Descriptive Statistics of Faculty Participants	65
Table 2:	Survey Responses: What would motivate you to teach online courses?	66
Table 3:	Survey Responses: What would inhibit you to teach online courses?	68
Table 4:	Descriptive Statistics of Motivators to Teach Online	70
Table 5:	Descriptive Statistics of Inhibitors to Teach Online	71
Table 6:	Characteristics of Study Respondents who Teach Online Courses	73
Table 7:	Motivating Factors to Teach Online Courses	76
Table 8:	Factors Inhibiting to Teach Online Courses	82
Table 9:	Logistic Regression – Faculty Characteristics Associated with Teaching Online	86
Table 10:	Logistic Regression – Motivating & Inhibiting Factors Associated with Teaching Online	87
Table 11:	Online Survey Comments: Crosswalk of Prompts and Research Sub- Questions	88
Table 12:	Online Survey Comments: Summary of Participant Response Rates to Prompts	89
Table 13:	Online Survey Comments: Themes Related to Question A	90
Table 14:	Online Survey Comments: Themes related to Question B	92
Table 15:	Online Survey Comments: Themes Related to Question C	93
Table 16:	Online Survey Comments: Emerging Themes from Combined Responses	96

Table 17: Online Interviews: Crosswalk of Interview Questions and Research	
Sub-Questions	98
Table 18: Online Interview Questions: Synthesis of Qualitative Findings.....	108

ACKNOWLEDGEMENTS

I acknowledge the support of my colleagues in higher education who provide an amazing organizational environment that thrives on innovation and providing relevant educational programs and services. I am grateful for working in an environment with so many thought leaders who value the importance of balancing accessibility and quality in higher education. I greatly appreciate my dissertation chair, Carolyn, for her ongoing support and encouragement throughout the program and the dissertation process as well as my entire Cohort, the “fine nine,” and want to extend my special gratitude to my cohort buddies Barbara and Darrell. I have enjoyed building relationships with a dedicated group of professors from both institutions for creating a scholarly and dynamic JDP program. Finally, I look forward to spending more time with loved ones and rekindling my relationships with so many friends as well as my family in California and in Minnesota.

VITA

EDUCATION

- 1978 Bachelor of Arts in Social Work and Sociology
St. Cloud State University, St. Cloud, Minnesota
- 1982 Master of Business Administration
National University, San Diego, California
- 2001 Organizational Leadership, graduate work
University of La Verne, La Verne, California
- 2016 Doctor of Education in Educational Leadership
University of California, San Diego, California
California State University San Marcos, California

PUBLICATIONS

- 2016 Transitioning from Lectern to Laptop: Faculty Experiences in Online Instruction
- 2007 Rohland-Heinrich, N., & Jensen, B. (2007). Library resources: A critical component to online learning. *MULTIMEDIA AND INTERNET @ SCHOOLS*, 14(2)

ABSTRACT OF THE DISSERTATION

Transitioning from Lectern to Laptop: Faculty Experiences in Online Instruction

by

Nancy Lee Rohland-Heinrich

Doctor of Education in Educational Leadership

University of California, San Diego, 2016
California State University, San Marcos, 2016

Carolyn Huie Hofstetter, Chair

As online education expands in prominence and acceptance, the higher education sector will continue to experience a paradigm shift altering long-held institutional traditions. In 2012, over 7.1 million college students enrolled in at least one online course. To support the monumental surge in online enrollment trends, higher education has witnessed an increased demand for a qualified cadre of faculty to successfully transition teaching strategies and responsibilities in a face-to-face traditional setting to an online learning environment. This study explored role change for faculty from lectern to laptop, identifying the significance of the numerous idiosyncrasies as instructors experience this transition to a virtual environment.

This study examined the perceptions of faculty regarding the primary differences navigating between classroom and online instruction as they adopt pedagogical shifts in a digital setting and the impediments and benefits that occurred. Research shows there are significant attributes associated with this role change while faculty overcome barriers to successfully migrate this transition as they adapt to an innovative teaching modality. The research was conducted at a mid-sized, public university in Southwestern United States.

The mixed methods approach provided a quantitative measure of faculty perceptions of motivators and inhibitors of online teaching from both experienced and non-experienced faculty. The quantitative findings are coupled by a case study of faculty who have instructed in these diverse teaching environments. The faculty in the study elaborated on the pedagogical and functional shifts in teaching as well as the key aspects that potentially influence or discourage faculty from teaching in an online environment. The combined themes from the data converged into eight primary areas, including defining and acclimating to the role changes, navigating curriculum adaptations, identifying benefits of teaching online, expressing deterrents, defining technology expectations, professional development support, quality matters, institutional commitment, and innovative strategies.

The study informs higher education leaders how this expanding cadre of faculty perceives their evolving role and the nuances inculcated by teaching in these modalities. Faculty are the key ingredient to sustaining the quality of delivery for elearning opportunities as the momentum for growth continues and the demand for innovation in educational delivery reshapes 21st-century higher education.

Keywords: elearning, faculty retention, motivators, online teaching, pedagogy, roles, institutional readiness, instruction, motivators, attitudes, professional development, teaching presence

CHAPTER 1: INTRODUCTION

If we're really serious about all lives having equal value, we need to make sure that the higher education system, both access, completion, and excellence are getting the attention they need. (Gates, 2014, para. 2)

As online education expands in higher education, faculty must increasingly shift their teaching strategies and responsibilities to succeed in an online environment. To help prepare faculty to navigate the differences between classroom and online instruction and adopt appropriate pedagogical shifts, institutions must work to understand, from a faculty perspective, the related barriers and benefits that occur during this shift. The problem to be addressed is developing an appreciation for the nature of this significant transition from onsite to online instruction as it impacts the teaching and learning experience and the evolving role of faculty within digital learning contexts.

Understanding faculty perceptions of online learning can smooth the transition from real time in a physical setting to virtual time with online educational delivery. Academic leaders who recognize potential challenges associated with the migration to online from a faculty perspective can avert divisiveness and resistance to this monumental shift.

An essential component of institutional strategies includes understanding the evolving role of instructors in higher educational settings and their struggles when shifting from traditional to online learning environments. Currently, the online enrollment trend continues to experience explosive growth, and universities must recognize the importance of distinguishing themselves through the design and delivery of a quality and innovative online student experience. Institutions engaged in virtual education illustrate their understanding of the level of commitment by earmarking resources to strengthen the distinction and quality of the online student experience as an

essential value, which includes ensuring high-quality online instruction by faculty. Faculty are the key ingredient to sustaining the monumental growth demands as eLearning technology and data systems continue to improve the delivery.

Background

The landscape of higher education continues to experience significant transformation due to the growing pervasiveness of online education. This fundamental shift in higher education is evidenced by the growing number of online programs and institutions delivered by both traditional and non-traditional institutions (Lloyd, Byrne, & McCoy, 2012). In 2012, over 7.1 million higher education students enrolled in at least one online course compared to 1.6 million in 2002 (Allen & Seaman, 2014; Seaman, 2009). In the last decade, annual college student growth rates averaged 2.6%, which pales in comparison to an annual growth rate of 17% for online growth in higher education. These shifts substantially change the face of higher education with over 33% of the 21.2 million post-secondary college students enrolled in online courses in 2012 compared to 9.6%, or 1.6 million, students in fall 2002 (Allen & Seaman, 2014). As a result of this trend, institutions advocating for growth of online courses and programs are faced with increased demands for faculty possessing the capabilities to effectively teach online, complicated by parallel research that shows that many faculty are resistant to online education.

The proliferation of expanded modalities of educational delivery will transform teaching and learning at the higher education level. As well, the infiltration of online options in the K-12 sector will produce learners who will have exceedingly increased expectations when they reach the post-secondary level. In 2012, 86.5% of higher

education institutions offered some type of online education with the most notable trend being the expansion of offering individual online courses to full program offerings, increasing from 34.5% in 2002 of the institutions to over 62% in the last 10 years (Allen & Seaman, 2013). The scope of this monumental shift is evidenced by over 70% of public institutions, 48% of non-profit universities, and almost 73% of for-profit schools offering some online courses and programs. This sea change can be viewed as disruptive to traditional models of higher education as faculty contemplate whether they are willing to embrace the changing landscape.

Evolving Role of Faculty

The expansion of online education has significantly altered long-held traditions of university teaching (Major, 2010), and faculty roles have begun to evolve. This trend has also vastly disrupted the traditional hallowed role of faculty in academe in relation to the changing context of the lecture hall as faculty face the necessity of transitioning from lectern to laptop. Online learning is on the forefront of higher education and considered “the most pressing and rapidly changing issue faced by faculty members and administrators” (Herman, 2012, p. 87). As a result of this significant shift to online learning, it is important that universities cultivate a strong cadre of faculty that are nurtured, supported, and recognized for their unique and challenging role teaching in a virtual setting. This transition can be counterintuitive for faculty members immersed in the change and for educational leaders understanding the disruption of online learning for all those involved in education. Academic leaders from over 2,800 schools project that over 90% of higher education students will enroll in at least one online course by 2019 (Allen & Seaman, 2014), requiring institutional pressure to expand the faculty corps.

Recent studies reaffirmed that teaching online is very different from that in a face-to-face setting, necessitating the need for faculty to acclimate to this significant role change (Keengwe & Kidd, 2010; Lloyd et al., 2012; McQuiggan, 2012; Palloff & Pratt, 2010; Vaill & Testori, 2012; Wray, Lowenthal, Bates, & Stevens, 2008). While some classroom teaching practices are transferable, faculty face new learning experiences due to the differences and limitations in a virtual setting (Coppola, Hiltz, & Rotter, 2002; McShane, 2004). In online settings, the role of instructors changes significantly and necessitates the need to serve as facilitators, collaborators, technologists, and course developers (Reilly, Vanderhouten, Gallagher-Lepak, & Ralston-Berger, 2012). Instructors who have taught in both online and onsite environments acknowledge the differences and appreciate some of the benefits.

For over a decade, there have been numerous studies and debate about faculty attitudes toward distance learning, specifically in online teaching. The primary areas of faculty satisfaction identified are student related, teacher related, and institution related (Bolliger & Wasilik, 2009; Wiesenberg & Stacey, 2005). Institutions must understand the importance of the relationship between the effectiveness of online teachers and the success of online students (Bigatel, Ragan, Kennan, May, & Redmond, 2012; Major, 2010). Faculty satisfaction and motivation are critical elements to successful online programs (Bolliger & Walisik, 2009; Hislop & Ellis, 2004; McQuiggan, 2012; Thompson, 2003). Some faculty resistance could be attributed to how entrenched faculty are in face-to-face instruction, their lack of experience with technology, and their acceptance of the merits of the proliferation of online education.

Instructors face several challenges when transitioning to online teaching environments, including time constraints, course content management, and development and management of student issues (Archambault, 2010). Additional challenges for faculty are navigating the changing role of teachers and students, evaluating and assessing student achievement, and maintaining a sense of active presence with students through technology (Baran, Correia, & Thompson, 2013).

Academic leadership in all types of institutions report that the perceived acceptance rate of online educational related to value and legitimacy varies widely and the pattern has not changed extensively since 2004 (Allen & Seaman, 2013). As universities expand online, institutions must address the cultural changes in the academic community to avoid divisiveness and resistance to change especially with contentious issues such as academic freedom, intellectual property, and shared governance. It is critical educational leaders understand these nuances inculcated by faculty if they want to assuage faculty to embrace the opportunity. The study informs institutions of the unique role of faculty and their typology within online learning contexts and the importance of alignment with mission, policies, support systems, and dedicated resources.

Statement of the Problem

The problem addressed by this study focuses on the sets of experiences or challenges, perceived or real, that faculty in institutions of higher education encounter when transitioning to online teaching and learning environments and how these barriers impact the teaching and learning experience as well as the evolving role of instructors within digital contexts. The emergence of new technologies, increasing student preferences for online learning, and existing in a knowledge-based society encourage

innovative instructors to rethink pedagogy and teaching methodologies. The challenge universities face is the increased demand for faculty prepared to migrate from classrooms to online instruction and faculty who are reluctant to move their courses or teach online, resulting in challenges for administration in supporting the increasing demands of providing online offerings.

Purpose of the Study

This dissertation research explored faculty perspectives regarding the unique challenges and role changes they may encounter when transitioning from a traditional face-to-face classroom to an online teaching environment and how this experience impacts their professional role. The study identified faculty perceptions related to online teaching and the key differences they have experienced in navigating from site-based to online instructional settings. This added component to the problem was illuminated by isolating common themes that can further inform educators and institutions on how to address the challenges associated with the shifting role of teachers to online instructional settings. Identifiable factors could motivate faculty to contemplate teaching online and other aspects that could dissuade them from considering the instructional modality. Based on a review of previous research, there is limited knowledge of the integration of faculty perceptions of learned experiences as their needs and concerns are identified and how they relate to informing how novice faculty can prepare for or better approach inevitable opportunities to successfully navigate online teaching.

Research Questions

Faculty perceptions of the migration from face-to-face instruction to online are worthy of exploration to more fully understand the voice of the faculty participating in

this instructional shift. The educational wave to online has created a perplexing momentum impacting faculty at public and private universities from coast to coast. There is a void in understanding how experienced classroom teachers acclimate and adapt to this shift in instructional modalities, and it warrants further exploration. This research topic illuminates on a better understanding of “how” faculty experience this transition in teaching environments and contributing factors to success.

The overarching research question for this research was: What can be learned from faculty who have taught in both traditional classroom and online settings and how do they navigate these diverse teaching environments?

A series of secondary questions augment the scope of the primary research question and provided a framework for more deeply exploring this radical shift:

1. How do faculty differentiate the unique aspects of the teaching role in online and face-to face settings?
2. What influences faculty to consider teaching in an online modality?
3. What factors inhibit faculty transitioning from a traditional brick-and-mortar to a virtual (online teaching) context?
4. What factors support faculty to transition to online teaching?
5. How do faculty transitioning online see themselves as being innovators?

Research Methodology

The setting for the research was a public, 4-year institution in Southern California with a mid-sized enrollment of approximately 15,000 students and about 30,000 graduates. The school has been engaged in online learning for over five years. Over 650

faculty comprise 264 full-time tenured track faculty and 404 part-time instructors or lecturers. Of these, 100 faculty had taught online courses.

This study adopted a mixed methods approach and involved two phases. The first phase used a quantitative survey administered to all faculty at the university to examine their perceptions of being at an institution that is transitioning from site-based to online instruction. The survey was deployed digitally via an email invitation to 726 undergraduate and graduate faculty from several disciplines who taught in spring semester 2016. The instrument captured basic demographic data and academic teaching experience as well as faculty views of teaching online as motivators and inhibitors on a 5-point Likert-type scale. Faculty also had the opportunity to answer open-ended questions and volunteer for the qualitative phase of the study. The findings from the survey helped identify further exploration of the phenomenon experienced by faculty embarking on this role shift.

The second phase of the research employed qualitative methodology to provide an interpretive approach to identifying and more fully understanding faculty perceptions of the transition from face-to-face instruction to an online learning environment. A key element central to understanding the challenges instructors face when transitioning from traditionally accepted instructor roles to online learning environments allow instructors to participate in dialogue through analysis and reflection of their individual experiences. Faculty teaching online in spring and summer terms were invited to participate in interviews or to complete a semi-structured online questionnaire. As a contemporary issue, a case study approach provides tools to deeply explore faculty engaged in this

phenomenon and the complexity of the transition that classroom faculty experience as they change their teaching modalities from onsite to online delivery.

The study is central to understanding the challenges instructors face when transitioning from traditionally accepted instructor roles to online learning environments. Through open-ended survey instruments and interviews, the researcher gathered and identified perceptions from faculty at a public educational institution where faculty participants were experienced in teaching at both onsite and online settings. By adopting a mixed methods approach, the researcher envisioned that the data collection and analysis would have a higher level of reliability and credibility because of the multiple data collection methods, which would allow for triangulation of the data.

As the expansion of online learning continues to prevail, the field is increasingly being characterized as a disruptive innovation in higher education. A theoretical framework based on Rogers's (2003) diffusion of innovation theory related to faculty, as adopters of innovation could shape how the thematic structure is identified, enabling an a priori coding of the data based on a related theory shaping the methodology.

Significance of the Study

This study explored faculty perspectives regarding the unique challenges and differences faculty may encounter when transitioning from a traditional face-to-face classroom to an online teaching environment and how this experience impacts their professional role. The significance of the study further informs the volume of knowledge on online teaching to better understand the key differences, perceived faculty advantages and barriers, the development needs of faculty, and the institutional impact of the increasing numbers of virtual instructors.

The study greatly benefits further understanding of the perceptions of faculty, their evolving role within 21st-century digital learning contexts, and what strategies may be developed as a result of this understanding to strengthen instructional quality and potential for success within online learning contexts. Learning more from experienced online faculty who have successfully navigated this transition provides invaluable insight to help professors who face this dilemma to embracing this acclimation. How faculty establish a sense of presence and replicate effective instructional strategies from a physical classroom to an online setting is only understood by those who have lived that experience.

Definition of Terms

Blended or Hybrid Learning

Refers to courses that blend online and face-to-face delivery with the majority of the course delivered online (30-79%) and a reduced number of face-to-face sessions (Allen & Seaman, 2014; Archambault & Crippen, 2009).

Course Management Systems (CMS)

A computer platform used for online learning to host a framework for the placement of course materials and course management tools to enhance the online teacher-student online learning experience. CMS provides student access to content, stores submissions and assessments, hosts course discussions, monitors student performance and participation, and provides other tools to enhance the online instructional environment. This is often referred to as a learning management system (LMS).

Emerging Technologies

Generally refers to the rapid growth of new technologies and functionalities that impact industry standards and untapped markets (Cozzens, Gatchair, Kim, Ordonez, & Porter, 2010). Related to education, emerging technologies are generally associated with the evolving role of schools, teachers, and students at the intersection of traditional forms of education and technology integration.

Face-to-face classroom (F2F)

A traditional, live classroom learning environment where instructors and students are in the same physical space. Generally in a college setting, the teacher would be positioned at a lectern in the front of the classroom or lecture hall.

Mobile Learning

Learning supported by mobile devices such as cellular phones, portable computers, and personal audio players (Sharples, Taylor, & Vavoula, 2007) by means of wireless technological devices that can be pocketed and utilized wherever the learner's device is able to receive unbroken transmission signals (Al-Hussein & Cronje, 2010).

Online Course

At least 80% of the course content is delivered online and there is generally an absence of face-to-face sessions (Allen & Seaman, 2014).

Online Course Development

Also called course design, refers to those responsibilities associated with constructing course materials to be suitable for online delivery in a variety of synchronous and asynchronous formats (Jolliffe, Ritter, & Stevens, 2012).

Online Learning Environment

An Internet-based or virtual learning environment is a designed information learning space developed for educational interactions or using a website or learning management system via accessing through the Internet for all learning activity, collaboration, feedback, and assessments (Dillenbourg, 2000).

Online Learning Modalities

Generally meaning teaching and learning contexts in which a significant amount of the teaching and learning that occurs does so in an online or digital environment. Allen and Seamen (2010) identified this environment as one in which 80% of the learning environment occurs online.

Online Pedagogy

Teaching strategies that achieve active, collaborative discovery and creation of new knowledge, understanding, and growth in an online environment.

Virtual Schools

Can generally be understood “as part of the online distance education movement in which the Internet is used to provide education to students” (Archambault & Crippen, 2009, p. 363).

CHAPTER 2: LITERATURE REVIEW

This chapter provides an overview of research literature on the paradigm shift in higher education to online learning, the key differences for faculty teaching in a virtual environment, key barriers and benefits for faculty, and the faculty development needs for online teaching. Findings from the studies are synthesized in emergent themes pertaining to the faculty perceptions of navigating the transition to a virtual setting include pedagogical strategies, workload, student engagement, faculty development, and institutional support. Studies examining the correlation of variables related to teaching online are discussed. The two theoretical frameworks explored include Rogers's (2003) diffusion of innovation theory and Christensen's theory of disruptive innovations (Christensen, Horn, Caldera, & Soares, 2011), as they framed the topic of the study.

The Changing Landscape of Higher Education and Online Education

The tremendous demand for and growth of online classes has dramatically changed the face of higher education. In 2012, over 33% accounting for 7.1 million of the 20.9 million college students in the United States enrolled in online courses compared to 10% in 2003, or a total of 1.6 million of the 16 million students (Allen & Seaman, 2014). In the last decade alone, the growth rate in online education was almost 17% and outpaced that of overall annual college growth rates of 2.6%. This advent of online education coupled by these shifts is viewed as being a disruptive innovation in higher education.

The growth has impacted private and public universities as well as the growing for-profit sector. In 2012, 70% of public universities, 48% of private institutions, and 73% of for-profit colleges offered online courses or programs, which was a radical

increase since 2002 (Allen & Seaman, 2013). This monumental growth rate has a direct correlation to the increasing demand for full-time and part-time faculty equipped to teach online. Approximately one-third of post-secondary teachers have developed or instructed an online course, which would complement the growth in student enrollment in online courses and programs (Herman, 2013). The very nature of the shift from faculty's presence in the classroom, the key differences in their roles, coupled with their perceived advantages as well as barriers, results in a demand for institutional responsiveness to this growing population of the professoriate.

Faculty Transition to Online Teaching

As the educational landscape continues to witness extensive growth of online educational options at both the secondary and post-secondary levels, it is important to more fully understand the role of teachers within these contexts, specifically, to further understand from their own perceptions what barriers, challenges, and opportunities they experience as they transition from traditional, site-based instructional environments to digital learning modalities. As online education continues to escalate and become more commonplace at many universities, the image of traditional professors behind a lectern is becoming increasingly obsolete.

Research estimates that over 300,000 faculty are immersed in online teaching in the United States comprising about two-thirds in full-time ranks and about one-third in part-time or adjunct capacity (Mayadas, Bourne, & Bacsich, 2009). More recent data in the HERI 2013-2014 faculty survey indicates 27% of faculty in public, 4-year colleges have taught exclusively online classes while the national average was 17.4% (Eagan et al., 2014). While many teacher support resources address instructional and

communication strategies using technology, few address challenges instructors face when moving away from the role of disseminating content to “constructing a series of learning environments and activities” (Oblinger & Hawkins, 2006, p. 14) necessary to create effective online teaching and learning environments. Eventually, online teaching will become mainstream, and faculty may feel pressure to acclimate to emerging instructional formats, whether in a blended or hybrid model or a virtual classroom.

The instructor experience, within this intersection of traditional and innovative online educational approaches, comprises a large portion of the literature, particularly that identifying barriers and opportunities faculty have noted through experiential processes and research methods (Bolliger & Wasilik, 2009; Crawford-Ferre & Wiest, 2012; Major, 2010). Shea (2007) analyzed 386 faculty from 36 public institutions teaching online to explore the wide range of primary motivators as well as de-motivators for faculty electing to teach online. This study relates to future findings of defining how this shift to online educational models is transforming not only the teacher experience, but the role and mission of the teacher as well as shifting skillsets needed to teach effectively and successfully in online modalities (Archambault, 2010; Major, 2010; Meyer & McNeal, 2011).

Most interesting, however, is that the literature, although providing significant research on these aspects of the teacher experience, provide relatively limited research on the teacher experience as it relates to online course and content development. Most central to the increasing online teaching and learning environment is a re-thinking of the teacher’s role in developing and managing effective online course content using emerging technologies and supporting competencies (Oblinger & Hawkins, 2006). Are

teachers now expected to take on the role of instructional designers, technologists, and data analysts? What does the literature reveal and what more can we find out about the overall teacher transition experience within these contexts? How can institutions assist in overcoming related barriers to support online faculty?

Previous research on faculty experiences teaching online was conducted with a broad focus centered on differences, attitudes, barriers, motivation, engagement, development, and institutional responsibilities. Comprehending faculty's experiences as they relate to this transition from a lecture setting to an online format provides valuable insight into institutional planning, strategic initiatives, and allocation of resources to cultivate faculty readiness to teach effectively in a virtual context. Related research has been primarily quantitative, with more recent research expanded to mixed-methods and qualitative methodology.

Although the literature provides a strong succession of faculty perceptions from this expanding population of the professoriate, many themes emerge regarding this transition. The themes are characterized by the faculty presence in online teaching and in distinguishing the primary differences in the instructional experiences. The perceived benefits as well as the barriers of teaching online directly relate to the importance of institutions supporting the faculty encountering this transition.

Key Differences in Traditional Versus Online Teaching

Research studies have articulated many of the changes faculty experience when moving from the podium lecturing as a sage on stage to a virtual online instructor. The acclimation process identified by faculty moving from the familiarity of lecturing in a face-to-face classroom is expressed in the unique nature, qualities, and experience of

teaching online. Online teaching requires a different set of skills (Bates & Watson, 2008; Batts, 2008) and faculty competencies (Darabi, Sikorski, & Harvey, 2006; McQuiggan, 2012). The research indicates this has been consistently echoed in many educational settings, campuses, and disciplines and that more institutions now recognize these significant adaptations on current faculty practices as roles are expanded in an online environment.

A broader understanding of this role change from a faculty perspective allows for teachers to articulate what barriers, challenges, and opportunities they experience as they transition from teaching in traditional site-based environments to digital learning modalities. The growth is significant, approximating one-third of post-secondary teachers having developed or instructed an online course (Herman, 2013). The very nature of the shift of faculty presence in the classroom, the key differences in their roles, and their perceived advantages as well as barriers, result in a demand for institutional responsiveness to this growing population of the professoriate.

Role Changes

Online learning environments, by nature, fundamentally change the way instructional practices are conducted (Baran, Correia, & Thompson, 2011). Extensive research conducted since the late-1990s has articulated primary roles for online instruction that have been reaffirmed and expanded. The primary roles of online faculty are categorized as pedagogical, managerial, social, and technical (Berge, 1998; Keengwe & Kidd, 2010; Wiesenbergs & Stacey, 2005), which have been further studied assessing other variations (Anderson, Rourke, Garrison, & Archer, 2001; Aydin, 2005). Organization and intellectual roles were also added as fundamental instructor roles (Gold,

2001). The transformation of faculty roles include those from knowledge dispenser to resource provider, from lecturer to guide, and from authority to facilitator (De Gagne & Walters, 2009). Required responsibilities were also characterized as a moderator, ongoing curriculum developer, and subject matter expert (Kim & Bonk, 2006). These functions would have decisively different meaning in a face-to-face setting.

Earlier studies identified the primary roles of online faculty as designer, process facilitator, technologist, adviser, and manager (Goodyear, Salmon, Spector, Steeples, & Tickner, 2001). The roles were later described as professional, pedagogical, evaluator, administrator, technologist, adviser, and researcher (Bawane & Spector, 2009). The role of facilitating and moderating requires a stronger focus in an online setting than in lectern teaching (Kim & Bonk, 2006; Salmon, 2004). Faculty are not always prepared for this modified role adapting from teacher and lecturer who disseminates knowledge to the role of a learning facilitator (O'Neil, 2009; Vaill & Testori, 2012). As a result, there is a need to ensure sufficient available resources to cope with this transition.

Fundamental faculty and academic beliefs are challenged in an online environment (Major, 2010). Institutions must rethink the role of faculty with respect to the instructional practices faculty employ while teaching online (Conceicao, 2006; Morris, Xu, & Finnegan, 2005). The role of online teaching is multidimensional and requires a more integrated approach that blends subject expertise with technical delivery systems (Baran et al., 2011; Paulus et al., 2010). Past classroom teaching experiences will not sufficiently equip faculty with the foundation required for migrating to online instruction (Wray et al., 2008).

Instructors often feel uneasy and unprepared for online instruction and lack the intuitive ability to establish the same role and instant credibility as they often do behind a lectern (Major, 2010; Paulus et al., 2010; Vaill & Testori, 2012). Faculty undertake a role that is not as predictable and wieldy as a lecture setting and requires expanded expertise in classroom management, collaboration, and providing engaging instruction (Conceicao, 2006). Faculty adjustment to online instructional settings is a complex task requiring major pedagogical shifts from face-to-face settings (Conrad, 2004; Major, 2010; McQuiggan, 2012; Orr, Williams, & Pennington, 2009). Faculty identified some of the pedagogical changes in teaching strategies that include course structure, monitoring student learning, and restructuring student relationships (Baran et al., 2013). Online learning has changed the sacred role of the professoriate from the “sage on the stage” to a “guide on the side,” as faculty in a traditional lecture hall setting have assumed the role of a virtual professor perched on their laptop or mobile device.

Establishing Faculty Presence in an Online Environment

As educational delivery continues to shift to a more predominate presence of online or distance education, it is important to understand the nature of instructors teaching online (Archambault & Crippen, 2009) and assess the need to increase instructor presence and capacity within online teaching and learning models (Major, 2010). A better understanding of the key differences of teacher characteristics as they apply to pedagogy, technology competency, and the very definition of a teacher’s primary role are central components to further understanding their perceptions when teaching online (Archambault & Crippen, 2009; Wallace, 2003).

Survey data of teachers who have taught online in the secondary level reveal that to meet the increasing demand of online educational options, teachers who may initially start teaching in traditional classroom settings may, in the near future, find themselves teaching in an online environment (Archambault & Crippen, 2009). Although this transition might include potential barriers, data suggest that those teachers who teach both in traditional, site-based programs as well as online models report that their skills acquired in online teaching enhance their traditional classroom strategies (Archambault & Crippen, 2009).

Survey data reveal widespread participation in online or distance education models from the student perspective as well as that of instructor. A national study found that 52% of secondary school administrators and teachers indicated they had taken a fully online class (Project Tomorrow, Speak Up & Blackboard K-12, 2011). More significantly, the number of teachers and administrators who had participated in learning online grew by 148% from 2007 to 2011. The data suggest a new dimension of the transition of teachers from traditional on-site to online learning models, combining a dual perspective of teacher and learner within their individual experiential perceptions and related barriers and opportunities when teaching online.

At the higher education level, these same trends regarding the number of faculty crossing over from traditional, site-based classroom environments to online or blended models are also evident (Crawford-Ferre & Wiest, 2012). Faculty characterize primary changes in transitioning from a traditional setting to online as teaching experiences, instructional methodology, and role variations (Conceicao, 2006; Conrad, 2004; McQuiggan, 2012; Whitelaw, Sears, & Campbell, 2004). The paradigm shift and the

required adaptability of the subsequent role change for faculty remains a critical component for review and understanding.

Lack of Transferable Teaching Experiences

The role of faculty fundamentally changes when transitioning to an online setting due to the absence of familiarity found in a very diverse setting, without the physical presence in a classroom (Conceicao, 2006; Conrad, 2004; McQuiggan, 2012; Morris et al., 2005). The shift from a didactic instructional modality to a constructivist-based facilitative role in teaching online requires faculty to adapt their practices (Berge, 1998; Palloff & Pratt, 2007; Salmon, 2004). Online courses designed by constructivist principles should be relevant, interactive, project-based, and collaborative while providing learners with some personalized choice (Partlow & Gibbs, 2003). The faculty may rely heavily on their prior classroom instructional experiences and their own pedagogical philosophies as they approach these changes to a foreign virtual context.

Experienced classroom instructors may feel like novices as online teachers who lack requisite skillsets and techniques (Bolliger & Wasilik, 2009; McQuiggan, 2012). Instructors making this transition have an opportunity to rethink their fundamental ideas about teaching (Tallent-Runnels et al., 2006). Past teaching experiences may not be effective techniques in an online setting and the acclimation may not be intuitive (Major, 2010; Palloff & Pratt, 2010). Novice online instructors are generally not as active and interactive with students due to the extended learning curve associated with teaching online (Conrad, 2004; Palloff & Pratt, 2007). Faculty must be equipped with the technological skills and understand the pedagogical implications associated with teaching online.

Pedagogical Shift and Student Engagement

Studies support that online teaching is substantially different than traditional teaching and requires the development of its own pedagogical approaches (Baran et al., 2011; De Laat, Lally, Lipponen, & Simons, 2007). The research indicates of all the varying roles in online teaching, the pedagogical role is the most important (Bawane & Spector, 2009). Instructors described effective online teaching as answering questions and providing feedback and direct learning in a virtual setting (Berge, 1998; Morris et al., 2005). The role change for faculty relates to the ability to relinquish control of the learning process from teacher to learner.

The transition to online instruction impacts the classroom dynamics, shifting from a teacher-centered focus to a learner-centered environment (Baran et al., 2011; Conciecao, 2006; Conrad, 2004; Kim & Bonk, 2006; McQuiggan, 2012; O'Neil, 2009; Tallent-Runnels et al., 2006; Wallace, 2003). The instructional shift can be challenging during the transition mode to a more invisible instructor role and student-centered focus (Major, 2010; Sammons & Ruth, 2007). The concept of de-centering the role of the teacher presents opportunities for online teachers to explore learner-centered practices (Baran et al., 2011). Effective pedagogical learner-centered strategies are facilitating online collaboration, case-based learning, and problem-based learning (Kim & Bonk, 2006; Partlow & Gibbs 2003). Online learning has evolved from its earlier versions and is now considered to be more collaborative, informal, and reflective with more user-generated content (Berge, 2008).

In addition to instructional differences, the relationship between teachers and students online becomes more important than that in a traditional classroom, requiring

new strategies to cultivate student and teacher connection (Baran et al., 2013, Sammons & Ruth, 2007). Online teachers tend to lose the spontaneity of face-to-face instruction, decreasing the ability to gauge student learning and capture teachable moments (Appana, 2008; Conceicao, 2006; Hopewell, 2012; Wray et al., 2008). The immediacy of feedback and instructor's ability to facilitate ongoing interaction in a face-to-face setting changes when teaching is done online, leaving faculty feeling more disconnected even if online teaching is considered a more student-centered modality (Major, 2010). Faculty adjustment to teaching online is a complex task requiring more versatility.

Developing successful teaching strategies is dependent on an instructor's ability to incorporate personal style, professional methods, and contextual adaptation and navigate organizational factors (Baran et al., 2013). An instructor engaging online learners in an active rather than passive way is a critical component for a quality online teaching environment (Carroll-Barefield, Smith, Prince, & Campbell, 2005). Keeton (2004) reported that optimal instruction requires an online environment that encourages inquiry, expands the learner's knowledge, provides ongoing interaction, and promotes critical reflection.

Expanded Set of Competencies

Numerous studies have identified expanded competencies required for faculty transitioning to online instruction. Salmon (2004) described skillsets for e-teaching as content expertise, understanding online process, communication skills, technical abilities, and personal characteristics. Other abilities necessary for online instruction are characterized as administrative, design, facilitation, evaluation, and technical (Shank, 2004). Research has explored the competencies required for effective online teaching in

the areas of communication (Howell, Williams, & Lindsay, 2003), technology related (Egan & Akdere, 2005), and assessment related (Aydin, 2005). Additional research has expanded assigned levels of expertise such as competent or exemplary (Aydin, 2005; Varvel, 2007). These online teaching competencies must all be developed to ensure faculty readiness for teaching online (Vaill & Testori, 2012).

Mixed Perceptions of Quality

Faculty perceptions are very positive when they have exposure to online learning, while more traditional faculty with no online teaching experience have more fears, doubts, and negative views toward the field (Allen & Seaman, 2012; Lloyd et al., 2012; Seaman, 2009). Faculty opinion on most aspects of online education is not uniform based on responses from over 10,000 faculty across 69 institutions (Seaman, 2009). The flexibility of teaching online is liberating for faculty, although there is an increased time obligation when teaching online as compared to following a more fixed schedule (Major, 2010). Both extrinsic factors such as time, compensation, scheduling, and flexibility have been identified as resistance factors, while intrinsic barriers include the lack of recognition, challenging transition, and technological aptitude (Sammons & Ruth, 2007).

The literature shows great disparity regarding the quality of online education according to experienced and novice online instructors when discussing the efficacy of online education. Studies show that all faculty, including experienced online instructors, have serious misgivings about the quality of learning outcomes for online versus traditional instruction (Allen & Seaman, 2012; Seaman, 2009). The majority of online and traditional faculty would recommend online courses to students for their convenience even though they feel the overall educational value of online instruction is inferior to

face-to-face delivery (Allen & Seaman, 2013). This presents quite an indictment of the profession to imply sacrificing the quality of instruction for accessibility.

Positive Faculty Perceptions Teaching Online

The literature reveals that many faculty appreciate the diversification of their role as an online teacher. Institutions must understand the relationship between the effectiveness of online teachers and the success of online students (Bigatel et al., 2012; Major, 2010). Faculty satisfaction and motivation are critical elements to successful online programs (Bolliger & Walisik, 2009; Hislop & Ellis, 2004; McQuiggan, 2012; Thompson, 2003). Studies have shown that instructors indicate online teaching has been personally rewarding in providing opportunities to teach in interactive learning communities and professionally beneficial in providing opportunities to conduct research related to online education (Moore, 2005). Satisfaction levels are related to institutional support, recognition, teaching in a supportive environment, and research valuing the quality and rigor in online learning.

Faculty experienced in both traditional and online teaching articulated increased satisfaction with online delivery compared to classroom instruction (Bolliger & Wasilik, 2009). Positive factors expressed by faculty teaching online include the intellectual challenge, use of technology, flexibility, sharing of knowledge, and student interaction (Green, Alejandro, & Brown, 2009; Thompson, 2003). Conceicao (2006) found faculty expressing their experience with “words such as stimulating, invigorating, exciting, rewarding, satisfying, gratifying, and empowering” (p. 40), conveying a high degree of satisfaction when describing their online teaching experience. Other key motivators

included autonomy in online instruction, becoming a better teacher, and the ability to model best practices (Meyer, 2012).

As online education becomes more predominant, faculty contemplating teaching online will be able to further assess the value of the teaching format and determine whether there are inherent potential advantages. Based on results from a survey of 135 instructors, faculty generally valued teaching online and that the personal and professional choice positively contributed to the experience and provided convenient access for students (Green et al., 2009). Participants in research conducted by Meyer (2012) considered teaching online not as a preference but a passion and a meaningful way to serve their profession and institutions. Faculty viewed online teaching as an opportunity to learn and evolve as a virtual professor (Major, 2010). Positive attributes could be identified from both a teacher and learner perspective.

Intrinsic Benefits

Faculty expect institutional leaders to acknowledge the unique experience for online faculty and the challenge of balancing teaching, research, and service. Faculty willingness to teach online is influenced by intrinsic motivators as well as extrinsic influences, which include academic planning, workload, and scheduling (Lloyd et al., 2012; Meyer, 2012). Studies have shown that faculty are motivated to teach online for the intrinsic benefits but were also seeking extrinsic benefits of compensation and course workload reductions (Cook, Ley, Crawford, & Warner, 2009). Faculty valued developing courses, using new tools, determining pedagogies for effective online instruction, developing best practices, and, to a lesser degree, additional compensation (Meyer, 2012). Green et al. (2009) drew similar conclusions in that instructors were

stimulated by sharing knowledge with colleagues and valued the intellectual challenge of online instruction. Another perceived benefit has been articulated through analysis of teacher productivity in online teaching (Meyer & McNeal, 2011).

Professional Flexibility

One conundrum for faculty is the tradeoff between flexibility and increased time commitments. The most prevalent benefit of teaching online for faculty was a more flexible schedule (Bolliger & Wasilik, 2009; Green et al., 2009; Meyer, 2012; Seaman, 2009; Shea, 2007), while they have also indicated greater time and effort for developing online courses (Visser, 2000). Due to the increased demand for online teachers, a positive benefit was faculty having more input on workload and teaching schedules, greater flexibility, and a greater sense of empowerment (Bolliger & Wasilik, 2009; Meyer, 2012).

Expanded Levels of Engagement

Although the interaction between students and faculty differs in an online course, the faculty appreciated the dynamics of the virtual relationship (Bolliger & Wasilik, 2009; Major, 2010). Faculty and students can engage in quality discussion in an online setting with intensity, depth, and significance, even in the absence of typical unprompted gestures and emotions displayed in a physical classroom (Bawane & Spector, 2009). Faculty teaching online could connect with students at new levels since the visible barriers in a traditional classroom were eliminated (Major, 2010). Technology can augment instruction by engaging the learners and increasing overall participation (Carroll-Barefield et al., 2005). Online communication between faculty and students is

expedited, contributing to the learning experience and higher levels of connectivity overcoming geographic barriers (Apanna, 2008).

Faculty instructing online rethink their beliefs and assumptions about teaching methodology, which can positively impact their classroom teaching (McQuiggan, 2012). Lowes (2008) discovered that 75% of the faculty who taught online as well as in a traditional classroom agreed their face-to-face teaching improved because of the online teaching experience, supporting the assertion that online pedagogical strategies can strengthen the teaching strategies in a classroom (Mayadas et al., 2009).

Perceived Inhibitors in Online Instruction

Most challenges associated with teaching online can become barriers, if they are not addressed, to improving the faculty experience and may impede faculty willingness to teach online courses. In spite of the rapid growth of online education, many faculty members are reluctant to consider teaching courses online (Wray et al., 2010). Faculty entrenched in traditional face-to-face instruction may be reluctant to willingly migrate to teaching online. Professors who have expertise teaching from a lectern suddenly become novices as instructors in an online environment. At some institutions, faculty have an aversion for teaching online and this has to be addressed, as there is an increasing demand for online faculty.

Perceived barriers to online teaching include the ability to teach effectively, balance workload, and pursue research and service commitments, all of which may vary according to faculty gender, experience, age, and rank (Lloyd et al., 2012). Common concerns expressed included time commitment, compensation, workload, institutional support, and quality of online students (Green et al., 2009; Lloyd et al., 2012). Top de-

motivators from a survey of 386 faculty from 36 public institutions revolved around adequate compensation for course development, revision, teaching, and students' accessibility to online courses (Shea, 2007). Key deterrents of online teaching include the lack of: social interaction, administrative support, technical skills, motivation, time, and resources (Bolliger & Wasilik, 2009). The faculty in the research echoed similar sentiments of discouraging concerns and barriers.

Increased Time Commitment

The intensity of the work in teaching online is the most common identified barrier in the research. The recurring obstacle for faculty teaching online was the increased time commitment needed for quality instruction in this modality (Carroll-Barefield et al., 2005; Conceicao, 2006; Green et al., 2009; Hopewell, 2012; Major, 2010; Meyer, 2012; Sammons & Ruth, 2007; Seaman, 2009). In Allen and Seaman's (2013) most recent research, which included over 2,800 colleges and universities, over 44% of the colleges reported that it takes more time and effort for faculty to teach online. The work intensity regarding the length and depth of engagement required increased availability and cognitive efforts from faculty (Conceicao, 2006).

Hopewell (2012) indicated increased time was due to instructional delivery, correspondence, grading, and course development. Responding to online students was time consuming and proved difficult to establish boundaries between professional obligations and personal time (Major, 2010). Additionally, availability as a professor may have differing meanings and expectations between online teachers and students (Otter et al., 2013). The research indicates that developing courses and teaching online are more extensive and time consuming than traditional instruction.

Workload Implications and Lack of Recognition

The time concerns carry over to broader issues of online teaching and matters of equity in relation to workload, compensation, and evaluation. Faculty are reluctant to spend the additional time for developing and teaching online unless they are compensated by a decrease of workload or other incentives (Bolliger & Wasilik, 2009; Orr et al., 2009; Seaman, 2009). Studies conclude that teaching online results in an increased time workload compared to traditional instruction (Archambault & Crippen, 2009; Morris et al., 2005; Palloff & Pratt, 2007; Visser, 2000). Faculty expressed concern with how online teaching is recognized for assessing workload, viewed as teaching, service, and research as it applies to movement on tenure track (Hopewell, 2012; Major, 2012; Orr et al., 2009; Seaman, 2009; Shea, 2007). Faculty expect to be fairly acknowledged professionally for being on the forefront of online education.

Course Development and Design

In addition to the common challenges identified, additional barriers have been identified that relate to course content, design, and development (Archambault & Crippen, 2009; Conceicao, 2006; Oblinger & Hawkins, 2006). Faculty often experience challenges when attempting to adapt content within technology frameworks for a more interactive, asynchronous, and adaptive delivery (Oblinger & Hawkins, 2006). Course development is a unique barrier to online learning, especially when content development is linked to shifting pedagogical strategies through the integration of current and emerging technologies.

Technology Challenges and Support

In faculty's experience, technology as a teaching tool serves as a deterrent if it is not dependable. The research confirms that instructors are concerned with the reliability of technology and access to technical support (Bolliger & Wasilik, 2009; Green et al., 2009; Orr et al., 2009). Technology support structures are central to online learning and should help facilitate teaching and communicating with students rather than serve as a barrier to instruction (Seaman, 2009). Instructors have expressed frustrations regarding perceived inadequacies with new educational technologies, including social media and videoconferencing (Reilly et al., 2012). Faculty want to be assured that technical and format issues were not intermingled with their role or evaluation as teachers (Green et al., 2009; Hopewell, 2012).

Classroom Dynamics

Online learning can often be perceived as being more impersonal, with students potentially feeling "isolated" from instructors and other students (Appana, 2008). Lack of the visual cues and non-verbal communication present in face-to-face interaction can alter teacher-to-student interaction (Appana, 2008; Major, 2010; McQuiggan, 2012). Some teachers have expressed difficulty connecting with students and fostering positive educational relationships through technologies (Archambault, 2010).

These collective barriers are important to recognize so they do not serve as an impediment for faculty feeling pressured to develop courses and teach online. Institutions focused on increasing their online footprint must accentuate the benefits, overcome perceived barriers, and bridge the gap to increase faculty receptivity for

embracing this migration. Institutional readiness and support systems are a key factor for expanding online offerings.

Importance of Institutional Support

Some institutional considerations and infrastructure issues that impact the academic community relative to strategic direction and faculty support require attention from universities engaged in online learning. In a recent report conducted in 2012, 69% of the 2,800 higher education institutions surveyed reported that online education was critical to strategic initiatives compared to reports from less than half the institutions reporting in 2002 (Allen & Seaman, 2013). Institutions entering the online market may need to reevaluate how online learning is incorporated into the institutional mission, vision, and core values (Kim & Bonk, 2006; Orr et al., 2009; Seaman, 2009). Online teaching will become mainstream, and faculty will feel more pressure to be required to acclimate to both instructional environments.

Faculty satisfaction is generally higher when institutions demonstrate the value of online instructors by developing policies that support the faculty in teaching online (Bolliger & Wasilik, 2009; Green et al., 2009). This is important to address disincentives due to perceived online teaching burdens of student monitoring, facilitating, and tracking for faculty (Roby, Ashe, Singh, & Clark, 2013). The Sloan Consortium's five pillars of quality in online education are: access, learning effectiveness, faculty satisfaction, student satisfaction, and scale of the institutional commitment to achieve enrollment capacity (Lorenzo & Moore, 2002). Faculty satisfaction and preparedness is a key component, and faculty members' teaching performance is complex and interrelated to workload, productivity, and institutional mission (Meyer, 2012).

Adequacy of Infrastructure

Institutions often lack the required planning, resource allocation, and phased implementation approach to prepare for expansion of online programs, which directly impacts faculty, staff, and students. To support potential demand, the infrastructure, revised policies, and operational support must be fully implemented prior to launching online education (Tallent-Runnel et al., 2006). Online faculty expect support for their professional, technological, economical, and emotional needs, to ensure institutional readiness (Meyer & Barefield, 2010). Specific preparation includes technology platforms, curriculum design, revised policies, faculty workload considerations, collaborative interdisciplinary approaches, and sufficient skills development (McLean, 2005; Thompson, 2003). To achieve buy-in from faculty, institutions must maintain a culture of innovation, reinforced with dedicated resources and sufficient support structures (Escoffery et al., 2005; Meyer & Barefield, 2010).

Incongruent Institutional and Faculty Perceptions

There appears to be a perceptual gap between administrators and faculty on issues related to online learning, including quality, adequate pay, recognition, institutional focus, tools, and assessment (Allen & Seaman, 2012). The perceptions of faculty rank gender, and online experience with senior faculty believing compensation for online teaching is inadequate (Lloyd et al., 2012). In a study conducted at 15 community colleges, there appeared to be a wide discrepancy between the perceptions of administrators' related to value of online education and the faculty being far more pessimistic on the quality of online education and the associated myths (Cox, 2005). This was confirmed in a nationwide study finding administrators and faculty perceptions of the

value, legitimacy, and learning outcomes have not changed significantly in the past decade (Allen & Seaman, 2013).

It is important for faculty and administrators to address issues related to the demand for online education outpacing technology, limited financial resources, increasing enrollments, faculty workload to ensure student needs are met, and achievable learning outcomes (Lloyd et al., 2012). In essence, creating a quality online teaching and learning environment requires transitioning faculty to hold philosophic beliefs that online education is equitable to face-to-face instruction (Hoffmann & Dudjak, 2012). Such dichotomy of institutional commitment to expand online education is often at odds with faculty fully valuing the efficacy of online learning.

Online education has become very competitive with expansion of non-profits, piloting by publics, and a slow migration by many more traditional public institutions to offer online programs. Financial incentives exist that enable colleges to expand into new national and international markets, salvage struggling programs, and accommodate scheduling demands without increased facility expenditures (Appana, 2008; Bartley & Goleck, 2004). Also identified benefits are increasing access, enhancing the quality of learning, preparing students for a knowledge-based society, and building a culture for lifelong learning (Appana, 2008). Institutions responding to student demand for online options must ascertain organizational preparedness related to technology, faculty policies, student services, and staff development to meet this demand (Appana, 2008; McQuiggan, 2012; Meyer & Barefield, 2010).

Faculty Incentives and Recognition

The most important areas of institutional support of faculty are providing incentives for developing and teaching online courses and recognition for tenure and promotion (Seaman, 2009; Visser, 2000). “To provide high quality curricula and instruction, faculty need strong support from the institution” (Jaggars, 2011, p. 36). Faculty retention strategies include continuous training, mentoring, enrollment caps, virtual office hours and limiting teaching loads (Green et al, 2009). Almost 50% of faculty felt their institutions had solid metrics in place to measure the quality of online instruction (Allen & Seaman, 2012).

Importance of Faculty Development

Institutions anticipating current faculty transitioning to teaching online must ensure adequate professional development opportunities to meet the pedagogical and technical needs of instructors. A survey of the literature identifies ways to address these challenges through re-thinking and defining traditional faculty support and development models. Professional development requires differing levels of support to meet the diverse technical needs of faculty (Major, 2010; Meyer, 2012; Meyer & Barefield, 2010; Ray, 2009). Studies show that at most institutions, online faculty are not adequately trained to teach in the classroom or online (Bates, 2010). Online faculty training priorities include course development, technology, and pedagogy (Ray, 2009). Professional development structures include faculty attitudes about e-learning, pedagogical shifts, faculty roles, online course management and technology support, and learning communities, among others (Reilly et al., 2012).

Comprehensive training and orientation with experienced faculty provide an opportunity to reduce the learning curve and improve instructor readiness (Green et al., 2009; Herman, 2013; McQuiggan, 2012). Faculty development can increase the effectiveness of online teaching by augmenting distinctive behaviors and discernible practices (Bigatel et al., 2012). A case study discovered themes in preparing faculty for the transition addressing the changing roles, paradigm shift, building community, multidimensional learning, and peer sharing (Paulus et al., 2010). Administrative planning requires developing an orientation to transition faculty so they further understand the learning curve required for successfully being prepared to teach online. Shea (2007) also found that many of the factors dissuading faculty from teaching online could be overcome through professional development addressing pedagogical differences, opportunities to observe online instruction, and sufficient experience with the technology to help acclimation before teaching.

Professional development for faculty acclimating to teach online must be a priority for any institution desiring to maximize student learning. Training is required to facilitate instructional quality (Meixner, Kruck, & Madden, 2010). Institutions must work to integrate faculty into the broader academic culture through training and support to ensure instructional quality (Fagan-Wilen, Springer, Ambrosino, & White, 2006). A common theme that resonated was the importance of higher education leaders' commitment to retain the best faculty through outreach, training, and incentives. Rogers (2010) emphasized that for distance education or online faculty, universities that focused on effective communication, faculty development and training, fostering balance, and cultivating relationships had higher student retention and satisfaction.

Theoretical Foundation

Two theoretical frameworks of value are related to the proposed research: the first being the diffusion of innovation developed by Rogers in 1963. The theory aligns with the rapidly changing culture in higher education due to the onset of online learning as it relates to institutional embracement as well as faculty bodies within institutions. If online education is innovative, then faculty are somewhere on the continuum of adoption of innovation as they immerse themselves into online teaching. This theoretical framework cannot be applied unless there is a platform to provide a comprehensive environmental understanding of the online environment being considered as innovative. Understanding the significance of the phenomenon of burgeoning growth in online learning as a disruptive innovation taking place in higher education substantiates the assertion that the radical experiences during transition to online teaching are being embraced as well as endured by the faculty in private, public, and the for-profit sectors.

The seminal book by Clayton Christensen in 1997 entitled *Innovators Dilemma* outlined the disruption innovation framework. In 2008, and in more recent published works, Christiansen, one of the most widely recognized authorities on disruptive innovation, has focused this lens on health care as well as education in his world-renowned book *Disrupting Class: How Innovation Will Change the Way the World Learns* published in 2008 (Christensen, Horn, & Johnson). An applicable theoretical lens through which to develop deeper understanding of online teaching and learning and better understand the sea changes in the field of higher education and the impact on all stakeholders is the disruptive innovation framework. An innovation that is deemed disruptive allows a whole new generation of customer at the bottom of a market or

industry access to a product or service that was historically a more exclusive model with limited accessibility.

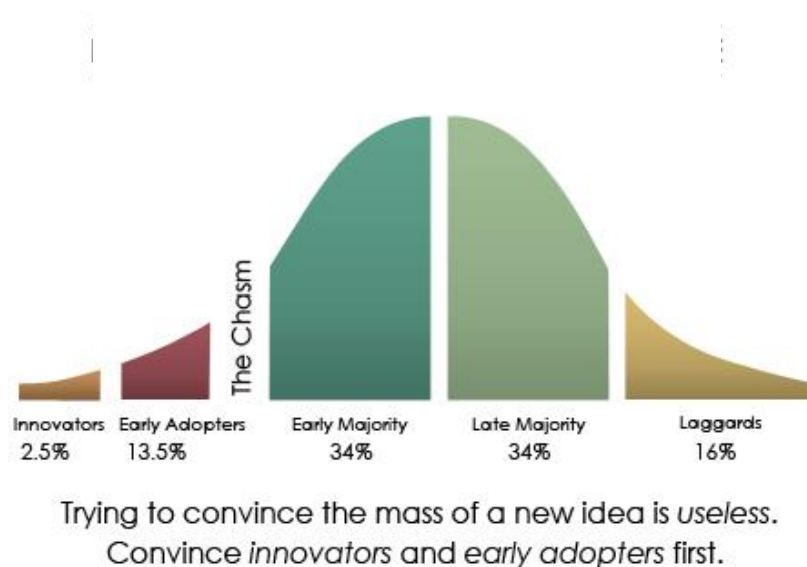
In recent years, whatever one's opinion regarding online education, the movement has gained credibility in being considered a "disrupter" of higher education (Christiansen, Aaron, & Clark, 2003). Disruptive innovation articulates the process involved when a product or service initially develops at the bottom of a market and then vigorously moves "up market," eventually disrupting or displacing established or traditional industry leaders (Christiansen, 2016). The theory aligns with the monumental growth in online education and how it has opened accessibility and affordability to higher education and democratized what once was considered a privilege.

The perception is that the disruptive innovator in relation to online higher education is the burgeoning for-profit sector since they are often credited with driving innovation to the masses at a much more aggressive pace than traditional public institutions or non-profit universities. In summary, the theory suggests that the fundamental business model of traditional universities could be antiquated, requiring improvement in the economies of scale by sustaining innovation and adopting more wide-scale online learning initiatives to meet the stewardship of institutional missions to remain inclusive of educating the masses as expected in the 21st century. As higher education costs have dramatically increased in recent years in the non-profit, private schools, as well as the costs of public colleges escalating, the lower-cost efficiency model of the for-profit institutions and their economies of scale in the proliferation of online education pose an economic and competitive threat for policymakers and traditional institutions.

The importance of considering the disruption innovation theory is the growing prevalence of online learning and the inevitable changes taking place in all higher education sectors and how they impact faculty participation in this process. The shift in what was considered hallowed in higher education is changing, which has launched the rapid expansion of online learning, thus serving as a disrupter. The evolution has increased the demand for virtual teachers rather than for those whose physicality is envisioned at a podium. Rogers's related theory of the diffusion of innovation is driving changes in adoption of online learning by institutions and the very faculty within each respective institution as they grapple with placement on the curve.

According to Rogers (2003), the concept of diffusion as it relates to innovation acceptance within a structure or organization can be understood as “an innovation [which] is communicated through certain channels overtime among the members of a social system” (p. 5). Within such a widely accepted model of diffusion of innovation throughout a social structure or process, five categories inherently occur and have a direct impact on the rate of adoption to innovation. The five classifications of adopters to innovation are identified as: the first to adopt as innovators, the second group as early adopters, followed by the early majority, the late majority, and the last group described as laggards (Rogers, 2003).

Over four decades, Rogers pioneered the theory of the diffusion of innovation, which has been tested in more than 6,000 research projects and is considered reliable in the field of social sciences. The factors surrounding the innovative adoption are compatibility, complexity, relative advantage, trial ability, and observability of the product.



Source: (Rogers, n.d.)

Figure 1: Rogers's innovation adoption curve.

Within the context of an analysis of the adoption of online teaching and learning by faculty transitioning to digital formats, Rogers's (2003) theoretical analysis of how innovation is spread and explanation of the reasons why some are adopted faster than others provides a contextual framework out of which a study of faculty acceptance and adoption of new roles and skillsets within technology-rich learning contexts can be understood. The application of this theory in this research focuses on the evolution or reinvention of online education as it progresses through the ranks of faculty in various institutions, initially led by mavens or innovators and early adopters.

In the 5th edition of *Diffusion of Innovations* (2003), Rogers outlined the process of implementing innovations in organizations after they have been adopted in that setting, which included three stages. The Redefining/Restructuring phase is when both the

innovation and the organization undergo change and is a mutual adaptation. The Clarifying phase encompasses the innovation once it is introduced. Once institutional members understand the outlines of the institution's functions and related organizational responses and take corrective action as appropriate, clarification takes place. The third stage of Routinizing occurs when the innovation is embedded in the practices of the users and the processes of the organization, which leads to sustainability of the innovation so it continues to be widely used to secure or mainstream the adoption. The key to sustainability is participation.

The theory in practice relates to a continuum of the propensity for individuals to adopt an innovation or innovative practice and envisioning where higher education institutions, their administrators, and faculty are on this adoption curve as online continues to expand in higher education. The innovators are the creative visionaries early in an emerging change, the early adopters participate once the benefits become apparent of something being reinvented, the early majority are considered pragmatic and open to moderately progressive innovations yet averse to high risks, the late majority are conservative pragmatists who adopt because they want to fit in, and the laggards are the hold-outs until the bitter end. The adoption of the pedagogical practice and implementation of online teaching aligns with the process Rogers (2003) outlined in his seminal *Diffusion of Innovations*.

The common theme emerging from the literature applicable to this research is that successful implementation of a broader adoption of the online teaching pedagogical practice requires effective communication, ongoing information exchange, coaxing of faculty to innovate, internal problem-solving, and resource allocation.

Conclusion

A review of the literature documenting faculty experiences at both the secondary and higher education levels revealed several common themes that warrant further consideration. First, as the review suggests, it is important to continue to reflect on and include faculty perceptions of both the opportunities and barriers they encounter when transitioning their specific skillsets to online instructional models. It is essential to recognize the importance of institutions distinguishing themselves through the design and delivery of a quality and innovative online student experience. It is also imperative to commit to focusing resources on strengthening the distinction and quality of the online student experience as an essential institutional value, which will include ensuring high-quality faculty instruction online.

This review benefits institutions in further understanding the perceptions of higher education faculty, their evolving role in 21st-century digital learning contexts, and what strategies may then be developed as a result of this understanding to strengthen instructional quality and potential for success within online learning contexts. Regardless of the level of online learning implementation, all institutions face the need to facilitate a smooth acclimation process for faculty. Understanding faculty perceptions more completely can assist institutions in developing and strengthening support models to ensure faculty are equipped to successfully instruct in digital contexts. As the literature points out, understanding faculty perceptions can inform not only faculty development models, but help create larger self-awareness on the part of instructors and their evolving role in teaching and learning and the associated skillsets needed to ensure successful and effective teaching.

Institutions that have embraced online learning to the degree that it has become commonplace and mission-central generally have support structures, professional development, and policies supportive of online teaching. As universities expand online faculty, institutions must continue to address the cultural changes in the academic community to reduce divisiveness and resistance by encouraging collaboration and greater acceptance of change. The faculty experience will be positively impacted if institutions of higher learning revisit important matters such as workload and compensation prior to rapid online expansion. There is an opportunity for collegial exchange between private and public institutions, faculty ranks, interdisciplinary fields, and academic levels to share and adopt best practices in this burgeoning area.

Based on online educational trends, as faculty participation in this teaching modality continues to grow, there may be stronger levels of acceptance resulting in decreased barriers and greater institutional support for virtual teachers. Academe can no longer assume that traditional face-to-face teaching is superior. Higher education has been reluctant to change, yet today's 21st-century learners are far more comfortable with technology and online learning. Institutional data confirm that online students experience similar quality to that of onsite courses when taught by experienced faculty with well-structured courses (Mayadas et al., 2009). The perception of the quality of online education will improve as studies demonstrate that the quality of online learning equates to that of face-to-face instruction (McQuiggan, 2012).

The predicament institutions face is that faculty preparing to enter these uncharted waters may have varying abilities and levels of knowledge on how to transition to the new online medium. Educators will be better equipped to make more

informed decisions about investing in virtual learning as the evidence increases about the efficacy of online instruction as compared to traditional environments (Allen & Seaman, 2013; Appana, 2008). Long accepted standards are shifting. For example, a 100-year-old definition of a Carnegie unit of measure in higher education is being questioned to define metrics for earning units towards degree acquisition. Policymakers and educational leaders are exploring new accountability models that focus on student learning, which innovations work, and under what circumstances and delivery models (Silva, White, & Toch, 2015). The landscape of higher education and cherished faculty roles are being redefined and today's faculty ranks are in the midst of this changing ecosystem. The current literature provides tremendous insights contributing to the faculty experience of online instruction and the importance of institutional readiness in addressing key issues as it relates to the professoriate.

CHAPTER 3: METHODOLOGY

Introduction

This chapter describes the research design and presents an overview of the foundation and key elements of the research study. Specifically, this chapter elaborates on the collection of quantitative and qualitative data to help inform the purpose of the study. In addition, an in-depth discussion of the research design and method of study is provided. The study adopted a mixed methods approach, which was selected to not only illustrate any possible statistical significance among those predictors of motivators and inhibitors related to online teaching but to further explore the qualitative experiences of faculty engaged in the practice of online instruction.

This study explored faculty perspectives regarding the unique challenges and role changes they may encounter when transitioning from a traditional face-to-face classroom to an online teaching environment and how this experience impacts their professional role. The problem addressed focused on the sets of experiences or challenges, perceived or real, that faculty in institutions of higher education encounter when transitioning to online teaching and learning environments and how this impacts the teaching and learning experience and the evolving role of instructors within digital contexts. There is limited knowledge of how faculty's perceptions of learned experiences might inform how novice faculty can prepare for navigating online teaching. The central research question guiding this study was: What can be learned from faculty who have taught in both traditional classroom and online settings and how they navigate these diverse teaching environments?

The following sub-questions provide a framework for more thoroughly exploring this faculty migration to online teaching from face-to-face instruction:

1. How do faculty differentiate the unique aspects of the teaching role in an online and face-to face setting?
2. What influences faculty to consider teaching in an online modality?
3. What factors inhibit faculty transitioning from a traditional brick-and mortar to a virtual (online teaching) context?
4. What factors support faculty to transitioning to online teaching?
5. How do faculty transitioning to online teaching see themselves as being innovators?

Research Design

This researcher adopted a mixed methods approach to gain a broader perspective than could be obtained from using only one predominant data collection method. The researcher applied a convergent parallel mixed methods design in which both quantitative and qualitative data were collected, the databases were analyzed separately, and a comparison of the results was conducted (Creswell, 2014). In this study, the mixed methods approach was selected to draw on the strengths of comparing different perspectives from each methodology that can develop a stronger understanding of the overarching research question. The findings of the quantitative (closed-ended) and qualitative (open-ended) research were compared to confirm or disconfirm the results yielding from each of the datasets, and the quantitative data are better explained by the more in-depth qualitative data.

Figure 2 illustrates the mixed methods design model, identifying the data collection process, the iterative analysis framework, the integration of comparing related data, and the interpretation of the combined results.

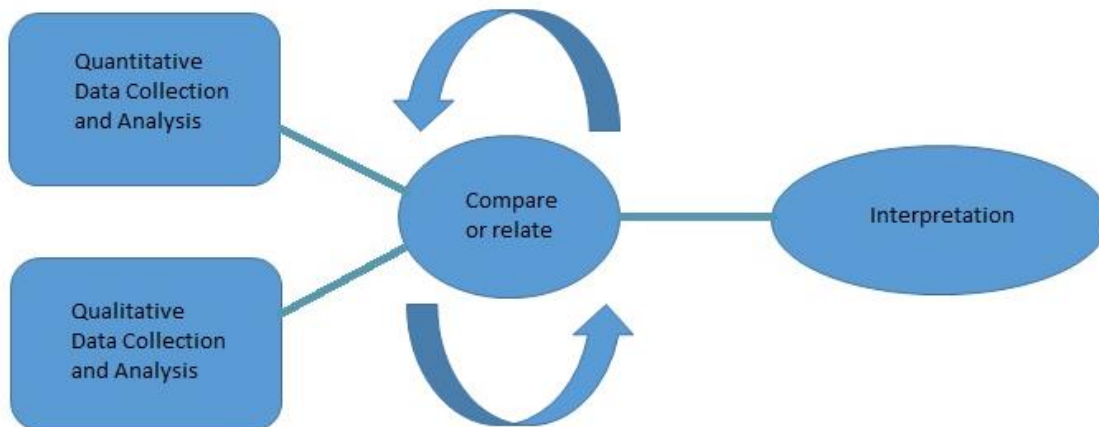


Figure 2: *Convergent parallel mixed methods design model.*

Figure 2 further outlines the quantitative and qualitative data collection process involving the two distinct phases. These applied mixed methods contribute to capturing diverse perspectives to better understand the phenomenon that is changing as a result of the experience being studied (Creswell, 2003). The first phase involved a quantitative survey administered to all faculty at a mid-sized, public university in Southern California to examine their perceptions of being at an institution that is increasingly transitioning academic offerings from site-based to online instruction. The second phase of the research employed qualitative methodology to provide an interpretive approach to identifying and more fully understanding faculty perceptions of the transition from face-

to-face instruction to online learning environments. Selecting appropriate research methods is essential to ensure the accuracy of the results (Ormrod & Leedy, 2010). The scope of the methodological approaches was fully vetted to identify the most appropriate fit, which drives the design of the study, data collection, and analysis.

Quantitative Design Methods

A survey was presented to all full-time and part-time faculty teaching in the 2015/2016 academic year during spring semester. The survey design provided insight directly related to the research questions from the diverse group of faculty participants from several disciplines. The findings from the survey helped identify areas for further exploration of the phenomenon experienced by faculty embarking on this role shift.

The survey was informed by instruments used in prior studies focused on faculty perceptions of online instruction and adapted for relevancy to the current study (Otter et al., 2013; Schifter, 2002). The survey was designed to capture faculty perceptions through 55 attributes outlined that could be considered motivating factors to teach online or inhibitors for faculty willingness to teach online. The questions were adapted to align with the research questions relevant to the study and key areas of interest supported by the emergent themes found in the literature review. The questions focused on faculty views of teaching, including roles, similarities, advantages, recognition, barriers, institutional support, and training needs (see Appendix A).

Three additional open-ended prompts at the end of the instrument encouraged faculty to provide their views on online teaching. The survey was distributed via an email invitation sent to over 700 faculty members (see Appendix B). The email provided an overview of the study and an electronic link to Survey Gizmo encouraging faculty to

complete the survey within three weeks. Two reminders were emailed, which helped increase participation levels (see Appendix B).

Qualitative Design Methods

The second phase of the research employed qualitative methodology, via online faculty questionnaires, to provide an interpretive approach to identifying and more fully understanding faculty perceptions of barriers or challenges when transitioning to online learning environments. A key element central to understanding the challenges instructors face when transitioning from traditionally accepted faculty roles to online learning environments is to allow instructors to participate in dialogue through analysis and reflection of their individual experiences in navigating these teaching modalities. This added research component helped isolate common themes that can further inform higher education institutions on how to address the dynamics associated with increased numbers of faculty undertaking online instructional roles.

Qualitative research was appropriate to strengthen the data because an inductive inquiry approach helps describe the transition from face-to-face teaching to online instruction and the experience in the voice of the faculty. Qualitative research enabled the researcher to focus on eliciting faculty views through narrative data, allowing for inclusion of participant perceptions of their experiences of the phenomenon being studied. Narrative data collection produces a systematic process of inquiry that provided a larger meaning for how the participants experienced the context of shifting from a familiar teaching environment in a lecture or classroom format to instructing at a physical distance in a virtual or online environment. The data gathering tools included open-ended questions intended to invite shared perceptions of the faculty experience. The

transcribed data were coded by patterns and emerging themes. The intent of the research design was to collect the data and to encapsulate these perceptions from select faculty members teaching in both onsite and online settings.

Finally, a case study inquiry approach provided expansive tools to deeply explore faculty engaged in online learning and their lived experiences. An instrumental case study provided the opportunity to better understand the complexity of the transition that classroom faculty experience as they change their teaching modalities to online delivery. The case study method also provided a linear yet iterative process in developing the ensuing design, preparation, data collection, and analysis (Yin, 2009). The methodology lent itself to studying multiple cases of faculty participants bounded by space and time.

The qualitative methodology provided faculty an opportunity to deeply reflect on and articulate their personal and professional experiences having undertaken the specific role change identified by the proposed research inquiry related to this proposed study. The application of a case study approach incorporated several data collection techniques, analyses, and interpretations of the data to increase the reliability and credibility of the findings. The setting for the case study method needed to be bound by defined parameters for selecting eligible subjects who could share their experiences to ensure the researcher explored the distinct purpose of the study. In this study, the participants were online faculty who had experienced transitioning from a face-to-face teaching environment.

The combination of mixed methods included survey findings, open-ended questions and online interviews, which captured and identified faculty perceptions from a public, 4-year higher education institution. The participants included faculty engaged in

teaching in both onsite and online environments. By adopting a mixed methods approach, the data collection and analysis had a higher level of reliability and credibility because of the multiple data collection methods that could lead to triangulation of the data. The system of codifying data and the analysis from both the quantitative and qualitative sources was critical in recognizing the emerging as well as converging themes. Themes identified required member checking because this helped to validate the credibility of the emerging patterns from the data analysis.

Context for the Study

The setting for the research was a public, 4-year institution in California with an enrollment of 14,179 students. The student population is diverse with ethnicity comprising 41% Latino, 31% Caucasian, 10% Asian, 6% two or more races, 3% African American, and 8% other or not reported. The student to instructor ratio is 23 to one. The median age of undergraduate students is 22 and the median age of graduate students is 30. Over 53% of the undergraduate students are first-generation college students, one in nine students is active duty or a veteran, 83% receive financial aid, and the majority of the students are commuters. Undergraduate students are 61% women and over 47% are considered low income.

The University comprises four colleges including a College of Humanities, Arts, Behavioral and Social Sciences consisting of 39% of the student enrollment; a College of Education Health and Human Services (24%); a College of Business Administration (18%); and a College of Science and Mathematics (17%). The university offers 50 academic programs including 31 undergraduate majors, 37 minors, 11 master's programs, and eight credential programs.

The total faculty included 820 members of which 54% were female. The profile of the faculty included 276 full-time tenured track faculty including 123 full professors, 81 associate professors, 72 assistant professors, and 544 part-time instructors or lecturers. The faculty is diverse with the ethnic breakdown reported by faculty as 65% white, 17% Hispanic, 8% Asian, 4% African American, 1% two or more races, and less than 1% Native American.

Of the 820-member faculty body, over 100 have developed or taught an online course. Training is available to all but is considered optional for instructors. The institution has offered courses in an online format for over six years and utilizes Moodle as the learning management system. During spring semester 2016, 726 of the faculty were teaching and the course offerings included 139 sections taught in an online format.

Participant Selection

The profile of the faculty who participated in the study was defined for both the quantitative and qualitative research. For the quantitative research, a request for participation in the survey was sent by email to all full-time and part-time faculty to capture their opinions or perceptions of online teaching whether or not they have taught or not in this environment. The value of gathering survey data from a broader group of faculty, whether experienced in online teaching or not, was helpful in identifying commonly held perceptions of online education, and the results of the survey assisted in shaping some of the deeper areas to explore in the qualitative research.

All faculty members teaching in spring semester 2016 were invited to participate in the quantitative phase of research via an email invitation (see Appendix B). Invitations were extended to the 726 faculty teaching during spring semester. Of those faculty, 193

agreed to voluntarily participate in the survey. The intent was to get representation from faculty who had experience teaching online as well as faculty with no experience teaching online. The key distinguishing factor of the participants was that the faculty who elected to participate was a fairly even split with 97 faculty members who had experience in online instruction and 96 who had never taught online. The participants included 97 tenured-track faculty and 96 part-time faculty.

The demographic characteristics of surveyed faculty (n = 193) suggest that they largely reflect the broader campus community. Over two-thirds self-identified as Caucasian (68%), followed by Hispanic (14%), Asian (10%), American Indian (3%), and Other (5%). The gender breakdown was female (63%) and male (36%). Nearly half were regarded as Baby Boomers (46%), followed by the younger Generation X (38%), and Generation Y (15%). Nearly half were lecturers (47%), while the remaining were tenure-track or tenured professors (Assistant 13%, Associate 16%, Professor 22%). The participants included faculty from varying disciplines including Education, Health and Human Services (34%); Humanities, Arts and Behavioral Science (33%); Science and Math (17%); Business Administration (8%); and first-year programs (7%).

Other questions pertaining directly to the study collected information on overall experience in collegiate teaching, instructional experience in an online environment, and participation as a student in online courses. Over half the faculty participants (51%) had up to 10 years collegiate teaching experience (0-6 years 33%, 7-10 years 18%) while the remaining faculty had 11-20 years (30%) or 21 or more years (20%). The faculty surveyed had varying levels of experience in teaching online courses in the following ranges: none (50%), one to three courses (25%), four to six courses (11%), 7-10 courses

(5%), 11-15 courses (4%), and 16 or more courses (6%). Almost half the participants had never enrolled in an online class as a student while many had enrolled in one to three courses (32%) or 4-10 courses (12%), and many had enrolled in 11 or more courses (7%).

For the qualitative research participants, the criteria for participants were that faculty members must have been engaged in the art of online teaching while having had experience as classroom instructors. There are no rules for defining sample size while conducting qualitative inquiry except that the population size be purposeful and of quality (Creswell, 2012). The population for this study was a group of nine faculty who met the criteria established with requisite experience as an online instructor. A recruitment correspondence was sent to over 40 faculty describing the scope of the research, the requisite qualifications for candidate participations, and requesting their consent to participate in the research. The subjects were instructors who had experience teaching in a classroom setting and had a minimum of one year teaching in an online learning format, described as a computer-mediated, web-based learning environment. The distinction was made since the focus of the inquiry was not on a blended learning format, which fully integrates online and onsite teaching.

Participants were selected on three criteria: representation based on faculty status, subject-area disciplines, and experience in online instruction. Faculty member participants included those having varying levels of online teaching experience, including at least three novice instructors (< 3 courses), three faculty with intermediate experience (4-6 courses), and four seasoned online teachers having 15 or more courses. The faculty selected exhibited knowledge, teaching experience, and a base level of competency in navigating this modality. Additionally, whether the participants had engaged in formal

training for teaching online was of interest, as it may have had an impact on their perceptions and readiness for teaching online. Four of the nine participants also had taken online courses.

The field could also be informed by exploring the experience for faculty self-identifying a potential factor for demographic representation using the concept of generational categories. This representation was based on year of birth groupings as based on birth years for various generations, including those labeled as the greatest generation, baby boomers, generation X, and generation Y. Since online learning has been defined as one of the disruptive innovations in higher education by Christiansen (Christensen et al., 2011), faculty engaged in the practice are at various levels of participation as innovators. Another area of self-identification in the study was faculty's perception of where they saw themselves on Rogers's (2003) adoption of innovation ranging from innovators, early adopters of online education, early majority, late adopters, or laggards.

Data Collection and Instrumentation

To narrow the focus of the inquiry pertaining to the research questions, the researcher applied a multi-step process for data collection. Thus, the design for the collection of data incorporated an online quantitative survey and online open-ended qualitative surveys with a subset of faculty to help triangulate the data. Yin (2009) described how in case study, the researcher concurrently intertwines the method and analysis while reflecting on the relevant literature related to the topic. This two-step process started with describing and mapping the dimensions of the experience, moved to

interpreting the meaning of the experience, and led to the culminating stage, which is the focus of the analysis (Yin, 2009).

Data collection occurred over a three-month period from February 2016 through April 2016, during spring semester at the University. All participants provided their expressed consent to ensure their permission to participate in the research. All data collected were aligned to and in compliance with the Institutional Review Board (IRB) guidelines. The data from the survey instrument and online questionnaire were gathered from the participants and secured. All digital information and any identifiers were securely stored in a password-protected personal computer and any paper copies of records were fully secured in locked cabinets to ensure the anonymity of participants.

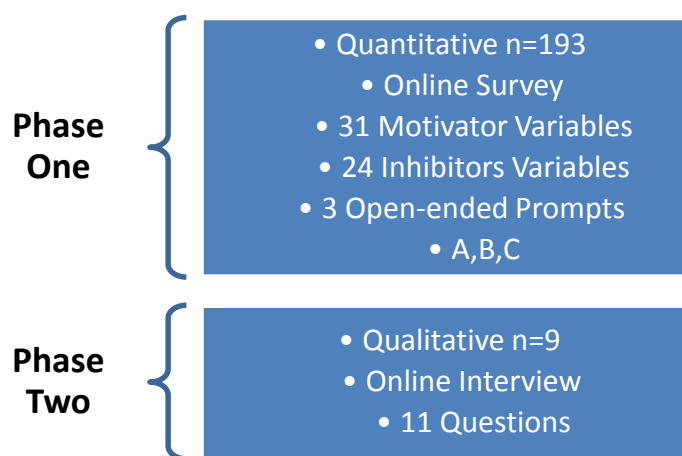


Figure 3: *Data collection process.*

Phase One: Quantitative Data Collection

The first phase of the data collection was a quantitative approach initiated through a targeted email distribution to all 726 full-time and part-time faculty inviting them to

complete the survey within in a three-week period (see Appendix B). The survey instrument for the quantitative analysis was a digital survey distributed electronically through Survey Gizmo distributed to undergraduate and graduate faculty from several disciplines who were teaching during spring semester 2016. A reminder was sent to all potential participants within 10 days to increase the response rate (see Appendix B). A second reminder was sent during the third week. The data from the survey were collected, coded, tabulated, and prepared for analysis in SPSS.

The instrument included a basic demographic data regarding the faculty members' profiles, academic levels, disciplines, and teaching experience in site-based and online modalities. An example of the instrument can be seen in Appendix A, which includes the demographic categories and the list of attributes. The questions were adapted to align with the research questions relevant to the study and key areas of interest intended to capture faculty perceptions towards online teaching. The survey was modified to identify 31 potential motivators to teach online and 24 factors that could inhibit faculty willingness to teach online (Otter, 2013; Schifter, 2002).

The responses to the survey provided data on faculty views of teaching including roles, similarities, advantages, recognition, barriers, institutional support, and training needs. Additional data were collected from open-ended prompts at the end of the instrument encouraging faculty to provide their views as well as self-select to volunteer for the qualitative phase of the study. The survey provided insight directly related to the research questions. A mix of undergraduate and graduate faculty participated from several disciplines, which generated rich data for further analysis. The dataset was inputted into SPSS for analysis. The findings from the survey helped identify further

exploration of the phenomenon experienced by faculty embarking on this role shift in their teaching experiences.

Phase Two: Qualitative Data Collection

The qualitative phase of data collection process was conducted during spring semester in April 2016 to capture perspectives of teachers actively engaged in online instruction. During this phase, a pool of 50 faculty teaching online courses in spring was invited to participate in the research (see Appendix DC). An email invitation was sent to the 50 eligible faculty teaching online during spring term to encourage experienced online faculty to voluntarily participate in an online open-ended questionnaire (see Appendix D). The semi-structured questions were included on a select basis aligned to relevancy with the research questions and to further explore the faculty members' experiences in making this transition from onsite to online teaching. The discussion points were selected as part of the questionnaire protocol to complement the scope of inquiry central to the research questions and purpose of the study.

The final phase included comparing the emerging themes from the participant responses in the quantitative data, comments collected as part of the survey, and the qualitative responses to the open-ended narrative questionnaires. The open-ended questions provided opportunities for faculty to provide additional insight or reflections to further explore the phenomenon.

Data Analysis

Data analysis for this study was ongoing throughout the data collection process. The mixed methods approach allowed for data to be analyzed from the survey instrument, providing quantitative as well as qualitative comments. The qualitative data from the

experienced online teachers provided a lens of analysis from participants with the requisite online teaching experience.

Analysis of Quantitative Data

The data collected from the results of the survey instrument were analyzed with a particular focus on those faculty with experience in online teaching. The sample size of 193 participants allowed for the application of comprehensive statistical analysis as well as descriptive statistics to describe or summarize the collected data, identifying any trends in a meaningful way. The data collected from the 55 variables generated a dataset, which lent itself to statistical analysis of varying faculty subsets. Findings of the survey helped inform the qualitative research and refined the scope of inquiry to the research questions.

For the data analysis, the six-response categories to the question (dependent variable), *How many online courses have you taught?* (0, 1-3, 4-6, 7-10, 11-15, 16+), were dichotomized into: yes (taught at least one online course) vs. no (did not teach online). Study respondents were asked to rate on a 5-point Likert-type agree/disagree scale: *What motivates you to teach online courses?* A total of 31 motivating factors were included in the study. Similarly, study respondents were asked to rate on a 5-point Likert-type agree/disagree scale: *What inhibits you from teaching online courses?* A total of 24 inhibiting factors were included in the study. Due to sparse data, the 5-point Likert-type scale was combined into three categories: (a) strongly agree or agree, (b) neutral, and (c) strongly disagree or disagree.

For the univariate analysis, descriptive statistics were used to display the frequencies and percentages for each study variable. For bivariate analysis, chi-square

was used to test the association between study variables and the dependent variable—taught online (yes vs. no). For multivariate analysis, two logistic regression analyses were conducted, examining the association of the study variables with the dependent variable (taught online). The first logistic regression examined the association of faculty characteristics in relation to whether or not they were more likely to teach online. The second logistic regression examined the association between statistically significant motivating and inhibiting factors with teaching online.

Analysis of Qualitative Data

There were two primary sources of qualitative data. The first source was generated from three questions following the quantitative survey instrument. The over 350 responses to the three questions justified the importance of including an analysis of this data source.

Since each question received a minimum of 100 responses, the comments captured from the online quantitative survey were individually coded to identify emergent themes. Collectively, this process informed the relevancy of the survey questions and additional analysis of the qualitative aspect of the research. This approach enabled the researcher to understand the case through ongoing accumulation and analysis of the data. A similar approach was applied to capture online responses to the guided questions for online questionnaires. The data were coded to identify patterns and themes from both sources.

Summary

The purpose of this study was to provide a rich description of faculty discernments of online teaching. Via the dissemination of a quantitative survey to a

broader faculty population at a single institution, motivators and inhibitors to teaching online were identified. Through the application of a qualitative case study to a subset of the population with online teaching experience, online faculty participated in an online interview questionnaire that encouraged them to share insights into their learned experiences transitioning from face-to-face teaching to online instruction. Most importantly, this research study considered the implications of faculty's shared experiences that may help practitioners better understand how faculty navigate this transition.

CHAPTER 4: FINDINGS

Chapter 4 provides the key findings of the quantitative and qualitative research from this study. The chapter is organized into two sections. The first section presents the quantitative research providing the descriptive statistics and univariate, bivariate, and multivariate analyses. The qualitative research section includes an analysis of two data sources: the first collected from three questions presented to the 193 participants in the quantitative survey and the second collected from responses of nine experienced online faculty to the 11 qualitative questions. The relationship of the responses is presented in crosswalk tables with the primary and secondary research questions.

The overarching purpose of this study was to examine faculty perspectives regarding the unique challenges and role changes they may encounter when transitioning from teaching in a traditional face-to-face classroom to an online instructional environment and how this experience impacts their professional activity. The study also identified faculty perceptions of key differences in navigating from site-based to online instructional settings. The researcher utilized two instruments to identify participant experiences: a quantitative survey identifying motivators and inhibitors of online instruction as well as an open-ended instrument completed by experienced online instructors reflecting their experience teaching in an online classroom environment. This chapter presents the analysis of both quantitative and qualitative data from faculty surveys and the open-ended questionnaire experienced online faculty completed.

Quantitative data were gathered from over 190 faculty through an online survey instrument, which included key demographic data, 55 questions related to motivators and barriers to online teaching, and three open-ended questions that provided teachers an

opportunity to share their perceptions. The participants identified their online teaching experience and consisted of 96 with no online teaching experience and 97 with varying amounts of experience ranging from teaching one to three online courses to over 20 courses. The data collected were analyzed to understand statistical differences in perceptions expressed from all participants as well as the variances attributed to experienced faculty who had taught online as compared to faculty members who had not taught online.

Qualitative data were collected from two sources. As part of the survey distributed to the participants, faculty were requested to respond to three open-ended questions to ascertain what would encourage or discourage faculty from teaching online as well as general perceptions of online teaching and to identify professional development needed to support online instruction. The questions generated rich supplemental data from the survey in over 358 narrative comments including a minimum of at least 100 responses to each of the three prompts. The qualitative comments were coded and themed and patterns were identified independent of the quantitative findings.

The second phase of the research was a qualitative case study of nine faculty with varying levels of experience in online instruction. The participants responded with qualitative open-ended narrative to an online interview questionnaire of 11 questions closely aligned with the five research sub-questions. The interview questionnaire transcripts were coded, patterns were identified, and various themes emerged. The data are organized by question. The convergence of the quantitative and qualitative findings are presented in Chapter 5 to synthesize the two datasets.

Research Questions

This study embarked on answering the focal research question: What can be learned from faculty who have taught in both traditional classroom and online settings and how they navigate these diverse teaching environments? A series of five sub-questions augmented the scope of this inquiry:

Sub-Question 1. How do faculty differentiate the unique aspects of the teaching role in an online and face-to face setting?

Sub-Question 2. What influences do faculty consider for teaching in an online modality?

Sub-Question 3. What factors inhibit faculty transitioning from a traditional brick-and-mortar to a virtual (online teaching) context?

Sub-Question 4. What factors support faculty to transition to online teaching?

Sub-Question 5. How do faculty teaching online see themselves as being innovators?

Quantitative Findings

The participants represented the broader sample of the faculty population where the study took place. The results in Table 1 indicate that of the faculty participants (n = 193), there was a 50-50 split (i.e., 50% of the study respondents indicated they had taught at least one online course and 50% indicated they had not taught online). The study sample included 36% males and 64% females; 68% White; 46% Baby Boomers; 50% on tenure track position; and 34% in Education, 33% in Humanities, 18% in Sciences & Math, and 15% in other departments. In regard to number of years teaching

at college, 26% had 1-3 years, 14% had 4-6 years, 18% had 7-10 years, 15% had 11-15 years, and 27% had 16+ years.

Table 1: Descriptive Statistics of Faculty Participants

Variables:		N	Mean	Std. Dev	Min	Max	Sum
Gender	Male	N	31	32	63		
		%	49.2	50.8	100		
	Female	N	58	52	110		
		%	52.7	47.3	100	0.20	1
Race	White	N	59	60	119		
		%	49.6	50.4	100		
	Non-White	N	34	23	57		
		%	59.7	40.3	100	1.57	1
Baby Boomers	Yes	N	47	34	81		
		%	58.0	42.0	100		
	No	N	45	49	94		
		%	47.9	52.1	100	1.80	1
Taken Online Courses	Yes	N	60	38	98		
		%	61.2	38.8	100		
	No	N	37	58	95		
		%	39.0	61.0	100	9.58	1

Motivators and Inhibitors of Faculty Participants

The online survey presented 55 variables for faculty participants to rank. The responses to the variables are in ordinal rank on a 5-point Likert-type scale. The frequency distribution for each of the 31 motivating and 24 inhibiting factors are

displayed in Table 2. Univariate analysis provided a descriptive of each of the variables ranked by the participants in the study as well as the frequency. The standard deviation measures the dispersion of the set of data from its mean with more spread-apart data having a higher deviation; the standard deviation is the square root of variance. The dispersion of the data and skewness of the variables were reviewed.

Frequency distribution for motivating factors. Table 2 provides a summary of study participant responses to their level of agreement with the factors that would motivate them to teach online. The frequency of the responses and the percentage of the total sample size are displayed.

Table 2: Survey Responses: What would motivate you to teach online courses?

Motivators	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average \bar{x}	Responses
Intellectual challenge	24 13.0%	33 17.9%	53 28.8%	57 31.1%	17 16.3%	3.1	184
Personal motivation to use technology	16 18.7%	21 11.4%	33 17.9%	84 45.7%	30 1	3.5	184
Opportunity to improve my teaching skills	19 10.35	15 8.1%	34 18.4%	81 43.8%	36 19.5%	3.5	185
Adopt innovative practices	9 4.8%	10 5.4%	19 10.2%	96 51.6%	52 28.0%	3.9	186
Opportunity for scholarly pursuit	29 15.8%	25 13.6%	70 38.0%	45 24.5%	15 8.2%	3.0	184
Maintain relevant skill sets	18 9.8%	16 8.7%	34 18.6%	83 45.45	32 17.5%	3.5	183
Opportunity to use personal research as a teaching tool	29 15.9%	37 20.3%	57 31.3%	46 25.3%	13 7.1%	2.9	182
Expectations by department/institution	10 5.4%	26 14.1%	66 35.9%	60 32.6%	22 12.0%	3.3	184
Support and encouragement from Dean or Chair	16 8.7%	20 10.9%	58 31.5%	64 34.8%	26 14.1%	3.3	184
Support and encouragement from department colleagues	12 6.5%	23 12.5%	54 29.3%	74 40.2%	21 11.4%	3.4	184
Opportunity to develop new ideas	11 6.0%	15 8.2%	32 17.5%	83 45.4%	42 23.0%	3.7	183
Shift from teacher-centric to learner-center focus	27 14.7%	18 9.8%	27 14.7%	71 38.6%	41 22.4%	3.4	184
Professional prestige and status	49 26.6%	48 26.1%	64 34.8%	20 10.9%	3 1.6%	2.3	184

Table 2 (continued)

Motivators	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average \bar{x}	Responses
Integration of technology in teaching	14 7.7%	16 8.7%	33 18.0%	79 43.2%	41 22.4%	3.6	183
Overall job satisfaction	23 12.5%	24 13.0%	58 31.5%	58 31.5%	21 11.4%	3.2	184
Opportunity to strengthen my classroom skills	27 14.7%	23 12.5%	49 26.6%	63 34.2%	22 12.0%	3.2	184
Professional advancement	19 10.3%	27 14.7%	56 30.4%	58 31.5%	24 13.0%	3.2	184
Technical support provided by the institution	15 8.2%	11 6.0%	43 23.4%	66 35.9%	49 26.6%	3.7	184
Working conditions, flexibility (hours, location)	7 3.8%	9 4%	21 11.4%	71 38.4%	77 41.6%	4.1	185
Online training provided by the institution	15 8.2%	9 4.9%	36 19.6%	77 41.8%	47 25.5%	3.7	184
Monetary support for participation (stipend, overload)	13 7.1%	9 4.9%	38 20.7%	60 32.6%	64 34.8%	3.8	184
Students attaining the same learning outcomes	14 7.6%	12 6.5%	41 22.3%	67 36.4%	50 27.2%	3.7	184
Personalized/individual student engagement	25 13.7%	22 12.0%	32 17.5%	67 36.6%	37 20.2%	3.4	183
Recognition/credit toward promotion and tenure	30 16.3%	28 15.2%	60 32.6%	38 20.7%	28 15.2%	3.0	184
Release time/reduced teaching load	28 15.1%	23 12.4%	46 24.9%	48 25.9%	40 21.6%	3.3	185
Compensation to attend training to teach online	22 11.9%	20 10.8%	41 22.2%	54 29.2%	48 25.9%	3.5	185
Stipend to develop courses	19 10.3%	19 10.3%	28 15.1%	59 31.9%	60 32.4%	3.7	185
Ability to reach students that cannot attend on campus	5 2.7%	8 4.3%	23 12.5%	70 38.0%	78 42.4%	4.1	184
Opportunity to diversify program offerings	13 7.1%	14 7.6%	32 17.4%	72 39.1%	53 28.8%	3.8	184
Greater course flexibility for students	10 5.4%	11 5.9%	24 13.0%	80 43.2%	60 32.4%	3.9	185
Benefits outweigh any inhibitors to teaching online	27 14.8%	18 9.9%	55 30.2%	56 30.8%	26 14.3%	3.2	182

Frequency distribution for inhibiting factors. A summary of study participant responses to their level of agreement with the factors that would inhibit them from

teaching online shows the frequency of the responses and the percentage of the total sample size (see Table 3).

Table 3: Survey Responses: What would inhibit you to teach online courses?

Inhibitors	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average \bar{x}	Responses
Role changes & pedagogical transition	14 7.7%	26 14.4%	72 39.8%	49 27.1%	20 11.0%	3.2	181
Establishing social presence online	15 8.3%	40 22.1%	62 34.3%	42 23.2%	22 12.2%	3.1	181
Concern about faculty workload	14 7.7%	19 10.4%	45 24.7%	53	51 28.0%	3.6	182
Negative comments made by colleagues about online teaching experiences	23 12.7%	37 20.4%	52 28.7%	49 27.1%	20 11.0%	3.0	181
Lack of professional prestige	20 11.0%	50 27.6%	66 36.5%	31 36.5%	14 7.7%	2.8	181
Concern about quality of course	5 2.7%	16 8.8%	17 9.3%	72 39.6%	72 39.6%	4.0	182
Lack of release time	10 5.5%	20 11.0%	61 33.7%	57 31.5%	33 18.2%	3.5	181
Time commitment exceeds face-to-face	10 5.5%	19 10.5%	45 24.9%	61 33.7%	46 25.4%	3.6	181
Lack of technical background	34 18.8%	36 19.9%	51 28.2%	42 23.2%	18 9.9%	2.9	181
Online teaching requires a different skill set	10 5.6%	30 16.7%	45 25.0%	66 36.7%	29 16.1%	3.4	180
Lack of training by the institution	11 6.0%	41 22.5%	48 26.4%	53 29.1%	29 15.9%	3.3	182
Lack of support and encouragement from chair or dean	12 6.6%	40 22.0%	66 36.3%	37 20.3%	27 14.8%	3.1	182
Lack of support and encouragement from department colleagues	15 8.2%	38 20.9%	65 35.7%	40 22.0%	24 13.2%	3.1	182
Inadequate support for course design/development	10 5.5%	22 12.1%	39 21.4%	61 33.5%	50 27.5%	3.7	182
Lack of technical support provided by institution	17 9.4%	29 16.0%	38 21.0%	49 27.1%	48 26.5%	3.5	181
Lack of grants for materials/expenses	9 5.0%	21 11.7%	70 38.9%	40 22.2%	40 22.2%	3.5	181
Lack of support and encouragement from institution administrators	10 5.5%	29 16.0%	69 38.1%	43 23.8%	30 16.6%	3.3	181

Table 3 (continued)

Inhibitors	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average \bar{x}	Responses
Lack of monetary support for participation (stipend, overload)	10 5.5%	23 12.7%	41 22.7%	61 33.7%	46 25.4%	3.6	181
Concern about quality of students	8 4.4%	25 13.8%	43 23.8%	56 30.9%	49 27.1%	3.6	181
Lack of salary increase/merit	11 6.1%	14 7.7%	67 37.0%	45 24.9%	44 24.3%	3.5	181
Concern about academic freedom	15 8.3%	37 20.4%	61 33.7%	40 22.1%	28 15.5%	3.2	181
Concern about intellectual property	15 8.3%	36 19.9%	47 26.0%	50 27.6%	33 18.2%	3.3	181
Concern about class size/management	8 4.4%	12 6.6%	30 16.5%	72 39.6%	60 33.0%	3.9	182
Lack of credit toward promotion and tenure	19 10.5%	21 11.6%	76 42.0%	30 16.6%	35 19.3%	3.2	181

Central tendency of motivating variables. Participants responded to what would motivate them to teach online. The mean or average describes the central tendency for the distribution of all the variables. The top five motivators with the highest mean score were *reaching students who could not attend on campus* ($\bar{x} = 4.13$), *working conditions and flexibility* ($\bar{x} = 4.09$), *adopting innovative practices* ($x = 3.92$), *course flexibility for students* ($\bar{x} = 3.91$), and *monetary support* ($\bar{x} = 3.83$). All motivational variables skew negatively to the right of the mean with the exception of *prestige* (0.206), which skews positively or to the left of the mean. Table 4 provides the calculated means, standard deviation, and skewness related to motivating factors identified by faculty participants.

Table 4: Descriptive Statistics of Motivators to Teach Online

Motivators	N	Mean	Standard	Skewness	
	Statistic	\bar{x}	Deviation	Statistic	Std Error
M28 Reach Students	184	4.13	.978	-1.259	.179
M19 Working Conditions	185	4.09	1.031	-1.300	.179
M04 Adopt Innov Practices	186	3.92	1.016	-1.286	.178
M30 Course Flexibility	185	3.91	1.085	-1.143	.179
M21 Support Money	184	3.83	1.168	-.935	.179
M29 Diversify Programs	184	3.75	1.161	-.898	.179
M20 Training	184	3.72	1.144	-.957	.179
M11 New Ideas	183	3.71	1.094	-.907	.180
M22 Student Learning	184	3.69	1.163	-.807	.179
M18 Support Technical	184	3.67	1.171	-.795	.179
M27 Stipend Courses	185	3.66	1.305	-.754	.179
M14 Integrate Technology	183	3.64	1.149	-.841	.180
M03 Improve Teaching Skills	185	3.54	1.193	-.815	.179
M06 Maintain Skills	183	3.52	1.171	-.814	.180
M02 Personal Motive/Tech	184	3.49	1.155	-.751	.179
M26 Training Compensation	185	3.46	1.306	-.529	.179
M12 Learner Centered	184	3.44	1.333	-.653	.179
M23 Student Engagement	183	3.38	1.307	-.549	.180
M10 Support Colleagues	184	3.38	1.054	-.544	.179
M09 Support Dean/Chair	184	3.35	1.120	-.485	.179
M08 Dept Expectations	184	3.32	1.034	-.304	.179
M25 Reduced Teaching Load	185	3.26	1.339	-.331	.179
M17 Prof. Advancement	184	3.22	1.164	-.339	.179
M31 Benefits Outweigh	182	3.20	1.241	-.400	.180
M16 Classroom Skills	184	3.16	1.231	-.404	.179
M15 Job Satisfaction	184	3.16	1.176	-.362	.179
M01 Intellectual Challenge	184	3.05	1.177	-.249	.179
M24 Promotion Tenure	184	3.03	1.276	-.094	.179
M05 Scholarly Pursuit	184	2.96	1.159	-.213	.179
M07 Personal Research	182	2.87	1.171	-.086	.179
M13 Professional Prestige	184	2.35	1.039	.206	.179
Valid N (listwise)	170				

Central tendency of inhibiting variables. When faculty were asked what most inhibited them from teaching online, the top five inhibitors with the highest mean or average were *course quality* ($\bar{x} = 4.04$), *class size* ($\bar{x} = 3.90$), *support for course* ($\bar{x} = 3.65$), *time commitment* ($\bar{x} = 3.63$), and *student quality* ($\bar{x} = 3.62$). The two

variables that skew positively or to the left of the mean are technical background (*0.001*) and prestige (*0.188*) (see Table 5).

Table 5: Descriptive Statistics of Inhibitors to Teach Online

Inhibitors	N	Mean \bar{x}	Standard Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std Error
In06 Course Quality	182	4.04	1.045	-1.146	.180
In23 Class Size	182	3.90	1.073	-.996	.180
In14 Support Course	182	3.65	1.164	-.612	.180
In08 Time Commitment	181	3.63	1.136	-.590	.181
In19 Student Quality	181	3.62	1.151	-.485	.181
In18 Support Money	181	3.61	1.157	-.559	.181
In03 Faculty Workload	181	3.59	1.217	-.574	.180
In20 Salary	181	3.54	1.123	-.388	.181
In07 Release Time	181	3.46	1.083	-.384	.181
In15 Support Technical	181	3.45	1.293	-.410	.181
In16 Grant Money	181	3.45	1.110	-.195	.181
In10 Skill Set	181	3.41	1.113	-.401	.181
In17 Support Administrators	181	3.30	1.095	-.103	.181
In22 Intellectual Property	181	3.28	1.211	-.205	.181
In11 Training	181	3.26	1.155	-.139	.181
In24 Promotion/Tenure	181	3.23	1.197	-.132	.180
In01 Role Changes	181	3.19	1.065	-.227	.181
In21 Academic Freedom	181	3.16	1.165	-.040	.181
In12 Support Dean/Chair	181	3.15	1.125	.057	.180
In13 Support Colleague	181	3.11	1.132	-.010	.180
In02 Online Presence	181	3.09	1.127	-.011	.181
In04 Colleague Perspectives	181	3.03	1.197	-.123	.181
In09 Technical Background	181	2.86	1.252	.001	.181
In05 Lack of Prestige	181	2.83	1.084	.188	.181
Valid N (listwise)	174				

Characteristics of faculty with online teaching experience. Analysis of faculty demographic data as well as other related characteristics of study respondents who had taught online courses, as compared to those who had not taught online courses, reveal no statistically significant differences between males vs. females, whites vs. non-whites, or

Baby Boomers vs. other generations. The results, however, indicate differences in terms of college type, tenure track position, and online courses taken.

For college type, 67% of faculty in Education had taught online compared to 29% of faculty in Sciences & Math, 33% of faculty in Business, and 53% of faculty in Humanities, $\chi^2(4) = 18.79, p < .001$. For tenure track, 58% of faculty in a tenure track position indicated they had taught online courses compared to 43% of faculty not on a tenure track position, $\chi^2(1) = 4.36, p < .05$. For those who had *taken* online courses, 61% reported they had *taught* online courses compared to 39% of those who had not taken any online courses, $\chi^2(1) = 9.58, p < .01$ (see Table 6).

Table 6: Characteristics of Study Respondents who Teach Online Courses

Variables:			Taught Online			Chi-square	DF*	p
			Yes	No	Total			
Gender	Male	N	31	32	63	0.20	1	0.656
		%	49.2	50.8	100			
	Female	N	58	52	110			
		%	52.7	47.3	100			
Race	White	N	59	60	119			
		%	49.6	50.4	100			
	Non-White	N	34	23	57			
		%	59.7	40.3	100			
Baby Boomers	Yes	N	47	34	81			
		%	58.0	42.0	100			
	No	N	45	49	94			
		%	47.9	52.1	100			
Taken Online Courses	Yes	N	60	38	98			
		%	61.2	38.8	100			
	No	N	37	58	95			
		%	39.0	61.0	100			
College Type	Business	N	5	10	15			
		%	33.3	66.7	100			
	Education	N	44	22	66			
		%	66.7	33.3	100			
	Humanities	N	34	30	64			
		%	53.1	46.9	100			
	Sci/Math	N	10	24	34			
		%	29.4	70.6	100			
	First Year	N	3	10	13			
		%	23.1	76.9	100			

Table 6 (continued)

Variables:		Taught Online				Chi-square	DF*	p
		Yes	No	Total				
Tenure Track	Yes	N	56	41	97	4.36	1	0.037
		%	57.7	42.3	100			
	No	N	41	55	96			
		%	42.7	57.3	100			
Number of years teaching at college	1-3 years	N	12	24	36	8.21	5	0.145
		%	33.3	66.7	100			
	4-6 years	N	14	13	27			
		%	51.9	48.1	100			
	7-10 years	N	16	18	34			
		%	47.1	59.9	100			
	11-15 years	N	17	11	28			
		%	60.7	39.3	100			
	16-20 years	N	19	10	29			
		%	65.5	34.5	100			
	21+ years	N	19	19	38			
		%	50.0	50.0	100			

DF=degrees of freedom.

Bivariate Analysis of Motivators and Inhibitors

An analysis of bivariate data was conducted to find out if there was a relationship between the two independent variables of motivating and inhibiting factors and the dependent variable of faculty who had or had not taught online.

Motivating factors of faculty participants. The bivariate association between 31 motivating factors with the dependent variable—taught online (yes vs. no)—reveals only two motivating factors were significantly associated with online teaching: *maintain relevant skillset* and *benefits outweigh any inhibitors to teaching online*. The findings indicate 69% of faculty who teach online strongly agreed/agreed that teaching online *maintains relevant skillset* compared to 56% of faculty who do not teach online courses, $\chi^2(2) = 6.79, p < .05$. Similarly, 54% of faculty who teach online strongly agreed/agreed that *benefits of teaching online outweigh any inhibitors* compared to 36% of faculty who do not teach online, $\chi^2(2) = 6.21, p < .05$ (see Table 7).

Table 7: Motivating Factors to Teach Online Courses

What <i>motivates</i> you to teach online courses?		Taught Online								Chi-square	DF*	p
		Yes				No						
		Disagree	Neutral	Agree	Total	Disagree	Neutral	Agree	Total			
Intellectual challenge	N	29	26	41	96	28	27	33	88	0.55	2	0.758
	%	30.2	27.1	42.7	100	31.8	30.7	37.5	100			
Personal motivation	N	20	17	59	96	17	16	55	88	0.07	2	0.967
	%	20.8	17.7	61.5	100	19.3	18.2	62.5	100			
Opportunity to improve teaching skills	N	14	16	66	96	20	18	51	89	2.84	2	0.242
	%	14.6	16.7	68.7	100	22.5	20.2	57.3	100			
Adopt innovative practices	N	6	12	79	97	13	7	69	89	4.23	2	0.120
	%	6.2	12.4	81.4	100	14.6	7.9	77.5	100			
Opportunity for scholarly pursuit	N	28	34	34	96	26	36	26	88	0.85	2	0.653
	%	29.2	35.4	35.4	100	29.6	40.9	29.5	100			
Maintain Relevant Skill Sets	N	19	11	66	96	15	23	49	87	6.79	2	0.033
	%	19.8	11.5	68.7	100	17.2	26.4	56.4	100			

Table 7 (continued)

What <i>motivates</i> you to teach online courses?	Taught Online											
	Yes					No						
Opportunity to use personal research as a teaching tool	N	33	30	33	96	33	27	26	86			
	%	34.4	31.2	34.4	100	38.4	31.4	30.2	96	0.44	2	0.802
Expectations by department/institution	N	22	29	45	96	14	37	37	88			
	%	22.9	30.2	46.9	100	15.9	42.1	42.0	100	3.19	2	0.203
Supported by Dean or Chair	N	18	33	45	96	18	25	45	88			
	%	18.7	34.4	46.9	100	20.5	28.4	51.1	100	0.76	2	0.685
Supported by department colleagues	N	18	28	50	96	17	26	45	88			
	%	18.7	29.2	52.1	100	19.3	29.6	51.1	100	0.02	2	0.991
Opportunity to develop new ideas	N	11	18	67	96	15	14	58	87			
	%	11.5	18.7	69.8	100	17.2	16.1	66.7	100	1.32	2	0.516
Shift from teacher-centric to learner-centered	N	23	16	57	96	22	11	55	88			
	%	24.0	16.7	59.3	100	25.0	12.5	62.5	100	0.64	2	0.727
Professional prestige and status	N	50	33	13	96	47	31	10	88			
	%	52.1	34.4	13.5	100	53.4	35.2	11.4	100	0.20	2	0.905

Table 7 (continued)

What <i>motivates</i> you to teach online courses?		Taught Online										
		Yes					No					
Integration of technology in teaching	N	15	15	65	95	15	18	55	88			
	%	15.8	15.8	64.4	100	17.0	20.5	52.5	100	0.84	2	0.657
Overall job satisfaction	N	22	30	44	96	25	28	35	88			
	%	22.9	31.2	45.9	100	28.4	31.8	39.8	100	0.94	2	0.625
To strengthen classroom skills	N	24	26	45	95	26	23	40	89			
	%	25.3	27.4	47.3	100	29.2	25.8	45.0	100	0.36	2	0.83
Professional advancement	N	25	29	42	96	21	27	40	88			
	%	26.0	30.2	43.8	100	23.9	30.7	45.4	100	0.12	2	0.942
Technical support provided by institution	N	15	22	59	96	11	21	56	88			
	%	15.6	22.9	61.5	100	12.5	23.9	63.6	100	0.37	2	0.83
Flexible work conditions	N	7	11	78	96	9	10	70	89			
	%	7.3	11.5	81.2	100	10.1	11.2	78.7	100	0.47	2	0.792
Online training provided by institution	N	13	21	62	96	11	15	62	88			
	%	13.5	21.9	64.6	100	12.5	17.1	70.4	100	0.82	2	0.664

Table 7 (continued)

What <i>motivates</i> you to teach online courses?	Taught Online												
	Yes					No							
Monetary support for participation	N	15	21	60	96	7	17	64	88				
	%	15.6	21.9	62.5	100	8.0	19.3	72.7	100	3.12	2	0.210	
Students attaining the same learning outcomes	N	13	18	65	96	13	23	52	88				
	%	13.5	18.8	67.7	100	14.8	26.1	59.1	100	1.71	2	0.425	
Personalized student engagement	N	23	19	54	96	24	13	50	87				
	%	24.0	19.8	56.2	100	27.6	15.0	57.4	100	0.86	2	0.651	
Recognition toward tenure & promotion	N	31	31	34	96	27	29	32	88				
	%	32.3	32.3	35.4	100	30.7	33.0	36.3	100	0.06	2	0.973	
Reduced teaching load	N	33	24	39	96	18	22	49	89				
	%	34.4	25.0	40.6	100	20.2	24.7	55.1	100	5.38	2	0.068	
Compensation to attend training to teach online	N	26	22	48	96	16	19	54	89				
	%	27.1	22.9	50.0	100	18.0	21.3	60.7	100	2.69	2	0.260	
Stipend to develop courses	N	22	16	58	96	16	12	61	89				
	%	22.9	16.7	60.4	100	18.0	13.5	68.5	100	1.33	2	0.514	

Table 7 (continued)

What <i>motivates</i> you to teach online courses?		Taught Online										
		Yes					No					
Ability to reach students that cannot attend on campus	N	8	9	79	96	5	14	69	88			
	%	8.3	9.4	82.3	100	5.7	15.9	78.4	100	2.11	2	0.348
Opportunity to diversify program offerings	N	10	15	71	96	17	17	54	88			
	%	10.4	15.6	74.0	100	19.3	19.3	61.4	100	3.91	2	0.141
Greater course flexibility for students	N	12	12	73	97	9	12	67	88			
	%	12.4	12.4	75.2	100	10.2	13.7	76.1	100	0.25	2	0.883
Benefits outweigh any inhibitors to teaching online	N	21	23	51	95	24	32	31	87			
	%	22.1	24.2	53.7	100	27.6	36.8	35.6	100	6.21	2	0.045

DF=degrees of freedom.

Disagree=Strongly Disagree or Disagree; Agree=Strongly Agree or Agree

Inhibiting factors of faculty participants. Further analysis explored the bivariate association between 24 inhibiting factors with the dependent variable, taught online (yes vs. no). Seven inhibiting factors were significantly associated with online teaching. In regard to *concerns about faculty workload*, the findings indicate 54% of faculty who teach online strongly agreed/agreed compared to 61% of faculty who do not teach online, $\chi^2(2) = 9.55, p < .01$. In regard to *negative comments made by colleagues*, 25% of faculty who teach online strongly agreed/agreed compared to 52% (n = 45) of faculty who do not teach, $\chi^2(2) = 16.28, p < .001$.

The other five statistically significant inhibitors include: *Concern about quality of courses*—72% of faculty who teach online strongly agreed/agreed compared to 87% of faculty who do not teach, $\chi^2(2) = 8.69, p < .05$; *inadequate support for course design/development*—55% of faculty who teach online strongly agreed/agreed compared to 68% of faculty who do not teach online $\chi^2(2) = 10.47, p < .01$; *lack of grants for materials/expenses*—37% of faculty who teach online strongly agreed/agreed compared to 53% of faculty who do not teach, $\chi^2(2) = 6.43, p < .05$; *lack of monetary support for participation*—49% of faculty who teach online strongly agreed/agreed compared to 70% of faculty who do not teach online, $\chi^2(2) = 11.22, p < .01$; and *lack of salary increase/merit*—47% of faculty who teach strongly agreed/agreed compared to 52% of faculty who do not teach, $\chi^2(2) = 9.49, p < .01$. For all above-mentioned seven inhibiting factors, faculty who teach online courses are *less* likely to agree when compared to faculty who do not teach online. The results of the bivariate analysis are summarized in Table 8.

Table 8: Factors Inhibiting to Teach Online Courses

What <i>inhibits</i> you from teaching online courses?		Taught Online								Chi-square	DF*	p
		Yes				No						
		Disagree	Neutral	Agree	Total	Disagree	Neutral	Agree	Total			
Role changes or pedagogical transition	N	24	36	35	95	16	36	34	86	1.17	2	0.557
	%	25.3	37.9	36.8	100	18.6	41.9	39.5	100			
Establishing social presence online	N	34	34	27	95	21	28	37	86	4.78	2	0.092
	%	35.8	35.8	28.4	100	24.4	32.6	43.0	100			
Concern about faculty workload	N	25	19	51	95	8	26	53	87	9.55	2	0.008
	%	26.3	20.0	53.7	100	9.2	29.9	61.0	100			
Negative comments made by colleagues about online teaching	N	42	29	24	95	18	23	45	86	16.28	2	<0.001
	%	44.2	30.5	25.3	100	21.0	26.7	52.3	100			
Lack of professional prestige	N	42	33	19	94	28	33	26	87	3.62	2	0.163
	%	44.7	35.1	20.2	100	32.2	37.9	29.9	100			
Concern about quality of courses	N	17	10	68	95	4	7	76	87	8.69	2	0.013
	%	17.9	10.5	71.6	100	4.6	8.0	87.4	100			

Table 8 (continued)

What <i>inhibits</i> you from teaching online courses?	Taught Online											
	Yes				No							
Lack of release time	N	21	29	45	95	9	32	45	86			
	%	22.1	30.5	47.4	100	10.5	37.1	52.4	100	4.51	2	0.105
Time commitment exceeds face-to-face	N	18	22	55	95	11	23	52	86			
	%	19.0	23.1	57.9	100	12.8	26.7	60.5	100	1.35	2	0.509
Lack of technical background	N	36	29	30	95	34	22	30	86			
	%	37.9	30.5	31.6	100	39.5	25.6	34.9	100	0.57	2	0.751
Online teaching requires a different skill set	N	19	29	46	94	21	16	49	86			
	%	20.2	30.9	48.9	100	24.4	18.6	57.0	100	3.60	2	0.165
Lack of training provided by the institution	N	27	28	40	95	25	20	42	87			
	%	28.4	29.5	42.1	100	28.7	23.0	48.3	100	1.11	2	0.574
Lack of support from chair or dean	N	28	35	32	95	24	31	32	87			
	%	29.5	36.8	33.7	100	27.6	35.6	36.8	100	0.20	2	0.905
Lack of support from department colleagues	N	32	32	31	95	21	33	33	87			
	%	33.7	33.7	32.6	100	24.2	37.9	37.9	100	2.01	2	0.365

Table 8 (continued)

What <i>inhibits</i> you from teaching online courses?	Taught Online											
	Yes					No						
Inadequate support for course design/development	N	25	18	52	95	7	21	59	87			
	%	26.3	19.0	54.7	100	8.1	24.1	67.8	100	10.47	2	0.005
Lack of technical support provided by institution	N	29	18	48	95	17	20	49	86			
	%	30.5	19.0	50.5	100	19.8	23.3	56.9	100	2.81	2	0.246
Lack of grants for materials/expenses	N	21	39	35	95	9	31	45	85			
	%	22.1	41.1	36.8	100	10.6	36.5	52.9	100	6.43	2	0.040
Lack of support from institution administrators	N	24	35	36	95	15	34	37	86			
	%	25.3	36.8	37.9	100	17.4	39.5	43.1	100	1.66	2	0.436
Lack of monetary support for participation	N	25	23	46	94	8	18	61	87			
	%	26.6	24.5	48.9	100	9.2	20.7	70.1	100	11.22	2	0.004
Lack of concern about quality of students	N	19	28	48	95	14	15	57	86			
	%	20.0	29.5	50.5	100	16.3	17.4	66.3	100	5.02	2	0.081
Lack of salary increase/merit	N	20	30	44	94	5	37	45	87			
	%	21.3	31.9	46.8	100	5.8	42.5	51.7	100	9.49	2	0.009

Table 8 (continued)

What <i>inhibits</i> you from teaching online courses?	Taught Online											
		Yes					No					
Concern about academic freedom	N	28	33	34	95	24	28	34	86			
	%	29.5	34.7	35.8	100	27.9	32.6	39.5	100	0.27	2	0.873
Concern about intellectual property	N	29	24	42	95	22	23	41	86			
	%	30.5	25.3	44.2	100	25.6	26.7	47.7	100	0.55	2	0.760
Concern about class size/management	N	8	15	72	95	12	15	60	87			
	%	8.4	15.8	75.8	100	13.8	17.2	69.0	100	1.54	2	0.462
Lack of credit toward promotion and tenure	N	22	35	38	95	18	41	27	86			
	%	23.2	36.8	40.0	100	20.9	47.7	31.4	100	2.29	2	0.318

* DF=degrees of freedom.

Disagree=Strongly Disagree or Disagree; Agree=Strongly Agree or Agree

Multivariate Analysis of Faculty Characteristics and Factors

Multivariate statistical analysis was applied to further determine the patterns of faculty characteristics associated with electing to teach online. Additionally, logistic regression analysis of motivating and inhibiting values was conducted.

Logistic regression of online faculty characteristics. The findings from the multivariate logistic regression analysis examining the faculty characteristics associated with online teaching and the results indicate faculty who have *taken* online courses are more likely to *teach* online (OR = 2.482, $p < .01$). Similarly, tenure track faculty are more likely to teach online (OR = 2.572, $p < .01$) and faculty in Education are more likely to teach online (OR = 3.884, $p < .05$) (see Table 9).

Table 9: Logistic Regression – Faculty Characteristics Associated with Teaching Online

Variables:	Odds	Ratio	SE	p-value	(95% Conf. Interval)
Taken Online	2.482	0.866	0.009	1.252	4.918
Tenure Track	2.572	0.875	0.005	1.320	5.011
College Type Ref=Business					
Education	3.884	2.447	0.031	1.129	13.355
Humanities	2.576	1.592	0.126	0.767	8.649
Sciences/Math/Other	0.995	0.650	0.993	0.276	3.578
Constant	0.181	0.116	0.008	0.051	0.637

Log Likelihood = -117.6; N = 192; $p = 0.000$

Logistic regression of motivating and inhibiting variables. Table 10 includes all statistically significant motivating and inhibiting factors (at bivariate level) in one multivariate logistic regression model. The results indicate *concerns with negative comments from colleagues* as the most important inhibiting factor (OR = 0.705, $p < .05$)

and *benefits of teaching online outweighs any inhibitors* (OR = 1.262, $p < .05$) as the most important motivating factor to teach online.

Table 10: Logistic Regression – Motivating & Inhibiting Factors Associated with Teaching Online

	Odds	Ratio	SE	p-value	(95% Conf. Interval)
Inhibiting Factors:					
Concern w/ faculty workload	1.054	0.141	0.693	0.811	1.371
Negative Comments from Colleagues	0.705	0.078	0.002	0.567	0.877
Concern w/ quality of course	0.791	0.122	0.128	0.585	1.070
Concern w/ course design	0.922	0.126	0.552	0.705	1.205
Lack of Grants	0.847	0.137	0.304	0.617	1.163
Lack of monetary support	0.840	0.148	0.321	0.595	1.186
Lack of salary incentive	1.112	0.182	0.502	0.810	1.537
Motivating Factors:					
Benefits outweigh any concerns	1.262	0.140	0.035	1.016	1.568
Maintain relevant skills set	1.008	0.112	0.943	0.811	1.252
Constant	11.172	11.150	0.016	1.580	79.011

Log Likelihood = -104.1; N = 175; $p = 0.000$

Qualitative Findings

Qualitative Data Analysis from Online Survey Comments

One hundred ninety-three survey participants started the online survey and 181 faculty reached the end of the quantitative survey. In addition to quantitative data collected from survey data of the 55 variables, faculty participants had an opportunity to respond to three open-ended prompts for additional commentary to reflect on their

perceptions of online teaching. Of the completers, the majority of the faculty elected to respond to the open-ended prompts, with a total of 355 responses and each of the three inquiries receiving a minimum of 100 comments. The crosswalk table illustrates the alignment of the online survey prompts and the related research sub-questions (see Table 11).

Table 11: Online Survey Comments: Crosswalk of Prompts and Research Sub-Questions

Survey Open-ended Comments	Research Sub-Questions (SQ)				
	SQ1	SQ2	SQ3	SQ4	SQ5
A) Are there any other factors that would encourage or discourage you from teaching in an online format?		X	X		
B) What are the primary development needs for faculty to successfully transition to online teaching?	X			X	
C) Please share any other comments regarding your perception of online teaching.	X	X	X	X	X

N = 193 Research Sub-Questions: SQ1-Differences, SQ2-Influences, SQ3-Inhibits, SQ4-Support, SQ5-Innovation

Table 12 provides a summary of the participation levels collected from the three questions in the online survey. The volume of participants providing open-ended responses to the prompts generated a rich dataset that added value to the qualitative findings. The information provided all online survey participants an opportunity to elaborate on their perceptions of various aspects of online teaching.

Table 12: Online Survey Comments: Summary of Participant Response Rates to Prompts

Summary of responses to Question/Prompts from Online Survey	Count	% of respondents
A. Are there any other factors that would encourage or discourage you from teaching in an online format?	119	61.98%
B. What are the primary development needs for faculty to successfully transition to online teaching?	128	66.67%
C. Please share any other comments regarding your perception of online teaching.	108	56.25%
	355	

N = 193

Online Survey Comments: Data Analysis

To analyze the data collected from the online survey prompts, all personal comments were read and reviewed a minimum of three times. The first step was a general overview of the responses to each of the online interview questions. The second reading and review of the data was completed to codify the comments by hand and collapse sub-themes into major themes and align them with the five sub-questions in the research. The third review identified important quotes or excerpts from the comments expressed by the faculty members and associated with each major theme and sub-theme. The most important excerpts associated with the research question and five sub-questions are included in the data presentation. Finally, the identified themes were reviewed to compare and pinpoint similar patterns among each of the three open-ended questions.

Factors that would encourage or discourage teaching online. The first open-ended question presented to participants was “are there any other factors that would encourage or discourage you from teaching in an online format?” which received responses from 119 faculty members. Table 13 presents the emerging themes and sub-themes and the related research sub-question from the online survey. These responses

were very divergent as the participants were equally divided between those with and those without online teaching experience.

Table 13: Online Survey Comments: Themes Related to Question A

A: Are there any other factors that would encourage or discourage you from teaching in an online format?

Themes	Sub-Themes	Research Sub-Question
Intrinsic Benefits	Personalized learner-centered	<i>SQ1, SQ2, SQ4, SQ5</i>
	Innovative strategies	
	Engagement/Communication	
Extrinsic Benefits	Compensation	<i>SQ, SQ2, SQ4</i>
	Professional Growth	
	Flexible Scheduling	
	Access/Options for Students	
	Extra Professional Development	
Disincentives	Time Consuming Format	<i>SQ1, SQ3, SQ4</i>
	Relationship and Role Changes	
	Course Development Process	
	Inadequate Compensation	
	Workload Concerns	
	Underprepared students	
Institutional Support	Limited Resources	<i>SQ1, SQ3, SQ4</i>
	Lack of Technology	
	Inadequate Financial Rewards	
	Faculty Choice	
	Quality/Outcomes	

N = 193 Research Sub-Questions: SQ1-Differs, SQ2-Influences, SQ3-Inhibits, SQ4-Support, SQ5-Innovation

One faculty member expressed the importance of “encouraging a better understanding of how this learning environment is different for learning, but not necessarily less than if done well.” Numerous comments were made reflecting the motivation or readiness of students. One professor that had extensive online teaching

experience expressed his discouragement with faculty who had never engaged in online teaching:

What I end up telling people is that you can be a spectacular failure in front of the classroom or a spectacular failure online, but this has more to do with the creation of the course than the modality that you choose to teach it in.

Another faculty expressed concerns about the hype with online education:

Not all students do well in online environment. Not all content is well suited to online delivery. Not all faculty have the skill set to do it well. This modality should remain an option among many, not touted as some kind of self-evident good.

Most of the comments contained no uniformity other than related to the need for faculty support, professional development, labor intensiveness, time commitment, student readiness, and addressing areas of recognition and workload.

Development needs for faculty teaching online. The second open-ended question posed was “what are the primary development needs for faculty to successfully transition to online teaching?” which captured comments from 128 faculty. The emerging themes and sub-themes aligned with the related research sub-question from the online survey (see Table 14). The data collected resulted in 26 sub-themes that were categorized into five primary themes of pedagogy, technology, resources, quality, and institutional support.

Table 14: Online Survey Comments: Themes Related to Question B

B: What are the primary development needs for faculty to successfully transition to online teaching?

Themes	Sub-Themes	Research Sub-Question
Pedagogy	Effective Delivery Strategies	<i>SQ1, SQ2, SQ3, SQ4, SQ5</i>
	Best Practices/Competencies	
	Role Clarification	
	Engagement/Connection	
	Learner-centered approaches	
	Assessment/Outcomes	
	Time Management	
	Adapting Curriculum	
Technology	Quality LMS platform	<i>SQ1, SQ2, SQ3, SQ4, SQ5</i>
	Course design/development	
	Adopting new tools	
	24/7 Help Desk	
	Provision of Equipment	
Resources	Professional Development	<i>SQ1, SQ2, SQ3, SQ4, SQ5</i>
	Standardized Training - QOLT	
	Release Time	
	Faculty mentors	
	Support from Deans/Chairs	
	Role of teaching assistants	
Quality	Rigor	<i>SQ1, SQ2, SQ3, SQ4</i>
	Student Readiness	
	Class Size Limits	
	Course fit for Online Format	
Institutional Support	Incentives/Compensation	<i>SQ1, SQ2, SQ3, SQ4, SQ5</i>
	Innovation Plan for Online	
	Recognition/Tenure	
	Reduced workload/Time	
	Optional choice for faculty	

N = 193 Research Sub-Questions: SQ1-Differs, SQ2-Influences, SQ3-Inhibits, SQ4-Support, SQ5-Innovation

Participants offered positive comments about the Quality Online Learning Training (QOLT) program as well as of the need for “ongoing support of technology staff to consult with on new tools has been valuable.” Numerous comments were made regarding the need for ongoing faculty mentoring and a seasoned online faculty member mentioned, “a few of us are very adept in the online environment – tap into our expertise.” One faculty expressed the need for “assurance of meaningful and pedagogical effective student intellectual engagement.” Faculty shared, “changing cultures about how teaching online merits equal respect to teaching in person for tenure and promotion considerations.”

Perceptions of online teaching. The third open-ended question was “please share any other comments regarding your perception of online teaching,” which generated 108 responses from participants. Table 15 presents the emerging themes and sub-themes and the related research sub-question from the online survey.

Table 15: Online Survey Comments: Themes Related to Question C

<i>C: Please share any other comments regarding your perception of online teaching.</i>		
Themes	Sub-Themes	Research Sub-Question
Pedagogy	Role Differences	<i>SQ1,SQ2,SQ3,SQ4</i>
	Active Learning	
	Student Engagement	
	Connectivity/relationships	
	Teacher v Learner centered	
	Assessment	
Time Commitment	Initial Prep Time	<i>SQ1,SQ2,SQ3,SQ4</i>
	Workload	
	Managing Student Expectations	
	Workload	
	Student feedback	

Table 15 (continued)

Themes	Sub-Themes	Research Sub-Question
Student Profiles	Broaden Access	<i>SQ1, SQ2, SQ3, SQ5</i>
	Academic Readiness	
	Learning Styles	
	Orientation critical	
	Equity Concerns	
Benefits	Workload Concerns	<i>SQ1, SQ2, SQ3, SQ4</i>
	Recognition	
	Compensation/Release Time	
Course Design	Navigation	<i>SQ1, SQ2, SQ3, SQ5</i>
	Synchronous/Asynchronous	
	Course type/modality fit	
	Canned instruction	
Technology	Quality LMS	<i>SQ1, SQ2, SQ3, SQ5</i>
	Integrated Approach	
	Sufficient Tools	
	Technology support	
Institutional Support	Professional Development	<i>SQ1, SQ2, SQ3, SQ4</i>
	Recognition	
	Academic Freedom	
	Preserving choice to opt-in	
	Intellectual Property	
Stigma	Mixed Perceptions of Online	<i>SQ1, SQ2, SQ3, SQ4, SQ5</i>
	Institutional Fit	
	Learning Outcomes	
	Prestige	
	Academic Dishonesty	

N = 193 Research Sub-Questions: SQ1-Differs, SQ2-Influences, SQ3-Inhibits, SQ4-Support, SQ5-Innovation

The researcher identified 29 sub-themes that collapsed into eight primary themes from the specific comments. One participant's statement reflects on the premise of differences in teaching modalities:

It serves a valuable purpose and should be part of the education experience. It is different than face-to-face and has both benefits and drawbacks. Each type of teaching has value and should not be placed in a false dichotomy.

Another faculty commented that the format “helps students to successfully communicate and consume knowledge online” and observed, “we are moving towards a text-based society.” An experienced online teacher remarked, “online teaching can democratize the participation in the classroom.” The greatest number of comments from experienced online teachers as well as those without experience were related to the idea that instructing online is perceived as more labor intensive, needing “more time to prep, respond to students, and develop relationships.” Another high frequency response was related to student engagement and the “intangible moments in the classroom,” the “spontaneity” and the challenge of emulating that same experience due to a “lack of spontaneity” in an online environment. This question reflected on the primary research question and touched on all five sub-questions.

Synthesis of themes from online survey comments. The final step in this phase of analysis was to conduct a review of the culminating themes, sub-themes, and associated research sub-questions identified from the data collected from responses to the three open-ended prompts following the online survey. The 355 responses were coded and sub-themes and emergent themes were identified. Table 16 summarizes the nine synthesized themes of primary role changes, curriculum adaptations, perceived benefits of teaching online, expectations, expressed deterrents, technology, professional development needs, quality matters, and institutional commitment.

Table 16: Online Survey Comments: Emerging Themes from Combined Responses

Emerging Themes	Sub-Themes	SQ1	SQ2	SQ3	SQ4	SQ5
Role Changes	Pedagogy, Engagement, Teacher to learner centered	X				
Curriculum Adaptations	Course design, class size, subject matter fit, tools	X	X	X	X	
Benefits	Innovation, personal rewards, flexibility, personalized learner focused	X	X			
Expectations	Compensation, time investment, recognition, support		X	X		X
Deterrents	Time commitment, balancing workload, limited resources	X		X	X	
Technology	LMS, Innovative approaches, sufficient tools			X	X	X
Professional Development	Training, mentoring, curriculum support, technical integration	X	X	X	X	
Quality	Stigma, Student Readiness, Outcomes, academic integrity	X		X	X	
Institutional Commitment	Sufficient resources, recognition, workload, mission	X	X	X	X	X

N = 193 Research Sub-Questions: SQ1-Differs, SQ2-Influences, SQ3-Inhibits, SQ4-Support, SQ5-Innovation

Qualitative Analysis: Interview Data

Phase two of this study involved the application of a qualitative case study approach, conducted with a subset of nine faculty participants who were specifically adept with online teaching as well as with face-to-face instruction. The online teaching experience of the participants varied, with newcomers having taught one to three courses, intermediate-level teachers having taught four to six courses, and seasoned online faculty having taught a minimum of 10 courses. Faculty participants completed an open-ended

questionnaire related to their experience and perceptions of online teaching as aligned with the overarching research question as well as the five sub-questions.

A three-step process was applied to analyze the data. The first review was a general overview of the responses to each of the questions, including a separate assessment of each dataset collected from all the responses aligned with each of the unique questions on the instrument. A second step in the analysis identified participant responses as related to the overarching research question and some of the five sub-questions. The next step was the codification of the data collected from the open-ended questionnaire and the identification of emergent sub-themes. The sub-themes were then categorized into central or major themes. The final review mined the data for key excerpts from the reflections of the faculty with experience in the art of online teaching.

The questions comprising the Online Interview Questionnaire (OIQ) are aligned with the five research sub-questions (SQ). Table 17 provides a crosswalk between the 11 interview questions and the research sub-questions. The combined participant responses provided data closely related to the overarching research question.

Table 17: Online Interviews: Crosswalk of Interview Questions and Research Sub-Questions

Online Interview Questions (OIQ)	Research Sub-Questions (RSQ)				
	SQ1	SQ2	SQ3	SQ4	SQ5
1) Please identify/describe how you have experienced a role change in transitioning from face-to-face teaching to online teaching?	X				
2) How do you develop an online persona teaching online?	X				
3) Studies have defined online instruction with the following functions: professional, pedagogical, social, evaluator, administrator, technologist, advisor/counselor, and researcher. How do you see those roles in in online teaching setting?	X				
4) In what ways have you experienced any challenges or barriers as an instructor teaching online?			X		
5) Describe the most rewarding or satisfying attributes you have experienced in teaching online.		X			
6) What techniques have you employed to enhance the online teaching and learning environment?	X			X	
7) How would you describe the types of additional support required for teaching in this environment?				X	
8) What types of professional development opportunities have contributed to your success in making this transition? What else would be helpful?				X	
9) Please describe how you see yourself on this continuum in adopting innovation at your institution in your role in the field of online education. Rogers describes the adoption of innovation as five stages: a) innovators (b) early adopters (c) early majority (d) late majority and (e) laggards (Rogers, 2003).					X
10) Clayton Christiansen, describes the changes in the higher education landscape as being a disruptive innovation. How would you view online education as being a disruptive innovation?					X
11) Please feel free to share any other thoughts you may have regarding your experience in online teaching.	X	X	X	X	X

N = 193 Research Sub-Questions: SQ1-Differs, SQ2-Influences, SQ3-Inhibits, SQ4-Support, SQ5-Innovation

Qualitative Findings from Online Interview Questionnaires

The data generated from the online interview questionnaire of the case study of the nine faculty who had taught online were analyzed by question.

Migrating to online teaching. The participant group shared their experiences of how they navigated the role change during the transition from face-to-face to an online teaching environment. Participant D acknowledged having early skepticism and bias towards online teaching. This was also echoed by Participant B who described, “transitioning to teaching online was very challenging for me because of the number of years I have taught face to face.” The respondent elaborated, explaining that “learning the pedagogy and the educational technology at the same time made it difficult.” Conversely, Participant J did not see much of a role change, stating, “How I teach changes, but not so much my role. I am still a guide, facilitator, teacher, discussion leader, etc.” Professor H viewed her role as an online instructor as “more of a facilitator; guiding students to where to find information and how to use it.”

Faculty widely agreed on the differences in establishing relationships with students and levels of engagement between face-to-face and online learning. Several faculty mentioned the need to cultivate communication with students in a more proactive manner including, as described by Participant C, the “need for more hand holding and the need to be more attentive.”

Participant F suggested, “my contact with students is ‘disconnected’ from a particular class time. I don't develop a rapport with as many students online as I do face-to-face.” Participant D appreciated the internal training and shared that it provided an “introduction to myriad of novel and interesting methods of student engagement” leading

to her love for teaching online. Faculty E expressed the need to establish better boundaries with students. Teaching online requires more “troubleshooting for students,” according to Participant F. Participant G acknowledged that online instruction involved “less teaching and reduced grading.”

Online persona. Participant responses about developing an online persona were mixed, with some faculty describing their guise as being somewhat different as an online teacher, while others did not recognize a significant shift of their role. Participant A confirmed, “do I become someone different than who I am in front of my face-to-face student? I'd say yes.” One faculty revealed that they strive to develop an online persona by sending “timely notes and video messages” to students that “demonstrate [they are] specifically to them and not just a general note.” This notion was expanded on by Participant B as the shift from being “more connected like a supportive coach to face-to-face students,” which contrasts to online teaching where they described assuming a role of being “somewhere between a nagging mother and drill sergeant to online students.” Participant H described his role as a “guide and problem solver online.”

Functions in online teaching. Faculty participants perceived teaching online as aligning to various functions defined in the literature, including: professional, pedagogical, social, evaluator, administrator, technologist, advisor/counselor, and researcher. Participant F shared, “many of the functions remain the same whether I teach online or in the classroom,” identifying those like areas as professional, pedagogical, evaluator, adviser, and researcher and noting a “change in my role as an evaluator, wherein I feel like they students don't ask questions about their assignments beforehand.” Participant E noted the function as “social,” while Participant G simply identified it as

“professional.” Professor H shared online teaching insights regarding functions from his viewpoint:

Definitely need to remain professional, yet congenial and flexible. Always trying new pedagogical techniques to better engage students, aid in their learning and processing of the information. Socially, I get students to know and interact with each other through “getting to know you” exercises in module 0. I have more technology-based questions from students in the online class vs face to face.

The functions of online teaching were commonly characterized by respondents as “complex as it is a challenge to remain engaged and available. It is often difficult to know what is working and what is not in a timely fashion” (Participant D). The functional similarities between online and face-to-face were also noted by Participant J, “I don't really see each of the roles changing in an online environment. Our methods may change, but not our roles,” also suggesting that “students’ needs will still need to be met, even though the class is online.”

Barriers and challenges teaching online. Faculty discussed many challenges and barriers they encountered in instructing online, with some of the noted key areas being time commitments, engaging students, frustrations with technology, facilitating collaboration between students, grading issues, and managing class size. Online teaching takes four times more preparation and attention to detail (Participant A), which was echoed by many faculty participating in this study regarding the fact that the time commitment in online teaching exceeds that of face-to-face instruction. Several faculty focused on the technology challenges, including learning to use the available tools effectively, reliability of technology, integration of video or live chats to improve engagement, or simply maximizing the functionality of the learning management system.

Faculty also noted the perception of student participation complacency in “just getting students to read course work and instructions for assignments” (Participant B), citing a “lack of student feedback on course content” (Participant G), and just getting students “talking as online students can appear more distant or disengaged” is challenging (Participant J). Communication barriers were summed up by Participant J:

At least in a classroom, the students are there, and they must participate in the activities (or they can simply leave the room). But in an online environment, it seems students have more freedom to not connect as deeply as they could in class. I'm not sure about this one though.

This notion was highlighted by Participant A in relation to the “art of constructing a good discussion board” that assists students in meeting the course objectives. Since it is challenging to “easily translate what you did face-to-face into the online environment,” the discussion boards become paramount to encouraging ongoing student interactions or participation.

Rewarding attributes of online teaching. Faculty remained consistent in many of their comments regarding the most rewarding or satisfying qualities they had experienced in teaching online courses, which focused on student interaction, quality feedback, evidence of learning, hassle-free technology, and witnessing the connection with course content and delivery. Faculty found it rewarding to receiving ongoing feedback from students including respectful discussions (Participant E), personal connections (Participant B), and seeing student posts and great discussions (Participants A, B, and D). One faculty expressed, “I greatly enjoy positive feedback from students.” Participant H shared that it was rewarding to be able to “give non-traditional students a chance of fulfilling their educational/professional goals,” referencing expanded

accessibility through online coursework for students “who could never take on campus because of work schedules and family” and other obligations. Participant F noted, “students want the convenience of an online course, but they also want a quality course that has all the interesting and challenging elements of a face-to-face course.” The faculty shared the importance of establishing connectivity with students while teaching online as being an essential positive attribute of online teaching.

Techniques to enhance teaching and learning. Faculty mentioned the various techniques they had applied to enrich the online teaching and learning environment. Most faculty integrated enhancements by implementing more interactive tools, increased communication channels, pedagogical approaches, and timely responsiveness to students. To enhance course delivery, eight of the nine faculty indicated they added more engaging features and visual elements such as video, recording lectures, film clips, animation, and other short digital assets to create a more engaging and innovative online classroom experience for students. Faculty Participant J considered these important to providing “various layers for students to learn about the materials.” Several faculty mentioned they expanded communication tools from group projects and activities to weekly chats, discussion groups, reflective journals, peer review, and personal testimony papers. Participant C identified the “meaningful techniques learned from QOLT including building communities and introductions” to enhance learning in an online environment. Cultivating teacher-student interaction through the need to be “diligent at giving feedback to students” (Participant A) was emphasized, while some suggested providing office hours, ongoing dialogue, and timely responses to students.

Support required for online teaching. The faculty also described the types of additional support that would be helpful for teaching in an online environment. The common themes that emerged included pedagogical tools, technology training to use course tools, innovative strategies, time allotment, and an accessible help desk. Participant H indicated, “instructors need time and training to transition from face-to-face to the online environment.” Faculty were confident serving as content experts, but simultaneously expressed they lacked the technical skills needed to learn new systems and needed online specialists who could assist with “the bells and whistles of what makes a good online course” (Participant G). The faculty generally expressed strong support for the internal support team. Online teachers verbalized interest in training that provides pedagogical strategies as key to balance course content modality through innovative teaching strategies and creative communication techniques. Several faculty mentioned the need for 24/7 help desks to not only assist faculty but also students in different time zones.

Professional development opportunities. Faculty identified the need for technical training and workshops as well as one-on-one mentoring with more individualized assistance. Faculty acknowledged the helpfulness of the QOLT seminars, as well as an institutional resource for faculty entitled technology use in learning and instructional programs (TULIP). One faculty (Participant D) mentioned the desire to have “access to novel strategies from other campuses for student engagement.” Faculty expressed desire to keep up with trends, access emerging technologies, gain assistance in identifying technology shortcuts, and maintaining a resource lists of new technologies available to online instructors. Faculty Participant J emphasized that seminars and

training “are continually needed to keep up with the trends.” The online faculty respondents appeared to have participated in the internal training opportunities that were made available.

Self-reflection of adopting innovation. Faculty were probed to assess how they saw themselves on a continuum of adopting innovation at their institution in the area of online education. The majority of the faculty expressed their passion for being innovative and a willingness to be on the vanguard at their institution. Participant F emphasized, “as an educator, I think it’s my responsibility to continually learn about my substantive area, as well as about new pedagogy so that I can more effectively teach about my discipline.” Participant D shared similar sentiments, asserting, “I am a huge proponent of online education. First and foremost it is effective and alleviates bottlenecks for departments that have limited infrastructure resources.” One faculty (Participant J) enthusiastically shared:

I want to be on the forefront. I think online education is really the way of the future; more and more classes will be taught online. I want to be a part of the shift, but I also want to develop the skills to teach effectively online.

Faculty widely recognized the momentum at their institution, but also expressed inconsistent opportunities for faculty to participate in online instruction.

Rogers’s adoption of innovation theory. The experienced online faculty were asked to identify how they placed themselves regarding adopting innovation on Roger’s Adoption Curve as (a) innovators, (b) early adopters, (c) early majority, (d) late majority, or (e) laggards (Rogers, 2003). Three faculty identified as innovators, two straddled between innovator and early adopter, one identified as early adopter, one identified between early adopter and early majority, and one participant extolled that at one time

they were an early adopter but considered themselves to be a late majority or laggard. One participant did not place themselves but shared interest in creating online courses that students enjoy. In this study, less than 25% of the faculty at the institution are teaching courses in an online environment.

Online education as being a disruptive innovation. Faculty also reflected on whether they viewed online learning as being a disruptive innovation referring to Clayton Christiansen's views that the changes in the higher education landscape are a disruptive education. Online education is at times considered one of the changes that could be viewed as contributing to levels of disruption in the field of education. The faculty participants had divergent views in this area, with a majority indicating they did not view online education as being a disruptive education. Participant F expressed:

with innovation naturally comes change . . . online education has been a subtle shift for those of us who have embraced it for its potential benefits, and it's disruptive for those who reject it for its potential negative aspects.

Participant A expressed:

I don't think online education is disruptive unless you are talking about disruptive to those who are willing to keep with the status quo. Online education is forcing many educators to change, to explore new strategies and to keep up to date. Not everyone is willing to change.

Participant D weighed in by stating, "in many ways it goes against the pedagogical paradigm but it is necessary and changing." The overall sentiment was that the shift is inevitable, and Participant B observed, "today's students were born into the digital era and I am a digital immigrant sharing the fast moving technology is hard to keep up with and quickly becomes outdated." Participant G questioned the use of the word "disruptive," suggesting, "isn't every innovation disruptive?" Faculty participants

recognized the momentum of change associated with online learning but did not categorize it as being disruptive.

Online faculty shared experiences. The faculty shared their final thoughts on the online learning experience. One faculty expressed, “lik[ing] teaching face-to-face better because of more personalized interaction with students, but I feel good that I am providing opportunities for students that would otherwise fall by the ways-side” (Participant H). Another faculty shared the importance of addressing the quality of online education noting, “how do instructors, department chairs, and accreditation officials ensure quality” (Participant G)? Participant F shared:

Not every class lends itself to online teaching, just as not every pedagogical tool is appropriate for every class. It is the responsibility of the educator to determine what tools are best to offer an effective learning experience for students.

Other notable comments from faculty referenced institutional support, student readiness, time constraints, and user-friendly technology.

Synthesis of Qualitative Online Interview Findings

The data in this section are presented to illustrate the overlapping themes and subthemes that emerged from the findings from both datasets. The synthesized themes included the findings pertaining to the sub-questions on the perceived differences between online and face-to-face instruction. Faculty elaborated on the pedagogical and functional shifts in teaching as well as the key aspects that potentially influence or discourage faculty from teaching in an online environment. The combined themes from the data converged into eight primary areas, including defining and acclimating to the role changes, navigating curriculum adaptations, identifying benefits of teaching online,

expressing deterrents, defining technology expectations, professional development support, quality matters, institutional commitment, and innovative strategies. The synergies between the themes from the two qualitative datasets are presented in Table 18.

Table 18: Online Interview Questions: Synthesis of Qualitative Findings

Parallel Themes	Sub-themes	Survey Comments	Interviews
Role Changes	Migration, pedagogical shifts, evolving functional roles, competencies, engagement, teacher-to-learner centered, online persona, teaching strategies	X	X
Curriculum Adaptations	Course design, preparation, class size, discipline compatibility, LMS, interactive tools	X	X
Benefits	Intrinsic rewards, flexibility, personalized learner focused approach, extrinsic rewards – incentives, compensation, time investment, recognition, student access	X	X
Deterrents	Commitment, barriers, time intensity, workload, assessment, limited resources, assessment, feedback	X	X
Technology	Reliability, integration of tools, LMS limitations, innovative, sufficient tools, expanded repertoire of skillsets	X	X
Professional Development	Training, curriculum development support, technical integration, faculty mentoring, QOLT, expanded levels	X	X
Quality Indicators	Equitable outcomes, stigma, student readiness, learning outcomes, academic integrity, sustainability	X	X
Institutional Commitment	Departmental support, sufficient resources, recognition, workload, mission alignment	X	X
Innovation	Adoption of innovation, perceptions of disruption, emerging technologies, student expectations		X

Conclusion of Findings

This chapter presented the culmination of data gathered from three primary sources in a two-phased collection process. The quantitative data analysis provided a summary of the univariate, bivariate, and multivariate analyses of responses from over

190 faculty. The participants completed an online survey instrument with 55 variables referencing motivators and inhibitors to teaching online. The survey instrument also provided faculty with an opportunity to respond to three open-ended prompts, which generated over 350 comments. Each of the three datasets were coded, patterns were identified, and sub-themes emerged resulting in the development of nine overriding themes. The second phase of the research was a qualitative online interview questionnaire gathered from nine faculty members with online teaching experience. The data collected from the responses to the 11 interview questions were collapsed and aligned with the five research sub-questions providing primary themes that emerged from each area of interest. The qualitative findings were overlaid with the quantitative analysis to provide triangulation of the datasets and identify similar outcomes from the two participant groups.

The overarching research question for this research was: What can be learned from faculty who have taught in both traditional classroom and online settings and how they navigate these diverse teaching environments? The research generated extensive data from both experienced online instructors and those who had never taught in an online setting. The data collection from the mixed methods approach provided quantitative and qualitative data that correlated with the research sub-questions.

The combined findings shed light on faculty perceptions pertaining to each of the sub-questions. The first research sub-question explored, “How do faculty differentiate the unique aspects of the teaching role in an online and face to face setting?” The second research question asked, “What influences do faculty consider teaching in an online environment?” The third research question probed to discover “What factors inhibit

faculty transitioning from a traditional brick-and-mortar to a virtual (online teaching) context?” The fourth question focused on identifying “What factors support faculty to transition to online teaching?” The final and fifth question sought to ascertain the role of innovation and online education prompted by, “How do faculty teaching online see themselves as being innovators?”

This study adopted a convergent parallel mixed methods design to cultivate a broader perspective than could be obtained from using only one predominant data collection method. The data from the quantitative (closed-ended) and qualitative (open-ended) data were analyzed separately. The final analysis involves conducting a comparison of the more in-depth qualitative data as they relate to the quantitative findings to compare the different perspectives from each methodology and mining the combined datasets as they relate to develop a stronger understanding of the overarching research question. The convergence of the findings is analyzed in Chapter 5, according to each of the five sub-questions.

CHAPTER 5: DISCUSSION AND CONCLUSION

This chapter discusses the research questions based on the analysis of the mixed methods research data. The quantitative and qualitative datasets were compared side by side to determine the existence of convergent or divergent findings. This chapter also provides a discussion of the implications of the study for educational practice and the field of online instruction, limitations of the study, recommendations for future research, and a closing summary.

Summary of Study

This research explored faculty perspectives regarding the unique challenges and role changes they may encounter when transitioning from a traditional face-to-face classroom to an online teaching environment. More specifically, the study identified faculty discernments related to online teaching and their perceptions of differences in the instructional settings, what could motivate them to contemplate teaching online, and those aspects that could dissuade them from considering the instructional modality. The analysis sought to identify the types of tangible and intangible support faculty require in navigating from site-based to online teaching to further inform higher education leaders on how to address the variables associated with the shifting role of teachers to online instructional settings. The research also explored how faculty considered online teaching to be innovative in the field of education.

Themes emerged from the faculty perspectives, leading to findings that provided greater insight. Additionally, the innovation aspect of the study was guided by two theoretical frameworks, which included Rogers's (2003) innovation adoption curve theory and Christiansen's (2016) concept of disruptive innovations. The frameworks

added an additional lens to frame the findings of the research aligned to the core of the study.

This chapter provides a summary and interpretation of the significant findings of this research study. Based on a review of previous research, there is limited knowledge related to online faculty needs and concerns and how these inform future online faculty of strategies to successfully navigate online teaching. While many of the findings are supported by the literature review, there are some noteworthy additions to what is already known in the field of online teaching. First, the factors that motivate faculty to teach online were very similar, regardless of whether faculty were experienced or inexperienced in this instructional environment, and were focused on intrinsic and extrinsic factors. Second, there existed disparity in the perceptions of inhibiting factors related to online teaching between experienced and inexperienced faculty. Third, participants in this study noted a variety of specific support and professional development needs that were critical components contributing to successful teaching in an online environment.

Discussion of Findings

In response to the overarching question of “What can be learned from faculty who have taught in both traditional classroom and online settings and how they navigate these diverse teaching environments?” a series of five research sub-questions were developed to guide this study. A mixed method approach was selected to collect quantitative and qualitative data to strengthen the understanding of the central question. The setting for data collection was a medium-sized public institution of higher learning located in the

southwestern United States. The University is in the outskirts of a densely populated county and serves a very diverse student body.

The quantitative data were generated from a pool of 193 faculty across several academic fields of study. The respondents included faculty without regard to whether they had taught exclusively in site-based classes or had no experience in an online delivery format. Additionally, nine faculty members with requisite experience in online teaching responded to a qualitative open-ended questionnaire to explore their online teaching experiences. The first phase of the research included the collection of quantitative data from an online survey including 55 data points divided between 31 motivators to teaching online and 24 questions regarding inhibitors to online teaching.

Qualitative data were gathered from two sources. The faculty who participated in the online survey provided responses to three prompts focused on online teaching, which generated qualitative data from a wide spectrum of faculty participants. The second phase of the study focused on gathering qualitative data from nine faculty members through the use of an online interview instrument, which included 11 open-ended questions. The nine faculty participants were selected based on their experience in online teaching. The qualitative findings were merged into nine major themes.

The datasets generated from the multi-method research approach were analyzed separately. The quantitative findings were analyzed through univariate, bivariate, and multivariate statistical procedures. The qualitative data sources from the faculty comments and the interview questions were examined and the emerging themes were established to enable the researcher to triangulate the qualitative findings. In this chapter, a discussion of the merged findings is presented under each of the research sub-questions.

The discussion provides a comparison of the quantitative and qualitative findings and ascertains areas of convergence or divergence of the datasets.

Research Question Findings

This mixed method study added to the field by focusing on the following overarching questions to enhance and expand the existing body of research. Through quantitative and qualitative data analysis, coupled with literature in the field, each of the research questions was supported by evidence from the findings of this study. Each of the five research sub-questions is addressed separately with the corresponding discussions and conclusions to assist in validating the findings of this research study. The combined findings, discussions, and conclusions inform the overarching research question: “What can be learned from faculty who have taught in both traditional classroom and online settings and how they navigate these diverse teaching environments?”

Research Sub-Question One

The first sub-question considered how faculty differentiate the unique aspects of the teaching role in an online and face-to-face setting. This research sub-question was answered by some quantitative participant responses as well as by their responses to the qualitative open-ended prompts and the online interview questions.

In the quantitative data collection process, the faculty who had taught online courses were less likely to respond more favorably to several of the inhibitors such as workload, online course quality, support for course design, monetary support, and recognition. Faculty who had enrolled in online classes were much more likely to teach online, as they have experience from a student perspective. Several motivating and

inhibiting variables in the survey related to perceived differences in the classroom and online teaching environment, and there was a strong variance in responses from experienced online faculty. The concept of online learning supports flexibility and access, related to the highest-ranking motivators of working conditions and flexibility in hours and location for faculty ($\bar{x} = 4.1$) as well as ability to reach students who cannot attend on campus ($\bar{x} = 4.1$). Inhibitors in the survey related to this sub-question included concern about the quality of the course ($\bar{x} = 4.0$), role changes and pedagogical transition ($\bar{x} = 3.4$), online teaching requires a different skillset ($\bar{x} = 3.4$), and establishing social presence ($\bar{x} = 3.1$).

There were two sources of qualitative data. The faculty responses from participants in the online survey referenced some of the perceived differences in their open-ended comments. The three primary themes from the comments regarded role changes, curriculum adaptations, and teacher-student engagement. The faculty discussed role shift in transitioning from a teacher-centered to a learner-centered environment requiring a much more individualized approach to teaching. Numerous faculty discussed that not all courses were conducive to an online environment due to the nature of the subject area. The ability to develop a dynamic curriculum on an innovative learning management system was considered an essential element to teaching online. Pedagogical adaptations, learning new teaching strategies, best practices, and shifts in roles were also considered different in a virtual or online setting.

The ability to build relationships with students and emulate the teacher-to-teacher and student-to-student live interaction is different in an online setting. Faculty expressed the value of preserving the communication in a face-to-face format with teachable

moments developed due to the spontaneity of ensuing discussions as a valuable benefit in a live classroom. The notion of the amount of time, effort, and challenges to emulate a similar learning environment was difficult for many of the faculty to grasp. Another prevalent theme related to quality as faculty grappled with whether the learning outcomes from an online course could align with a traditional face-to-face environment. Comments also echoed around classroom management with regard to class size, preserving academic integrity of the learning environment, and emulating a meaningful teaching and learning environment.

The Online Interview Questionnaire completed by nine online faculty produced relevant data for this sub-question in articulating the perceived differences in the teaching role in face-to-face versus an online setting. Questions 1, 2, and 3 generated responses related to the key differences from a faculty perspective. One consistent theme was that an essential ingredient includes an acclimation period to learn the pedagogy as well as educational technology tools. Experienced online faculty concurred that methods of cultivating relationships with students and instilling high levels of engagement to ensure students stay connected differ between face-to-face and online teaching. Faculty acknowledged online instruction involves a change in student expectations and the responsibility to provide timely and responsive feedback yet set reasonable boundaries due to time constraints.

Many faculty did not see the functional areas of their role changing as much as the emphasis on certain aspects of teaching such as more focus as a facilitator or technologist and the teaching methodology. Faculty had mixed perceptions on establishing social presence and an online persona with many investing in creative means

and using technical tools to develop more of an instructor presence for the students. The faculty appeared to be very invested in sharing the techniques they had applied to enriching the online teaching and learning environment to enhance pedagogical approaches and enhance course delivery and optimize levels of student engagement in the course material. They also viewed the time and work commitment to develop and teach online courses is generally heavier in the earlier stages until faculty are fully acclimated. There was a common thread in comments related to overcoming differences to serve students, support faculty, and expand institutional commitment to ensure a quality educational learning experience.

Synthesizing the data from the quantitative and qualitative sources created a multitude of various touch points describing differentiators between face-to-face and online teaching. The two primary themes from all the qualitative research related to this research sub-question were the role changes and curricular adaptations. Additionally, many of the concerns aligned to this sub-question were in areas related to equitable learning outcomes, academic integrity, and stigma associated with online learning.

There is some divergence of the quantitative and qualitative findings due to the disparities in the perceptions between experienced and inexperienced online faculty. Additionally, some faculty have become proponents of online teaching and learning while others continue to weigh future participation and still others are vehemently opposed to the concept and strictly advocate for more traditional teaching approaches. The analysis revealed some divisiveness within the faculty ranks towards online teaching.

Research Sub-Question Two

The second sub-question addressed influences faculty consider when teaching in an online environment. This question was answered by three data sources: the quantitative data from the survey, the qualitative data gathered from the open-ended prompts in the survey instrument, and the qualitative data generated from the Online Interview Questionnaire.

Rich quantitative data were collected from the online survey in that 31 of the factors asked faculty participants to respond to what would motivate them to teach online. The strongest-ranking motivators with the highest means were reaching students who could not attend on campus ($\bar{x} = 4.1$), working conditions and flexibility ($\bar{x} = 4.1$), adopting innovative practices ($\bar{x} = 3.9$), greater course flexibility for students ($\bar{x} = 3.9$), and monetary support ($\bar{x} = 3.8$). The next tier of variables averaging 3.7 are worthy of mentioning, although tied ($\bar{x} = 3.7$), and include online training, opportunity to develop new ideas, stipend to develop courses, technical support, and students attaining the same learning outcomes. The lowest mean score for motivators were professional prestige and status ($\bar{x} = 2.3$) followed by the opportunity to use personal research as a teaching tool ($\bar{x} = 2.9$), opportunity for scholarly pursuit ($\bar{x} = 3.0$), and recognition toward promotion ($\bar{x} = 3.0$).

The bivariate analysis revealed two motivating factors for experienced online faculty that were significant: faculty interest in maintaining relevant skillsets and the benefits outweigh any inhibitors to teaching online. The findings from the multivariate logistic regression analysis examining the faculty characteristics associated with online teaching and the results indicate faculty who have taken online courses, tenure track

faculty, and faculty in Education are all more likely to teach online. The analysis eliminated any characteristics related to ethnicity, gender, or generational groupings with Baby Boomers versus other groups.

Qualitative data were collected from two areas for this sub-question intended to better understand what influencers are important for faculty to consider teaching in an online environment. All faculty participating in the online quantitative survey were asked to comment on what would encourage or discourage them to participate in teaching in online format, which generated over 100 comments from participants. The reflections from the faculty centered on intrinsic as well as extrinsic benefits. The encouraging elements of online teaching were the personalization of instruction in a learner-centered focus, the creativity and innovative strategies employed, and opportunities to engage with students through new mediums. Faculty also acknowledged the extension of educational access to create options for more students. The other, more extrinsic expectations included compensation, workload considerations due to the perceived increases in time commitment, recognition for tenure, and the access to professional development. There was also an assumption of sufficient technological resources and institutional support for faculty engaged in online learning.

Another primary resource for qualitative data collection was the interview questions asking nine online faculty to share their personal experiences and to specifically describe the most rewarding or satisfying aspects, Interview Question 4. A primary theme that emerged was how rewarding it was to establish connectivity with students on academic and personal levels. Faculty found it rewarding to observe students' connection with the course content and delivery, demonstrated evidence of

learning, engaging interaction, and quality feedback loops within the course. Several faculty recognized the importance of expanding accessibility through online teaching and that it is inclusive of more diverse student groups. At the core of the discussion remains the expectation for reliable technology so course delivery is not interrupted by technical glitches. The culminating theme related to this research sub-question was the perceived benefits of teaching online, which had sub-themes of intrinsic as well as extrinsic benefits.

The comparison of the findings from the quantitative and qualitative analyses demonstrate some convergence of data. There were parallel data surrounding student-centered comments and serving students, and increasing accessibility and flexibility was acknowledged by all faculty whether they were experienced in online teaching or not. The comments recognized that providing the option for students is inevitable and the right decision yet throughout the data there was ongoing concern expressed for student readiness and comparable quality. Faculty also placed value on professional development to assist faculty in developing strong online pedagogy and exploring innovative teaching methods. The other influencers that received more positive responses and were supported by qualitative data include the expectations of faculty rewards in compensation and recognition, institutional support for adequate resources, robust technology platforms, and assurance that students are prepared to learn in an online environment.

Research Sub-Question Three

The third sub-question investigated what factors inhibit faculty from transitioning from a traditional brick-and-mortar to a virtual (online teaching) context. Extensive data

were collected for this question in both phases of the research including the quantitative and qualitative sources. The quantitative data were collected from the responses to the online survey instrument, which included 24 questions regarding inhibitors of teaching online. Additionally, qualitative data were collected from the open-ended prompts following the survey instrument and from more extensive online interviews conducted with experienced online instructors.

The quantitative findings from the online survey distributed to 193 faculty generated extensive data directly related to this sub-question, identifying some of the key deterrents that would potentially cause faculty to hesitate teaching online. The highest means on the ordinal scale for inhibitors include concern about quality of the course ($\bar{x} = 4.0$), class size ($\bar{x} = 3.9$), inadequate support for the class ($\bar{x} = 3.7$), time commitment ($\bar{x} = 3.6$), lack of monetary support ($\bar{x} = 3.6$), and concern about the quality of the students ($\bar{x} = 3.6$). The lowest mean scores were lack of professional prestige ($\bar{x} = 2.8$), followed by lack of technical background ($\bar{x} = 2.9$) and negative comments about online teaching experiences ($\bar{x} = 3.0$). The two variables that skew positively or to the left of the mode are technical background (*.001*) and prestige (*.188*).

A closer review of the bivariate findings indicate seven inhibiting factors were significantly associated with faculty engaged in online teaching. The faculty who teach online courses are less likely to agree when compared to faculty who do not teach online in the areas of workload, negative comments made by colleagues, online course quality, inadequate support for course design, lack of grants for development, lack of monetary support, and lack of increase or merit. The data sources related to this sub-question revealed that both experienced online faculty and faculty who have never taught online

share concerns that there is a set of perceived barriers when transitioning to online teaching. The impact of these barriers can be mitigated by change of policies, infusing additional resources, addressing concerns of quality, and addressing many of the key concerns.

Several patterns emerged while synthesizing the data from the qualitative sources. Over 100 faculty respondents elected to respond to the prompt regarding perceptions of challenges and barriers to online teaching. There were several emerging themes regarding disincentives to teach online including the time-consuming format, workload concerns, compensation, and the transition to the role change. Concerns were expressed in the areas of institutional support regarding limited resources, highly functioning technology, concern of quality, and ensuring teaching online remains a choice. There were concerns regarding student levels of engagement, underprepared students, academic dishonesty, achieving learning outcomes, and quality of delivery.

A primary source of data for answers to this sub-question was the nine faculty with online teaching experience who participated in the online interview questionnaire in which they responded to a question pertaining to challenges and barriers they had encountered teaching online. The key areas of concerns were related to the time commitment of online teaching, communication channels, student engagement and participation, technology, intensive nature of online teaching, and class size. Relevant data were also collected in other questions as faculty addressed overcoming hurdles related to pedagogical shifts, sufficiency of resources, technology obstacles, and institutional support.

The qualitative data converged with the quantitative data, providing more specific elaborations on the perceptions of faculty that would inhibit participating in online teaching. The areas of convergence regard the perception of insufficient resources, limitations of professional development, adequate technology, time commitment, workload, and limited institutional support. The one area of divergence would be the lack of qualitative descriptors that emerged pertaining to quantitative findings regarding the professional prestige of teaching online and negative comments from other faculty.

Research Sub-Question Four

The fourth sub-question inquired about what factors support faculty in transitioning to online teaching. The data for this question evolved from two qualitative sources including extensive faculty comments generated from an open-ended prompt following the online survey augmented by several of the questions included in the online interview questionnaire with experienced online faculty. The quantitative variables on the survey referencing support included several areas. The motivating variables pertaining to support include monetary support ($\bar{x} = 3.8$), technical support ($\bar{x} = 3.7$), online training ($\bar{x} = 3.4$), support and encouragement from the Dean and Chair ($\bar{x} = 3.4$), and support and encouragement from colleagues ($\bar{x} = 3.4$).

In the qualitative data collected from faculty responses to the three prompts following the online survey, over 350 responses shed light on the expectations for support as it relates to several categories, such as institutional and departmental support including recognition, technology resources, professional development, financial incentives, support from Deans, and release time. The online interview questionnaire also addressed areas of support in Questions 8 and 9. The common themes referenced pedagogical tools,

technology, innovative teaching strategies, allocation of time, and a help desk. Professional development opportunities were considered critical and highly valued to maintain currency with technical tools, navigate the learning management system, improve student engagement strategies, and provide one-on-one mentoring support. A direct comparison of the qualitative data from both sources ties two primary themes related to adequate technology and the importance of faculty development through extensive trainings.

In overlaying the analysis of the quantitative survey data and the emerging themes from the qualitative data, there was a convergence of several of the findings. The areas that warrant attention in the quantitative analysis related to support and encouragement from deans and support colleagues received limited commentary in the qualitative findings. The overriding theme from the findings is the critical role of institutional support for faculty teaching in this environment, as it is expected in allocation of resources and recognition.

Research Sub-Question Five

The fifth sub-question explored how faculty teaching online see themselves as being innovators. The primary data were gathered through qualitative sources including the open-ended prompts included as part of the online survey as well as online interview questions pertaining to innovation. One specific variable related to innovation in the online quantitative survey. According to the survey participants ($n = 193$), the ability to adopt innovative practices had the third highest mean \bar{x} of the motivators averaging 3.92 with over 80% of the respondents indicating that they either agreed or strongly agreed with this factor related to innovative practices as a motivator to online teaching. Two

other related variables that warrant mentioning are the opportunity to develop new ideas ($\bar{x} = 3.7$) and integration of technology in teaching ($\bar{x} = 3.6$). The comments following the survey also mentioned the importance of faculty developing innovative strategies in teaching as well as the need for an institutional plan for innovation.

The primary source of data for answering this sub-question was in the online interview questionnaire, which provided experienced online faculty to discuss two areas related to innovation. One question provided faculty an opportunity to describe themselves on the continuum related to Rogers's Adoption of Innovation Theory (Rogers, 2003). Three faculty self-identified as innovators, two selected being innovator/early adopters, one chose early adopter, one identified as being between early adopter and early majority, and one participant had once been an innovator who drifted to a late majority or laggard. Generally innovators and early adopters comprise 16% of how people accept innovation and early majority includes the next 34%. Since only 25% of the faculty teach online at the institution in the study, the faculty currently teaching online would generally be considered in the earlier categories of adopting innovation since they have made a judicious choice to teach online.

The responses indicate that the faculty participating see themselves as being innovative but not the university, as it has been slow in transitioning to a wide-scale support for online education. The faculty reflected on Christiansen's theory regarding the role of innovation and whether online learning would be considered a disruptive innovation in higher education. The majority of the faculty considered online education to be an innovative shift in educational delivery. The faculty hold varying views on the

level of online learning as serving as a sustaining or a disruptive innovation in higher education.

Online Education and Innovation

Online education would be considered a disruptive model if it was providing high quality education, increased access to greater numbers of students, and providing delivery at a lower price point (Christiansen et al., 2003). In this study, the faculty fully recognized the impetus for educational delivery being unparalleled in changing instructional delivery and the inherent opportunities contributing to educational access. The participants demonstrated mixed perceptions as to whether they would categorize the movement as a disruptive innovation.

The two fundamental types of innovation are described as sustaining or disruptive and they lead to different trajectories and ultimately different outcomes. In the last decade, the number of emerging online providers outside traditional universities has changed the consumers of higher education and opened new markets. Whether online learning is on the cusp of qualifying as a disruptive innovation will be solidified as several factors continue to authenticate the shift in higher education. Disruption will occur as more college professors adopt online teaching as a mainstream alternative, the confidence of parity of delivery models is equitable, the value proposition is plausible, and online continues to be a desired option for providing higher education to a wider audience. The defining factor of assessing the type and level of disruption will be when the delivery of online education becomes accessible to the masses at an affordable price point.

Discussion and Recommendations

The findings of the study provided insight into the overarching central question of “What can be learned from faculty who have taught in both traditional classroom and online settings and how they navigate these diverse teaching environments?” The mixed methods approach was applied to increase the scope of the study to obtain broader dimensions for analysis. The quantitative survey included broad-based participation from the faculty inclusive of those without online experience as well as those with experience. The data related to the motivators and inhibitors are informative to higher education institutions adopting or expanding online educational programs. The data from the faculty with online experience were helpful in providing a better understanding of what they have experienced in the transition. Equally important is acknowledging the perceptions of the faculty who have not been exposed to online teaching whether by intentional choice or lack of opportunity.

The qualitative data from the survey provoked faculty to identify and have an opportunity to voice their opinions on what would encourage them or discourage them from teaching online as well as articulate what they would perceive as their developmental needs. The case study of a subset of online faculty enabled faculty to address key questions pertaining to their personal lived experiences navigating these environments. The reflections of the faculty participants in both populations provide insight for various stakeholder groups to ponder as institutions consider their strategic approaches to provide online educational options.

Several themes emerged from the findings regarding the perceptions of faculty toward teaching online. The motivational and inhibiting factors garnered through the

survey and subsequent interview questions made it apparent that several key themes were integrated throughout the data. It was evident that the experiences of faculty who had taught in an online format directly correlated to their perceptions of teaching online. Faculty with more experience were more likely to rate the motivators at a higher level and did not perceive the inhibitors to be as concerning as those with no experience. This is also supported by the findings that the motivators of teaching online by experienced faculty outweigh any inhibitors.

Recommendations for Actions

The findings of this study provided valuable quantitative and qualitative data analysis for higher education institutions interested in developing a better understanding and support for faculty members transitioning from site-based to online teaching settings. Consideration should be given to providing faculty a supportive climate for online teaching, ensuring professional development opportunities to support pedagogical strategies, providing user-friendly technology, and demonstrating recognition for workload and adoption of new teaching techniques. It is also critical that institutions recognize that not all academic disciplines are equally conducive to online education, students need to demonstrate academic readiness and orientation for online learning, and engagement levels take on new meaning in this environment. To help faculty transition from instructing in a face-to-face classroom to teaching online, all institutions and academic leaders should consider creating infrastructures to better support faculty preparation and immersion in this instructional modality, creating conditions that lead to a satisfying and supportive environment.

The research presents the major findings that inform these recommended actions and future research. Specifically, key foundational understandings within the context of an institution's control supporting online teaching and learning environments is suggested, followed by an outline of key understandings and best practices that emerged from the experiences of faculty contemplating teaching in an online environment. Additionally, the research presents elements of factors that could enhance successful transition of faculty considering teaching online. The following areas can better support faculty in successfully transitioning to online teaching based on the convergent findings from the data in this study:

- Create an institutional environment with innovation initiatives supporting online instruction
- Ensure academic and institutional leaders support a cohesive online strategy
- Develop a climate that values and respects online education
- Expand offerings to better serve students by providing choice in course delivery
- Acknowledge the faculty encumbrance when initially migrating to online teaching
- Broaden professional development opportunities for pedagogical and technical training
- Review faculty workload, compensation, and recognition for online teaching
- Upgrade technology systems and integrate innovative tools to enhance engagement
- Improve onboarding of online students to ensure academic readiness and preparedness

The above collective approaches to revisit current practices would provide an environment that would be more conducive to increasing faculty consideration of teaching online courses.

Recommendations for Institutional Support

Based on the results of this study, the following recommendations can facilitate further discussion between university administration and academic leadership to create an organizational ecosystem supportive of online education.

First, faculty development in this area is critical to the success of online programs. The experienced online faculty members praised the existing professional development opportunities available through QOLT. There is an expressed interest in diversifying the scope of the offerings and delivery of training modules to provide increased flexibility to expedite faculty readiness and expertise. The need to formalize mentoring programs with more seasoned online faculty members was shared by several participants. Expanded hours for a 24/7 help desk would not only service the needs of the faculty but would aid students in any challenges they may encounter while enrolled in an online course. Faculty expressed a desire for real-time access to tools to enhance their courses and assist in strengthening their repertoire of skills.

Second, it is recommended that communication between professors and academic leadership increase to develop a supportive environment for faculty engaged in online teaching. Although the faculty praised the support they received for course development and professional development opportunities, there is a high level of dissatisfaction with the integration of the technology. It is important to identify and support a single learning management system so faculty can enhance their course design and build confidence in

navigating a single platform and practices supporting faculty can be standardized. The reliability and functionality of the system and the integration of other communication tools is paramount. Although some faculty advocate teaching online is a professional choice and they should not be forced to migrate from a face-to-face environment, others expressed they are not given the opportunity. A cross-discipline approach as well as opportunities for seasoned online instructors to mentor other faculty would be welcomed as well as new opportunities to pilot online learning in broader disciplines.

Third, an institutional assessment of online education innovation is recommended to determine how it is strategically aligned with mission and institutional planning. This process might include a review of institutional policies and practices and how they relate to any considerations for faculty teaching in an online environment. A common sentiment from this study is that faculty do not feel they are adequately compensated or recognized for their involvement in the advancement of online learning at the institution. The various topics for open dialogue are compensation review for course development, evaluation of efforts in online teaching as valued for tenured track faculty, workload considerations, acknowledgement of innovative practices and leadership, and respectful recognition of faculty volunteering to serve this burgeoning student population. Also, faculty expressed interest in opening channels of communication with institutional leaders to develop a pathway for a more inclusive planning process online and other innovative educational approaches.

Limitations and Considerations

This study involved a cadre of faculty representatives of one institution. The design, methodology, and scope of participants from one institution may only be of

greater value to the organizational context of the study. There are inherent limitations in the research. The first is that the quantitative and qualitative research was conducted at only one public university with a limited number of participants; thus, there may not have been a strong enough response rate. Even though over 190 faculty participated in the quantitative survey and nine participated in the qualitative research, this is a very small population of faculty participants.

Some of the participants may have been motivated to participate because they had an interest in the topic of inquiry, which could have impacted their responses. There was the potential that the faculty participating in the quantitative study did not complete the survey with true convictions and did not provide answers that fairly reflected their perceptions on the survey instrument. Additionally, the participants involved in the qualitative research may not have provided comprehensive answers that provide enough information to fully develop themes and draw conclusions from the responses.

Data gathered from quantitative survey instruments and qualitative open-ended questions could inherently be biased. Other factors posing consideration were self-reported perceptions or opinions of faculty who participated in the study; the data and findings cannot be independently verified. Individuals' formulated perceptions based on selective memory, attribution factors, or potential hyperbole can contribute to potential bias and limitations of the findings.

The findings of the study are limited in generalizability because the study was conducted at a university with a small population of faculty teaching online and students enrolled in online courses. The study may be generalized more appropriately to universities who are in the early phases of transitioning faculty to teaching online as

course offerings begin to escalate. A larger sample size may have provided additional insights into the faculty experience in transitioning from face-to-face instruction to an online modality. Due to these conditions, the results of the data may not be generalizable to a broader population.

Limitations and Positionality

Justification for this research project stems from the researcher's leadership role within a private, non-profit institution of higher education located in California. This role has spanned over three decades of working with a university deeply committed to enhancing the quality of the student experience, providing relevant and rigorous learning experiences whether in a traditional setting or in online delivery. As an administrator, the researcher has been involved on the vanguard of this evolution watching her own institution's online footprint expand since the late 1990s to offerings of over 1,600 courses, 100 programs, and over 80,000 registrants per year.

The researcher has been exposed to online learning at the higher education and K-12 levels with a variety of administrative roles when the field was emerging and currently while the online education field has become more pervasive. An essential component to these institutional strategies includes understanding the evolving role of instructors in higher educational settings and their struggles when shifting from traditional to online learning environments. A viable concern of the researcher is to address positionality to mitigate bias in any research conducted. The researcher is not in a faculty role but through former roles held certain beliefs, views, and biases that would potentially shape the interpretation of the study (Creswell, 2012). It was important that the researcher

avoided falling prey to personal or professional experiences that could taint the objectivity of the issue being studied.

The researcher did not perceive any ethical issues in conducting the research but acknowledges great familiarity with the topic and the literature. The researcher elected to conduct the study at another institution to promote objectivity, as none of the participants had a familiar or reporting relationship with the researcher. Professionally, the researcher has witnessed the diverse challenges faculty encounter as they acclimate to a virtual environment and understand the importance of supporting this transition as the demand for online education continues to change the face of higher education. It is imperative that the researcher approaches the data collection and analysis by applying a high standard of impartiality to ensure results are void of potential influence by professional experiences related to the field. The researcher exercised attempts to appropriately and objectively capture and interpret the data to avoid perpetuating any bias in the research conducted.

In summary, there are potential positionality concerns that may have inadvertently affected the study. First, the researcher has over 36 years' experience in higher education, is working on a doctorate in educational leadership, and has over 18 years' experience in the field of online learning and may be too familiar with the subject area to present and interpret results through a completely objective lens. To offset potential bias, the researcher did not personally or professionally know any of the faculty participants, and the data gathering tools selected did not reflect any potential bias of the researcher toward the field of study. Selection of study participants was objective for both the

quantitative and qualitative instruments to identify participants that would provide candid responses to the data gathering tools.

Implications of the Study

Based on the discussion of the major themes that emerged in this study, the following series of implications can serve as lessons learned and best practices to assist faculty, deans, and higher education administrators. Susan Patrick, CEO of iNacol, stated, “I think in the future, there won’t be any differentiation between where the education comes from. We’re not going to call it online learning, we’re just going to call it learning.” A better understanding of the environmental shifts in the movement to increased online educational delivery commands institutional infrastructures with sufficient support services, resources, and ecosystems to support faculty in providing effective online instruction.

Implications for Practice

The rapid pace of educational change provides challenges for all key stakeholders in defining the future of higher education. The diversity of teaching modalities, offerings of flexible formats, and providing students options for learning content and earning degrees or demonstrating proficiency will impact some of the sacred traditions in higher education. Educational delivery will have myriad functionality, as technology is integrated with knowledge acquisition and innovative learning pathways.

The role of faculty will continue to be redefined as faculty transition from lectern to laptop and from lecture halls to virtual classrooms. The field of online learning is still in its early infancy and its inevitable proliferation warrants additional studies exploring the faculty experience in online instruction to provide optimum conditions for success.

This would be beneficial to faculty in the broader higher educational community, especially in light of the movement to open course content. By encapsulating these perceptions, the research will help institutions identify the recurring barriers identified by faculty that may inhibit their ability to transition from onsite instructional settings to online learning modalities. Implications resulting from the faculty perceptions could prove valuable to informing institutions contemplating expanding and enhancing online learning environments for students. As such, understanding related teacher competencies for online teacher success requires further exploration.

For long-term viability and broader acceptability, it is imperative that institutions provide high-quality online programs with measurable results (Appana, 2008). As higher education slowly embraces innovation and change, it creates opportunities to explore successes and institutional readiness for integrating online and blended learning models. This mindset creates opportunities for further exploration of how best to understand faculty needs in their instrumental role in cultivating a quality online teaching and learning environment.

Educational leaders at institutions engaged in online learning should respond proactively to the changing needs of faculty and organizational capacity as they expand online offerings. As the demand grows, faculty may face increasing pressure from academic leaders to increase web-based instruction (Hopewell, 2012). Leadership can encourage stakeholder buy-in and increase the value, recognition, and acceptance of online education when it is integrated into the mission (Orr et al., 2009). Strong leadership requires removing barriers when considering policy decisions, training resources, compensation models and required levels of faculty development (Lloyd et al.,

2012). Academic leaders must also recognize the importance of intrinsic motivators as well as extrinsic influences when considering academic planning, workload, and scheduling (Lloyd et al., 2012; Meyer, 2012). Faculty expect institutional leaders to acknowledge the unique experience for online faculty and the challenge of balancing teaching, research, and service.

The paradoxes expressed by faculty indicate that leaders need to collaborate with faculty in exploring the perceived quality of online versus face-to-face instruction, evaluation of the adequacy of support structures, and the changing role of faculty at their respective campuses (Allen & Seaman, 2012; Seaman, 2009). Leadership at an institutional level is critical to ensure faculty receive adequate resources to support transitioning to online instruction (Baran et al., 2013; Kim & Bonk, 2006). Faculty who are transitioning to online are ill equipped unless they have a variety of resources addressing time management, technology, and training and are provided ongoing recognition for the extra workload (Lloyd et al., 2012, Shea, 2007). Current leadership models may not be conducive to support the burgeoning growth in online education requiring institutions to recruit and cultivate online academic leaders and modify organizational support.

Implications for Social Justice

The implications for social justice are the conflicting concerns of increasing educational access through online and other learning modalities and concerns of equitable outcomes for all students. Educators are compelled to support equity by offering online education options yet are faced with the challenge of maximizing flexibility and accessibility to higher education, especially for underserved learners, without sacrificing

minimum assurances of equitable learning outcomes (Silva, White, & Toch, 2015).

Faculty participants in the study expressed ongoing concerns regarding underprepared or underserved students and their ability to succeed in an online environment balanced with providing accessible options.

As the digital divide continues to narrow, online programs have the potential to facilitate educational equity and attract greater diversity including underserved and less traditional college students. Faculty value teaching online because it promotes educational access for a more diverse student population (Appana, 2008; Bolliger & Wasilik, 2009), and they are freed from influence of observable student characteristics and demographic differences (Major, 2010). The format can reduce geographic barriers as well as provide students the ability to balance education with family and work obligations reducing the economic burden of being a full-time student (Appana, 2008).

Online learning is not a panacea. For online learning to meet its promise of access, progression, and success for low-income and underprepared students, institutions will have to invest in expanded resources, faculty training, and quality courses (Jaggars, 2011). The literature recognizes that although today's youth may be considered digital natives, there continues to be a potential digital divide regarding equitable educational opportunities. This study also found similar expressions of concerns in this area. The collective desire to increase college access to broader audiences through online learning has increased with institutional and faculty support; however, accessibility and student readiness continue to present some limitations. Online education could have an immense impact on gradually increasing educational equity (Marks & Reid, 2013). Differential in salaries is associated with educational attainment, which in turn has an opportunity to

increase social mobility. Faculty in this study shared their voice regarding the importance of online delivery as a vehicle to accessibility while the concern of student readiness and success factors resonated with many participants.

Implications for Policy

The growing body of knowledge related to online learning is expanding, which will ultimately drive policy shifts. Faculty and other academic leaders operating in the virtual education space will need to understand regulations impacting institutional decisions, policies, and scalability of programs. The attention of this research will help inform future policy decisions regarding online education as the modality continues to expand in private, public, and non-profit institutions. Online learning has had a polarizing affect in educational circles as policymakers have gravitated to attempt to regulate virtual educational delivery where teachers and students are not in a traditional setting.

While online learning has increased accessibility to college students, the widespread growth has triggered increased scrutiny to hold institutions to a higher level of accountability for online education and to provide college students a sense of consumer protection. At the federal and state levels, departments supporting higher education are redefining policies and how they relate to the emerging trends in online learning and other emergent educational directions. The sacred tradition of the century-old Carnegie unit for measuring “seat time” requirements for students is being modified at the state and federal levels, which also drives changes in “teach time” for faculty. This shift in the composition of how institutions are measuring the accumulation of academic

credits due to new modalities such as online learning are challenging the fundamental role of faculty and course delivery.

The most significant national policy issue and controversy for higher education is the increasing compliance for institutions offering online classes outside of the state where the institution's home campus resides (Lederman, Stradford, & Jaschik, 2014). The State Authorization Reciprocity Agreement (SARA) formed in 2013, formulated a state authorization process that is more expeditious and uniform with reasonable standards across states. Policy changes will be redefined as regulators grasp the nuance of online education and other non-traditional delivery models at the crux of some of the state regulations. Ideally, these efforts will streamline processing, reduce costs for state authorization, and support the integrity and academic quality of online institutions.

Recommendations for Future Research

The findings and conclusions of this research study have provided several recommendations for areas of future research related to this field. Through this study and its findings, various subtopics emerged that led to three primary recommendations for future research. Each recommendation will add to the body of knowledge in the field of higher education related to the impact of faculty transitioning from face-to-face teaching to an online environment. The research in each recommendation will provide further insight for institutional and academic leaders in more fully understanding critical information about this shift from the perspective of faculty. The areas of research identified can increase awareness of factors supporting faculty teaching online and could help academe facilitate faculty navigating these teaching environments in a supportive organizational culture. Listed are the three recommendations.

First, future research should be focused on exploring and defining how to provide faculty who have not demonstrated successful transition to online teaching the means to acquire the pragmatic skillsets necessary to further support and prepare these instructors for online instruction. A focused analysis on enhancing online pedagogical teaching skills could continue to inform support systems required for successful migration.

Second, future research should also focus on identifying whether instructors who have gradually transitioned to online instruction by means of teaching in hybrid or blended learning environments has any impact on overall faculty success to teaching fully online. Additional research from this perspective could further inform institutions of higher education with a more cognizant understanding of whether a multi-step method of faculty transition may be more palatable for faculty hesitant to transition directly to online instruction.

Third, future research for consideration should focus on a comprehensive examination of the inherent dispositional characteristics of faculty who embrace and have a penchant for innovation in teaching. Higher education institutions may benefit from a better understanding of faculty with a proclivity to create more personalized or precise learning environments to meet the educational needs of future generations of learners.

Education continues to undergo transformative changes, which will inevitably redefine how higher education institutions view legacy measurements and definitions such as credit hours, seat times, and the role of faculty. As higher education becomes more commoditized, the role of new and emerging models of instruction such as Massive Open Online Courses, competency-based learning, and data analytics will provide

accessibility and a more individualized approach for meeting learners anytime, anyplace and at any pace.

Conclusion

This study demonstrates the importance of higher education institutions' understanding of the significant impact faculty undergo when transitioning from a face-to-face teaching environment to an online instructional setting. This research study addressed the problem and isolated specific findings and common themes that can further inform higher education leaders on how to address support of the shifting role of faculty migrating the transition to online teaching. The findings generated identifiable factors that could potentially motivate faculty to contemplate teaching online as well as other aspects that could dissuade them from considering the instructional modality.

This mixed methods research included the participation of over 200 faculty members. During spring semester 2016, faculty had an opportunity to share their perceptions on the motivators and inhibitors related to online teaching by participating in a quantitative survey administered through Survey Gizmo. Additionally, nine experienced online instructors participated in an open-ended digital questionnaire. The data from the surveys were coded and the variables were collapsed; data were analyzed with descriptive, univariate, bivariate, and multivariate statistical measures; and the statistically significant findings were presented. The comments to three prompts collected during the online survey generated over 350 responses, which were coded, and sub-themes were identified to coalesce to primary themes. The qualitative research included the synthesis of responses to 11 open-ended questions that were analyzed in conjunction with the primary research question and sub-questions. The qualitative data

supplemented the quantitative findings to offer greater understanding of the relationship between the sub-questions, which better informed the overarching research question.

Overall, the review of the literature and quantitative survey analysis, supplemented by the qualitative research support, warrant the uniqueness of faculty dispositions in teaching online. The researcher examined, interpreted, and reported the analysis of the data, which informed the five sub-questions and contributed to answering the overarching research question. Additionally, the analysis of the findings was also guided by two theoretical frameworks related to innovation, which provided the means by which multiple variables could be interpreted within the context of the study.

The rapid pace of educational change provides challenges for all key stakeholders in defining the future of higher education. The diversity of teaching modalities, offerings of flexible formats, and providing student options for learning content and earning degrees or demonstrating proficiency will impact some of the sacred traditions in higher education. Educational delivery will have a multitude of functionality as technology is integrated with knowledge acquisition and innovative learning pathways. The role of faculty will continue to be redefined as faculty transition from lectern to laptop and from lecture halls to virtual classrooms.

APPENDICES

Appendix A: Instrument One: Faculty Survey Instrument

Appendix B: Emails to Online Survey Participants

Appendix C: Invitation for Interview/Questionnaire Participants

Appendix D: Online Questionnaire

Appendix A: Instrument One: Faculty Survey Instrument

Survey Option One: Motivators and Inhibitors in Teaching Online

Demographic Information (this would be similar for all options):

How many “years” have you been teaching at a post-secondary/collegiate level?

1-3 4-6 7-10 11-15 16-20 21+

I teach in the following College: *Education/Health/Human Services* *Business Administration*

Science/Math *Humanities/Arts/Behavioral & Social Sciences*

What is your faculty rank/position? *Professor* *Associate Professor* *Assistant Professor*

Lecturer *Other* _____

What is your gender? *Female* *Male* *Other*

How would you describe your ethnicity *African American* *Hispanic* *Asian*
 American Indian *Caucasian* *Other*

How would you describe your Generational Category based on birth groupings?

1946-1964 Baby Boomer *1965-1985 Generation X* *1978-1990 Generation Y* *1991+ Generation Z*

Experience in online education:

Have you ever taken/enrolled in an online course as a student? *No* *Yes*

If so, How many courses? 1-3 4-6 7-10 11-15 16-20 21+

Have you ever taught an “online” course ? *No/0 Never taught Online* *Yes*

If so, how many courses? 1-3 4-6 7-10 11-15 16+

Part One: What would motivate you to teach online courses?

Please check the most appropriate box:

Motivating (M) Factor List.

(1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree

- | | | | | | |
|---|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| 1. Intellectual challenge | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 2. Personal motivation to use technology | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 3. Opportunity to improve my teaching skills | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 4. Adopt innovative practices | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 5. Opportunity for scholarly pursuit | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 6. Maintain relevant skill sets | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 7. Opportunity to use research as a teaching tool | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 8. Expectations by department/institution | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 9. Support and encouragement from dean or chair | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 10. Support & encouragement from dept colleagues | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 11. Opportunity to develop new ideas | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 12. Shift from teacher-centric to learner-centered | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 13. Professional prestige and status | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 14. Integration of technology in teaching | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 15. Overall job satisfaction | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 16. Opportunity to strengthen my classroom skills | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 17. Professional advancement | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 18. Technical support provided by the institution | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 19. Working conditions/flexibility (hours, location) | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 20. Online training provided by the institution | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 21. Monetary support for participation
(stipend, overload) | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 22. Students attaining the same learning outcomes | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 23. Personalized/Individual student engagement | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 24. Recognition/Credit toward promotion and tenure | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 25. Release time/reduced teaching load | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 26. Compensation to attend training to teach online | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 27. Stipend to develop courses | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 28. Ability to reach students that can't attend on
campus | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 29. Opportunity to diversify program offerings | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 30. Greater course flexibility for students | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 31. Benefits outweigh any inhibitors to teaching
online | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |

Part Two: What would inhibit you from teaching online courses?

Please check the most appropriate box:

(1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree

Inhibiting Factors (I) List

- | | | | | | |
|---|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| 1. Role changes/pedagogical transition | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 2. Establishing social presence online | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 3. Concern about faculty workload | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 4. Negative comments made by colleagues about online teaching experiences | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 5. Lack of professional prestige | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 6. Concern about quality of courses | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 7. Lack of release time/workload concerns | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 8. Time commitment exceeds face-to-face | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 9. Lack of technical background | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 10. Online teaching requires a different skill set | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 11. Lack of training provided by the institution | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 12. Lack of support and encouragement from Department/chair/dean | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 13. Adequate support for course design and development | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 14. Concern about quality of courses | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 15. Lack of technical support provided by the institution | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 16. Lack of grants for materials/expenses | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 17. Lack of support/encouragement from institution administrators | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 18. Lack of monetary support for participation (stipend, overload) | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 19. Concern about quality of students | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 20. Lack of salary increase/merit | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 21. Concerns about academic freedom | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 22. Concerns about intellectual property | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 23. Concern about class size/management | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |
| 24. Lack of credit toward promotion and tenure | <input type="checkbox"/> (1) | <input type="checkbox"/> (2) | <input type="checkbox"/> (3) | <input type="checkbox"/> (4) | <input type="checkbox"/> (5) |

Some aspects of this survey tool have been adopted (Otter, 2003; Schifter, 2002).

Please feel to respond to the following prompts:

A) Are there any other factors that would encourage or discourage you from teaching in an online format?

B) What are the primary professional development needs for faculty to successfully transition to online teaching?

C) Please share any other comments about your perception of online teaching

What do you think is an ideal size for an online course? *Up to 40* *41-60*
 61-80 *81-100* *100+*

What class size would you be willing to teach if you had a TA? *Up to 40* *41-60*
 61-80 *81-100* *100+*

Appendix B: Emails to Online Survey Participants

Initial email to Online Survey Participants

To: Individual email address

From: Nancy Rohland-Heinrich as principal researcher

BCC: Recommended use for sending the same email message to multiple user addresses

Subject: Research Participation Invitation: Faculty Experience in Online Instruction

Nancy Rohland, a candidate in the joint doctoral educational leadership program at CSU San Marcos and University of California, San Diego, is conducting a study that explores faculty perspectives regarding the unique role changes they may encounter when transitioning from a traditional face-to-face classroom to an online teaching environment and how this experience impacts their professional role.

The purpose of this research is to explore the experiences that faculty in institutions of higher education encounter when transitioning to online teaching and learning environments, and how this impacts their evolving role of instructor within digital contexts. The research is valuable in addressing the growing demand for online education and the increasing number of faculty considering teaching in this environment.

In your valuable roles as a faculty member, your perceptions regarding online instruction and related information are of interest to the researcher. The results of this survey are confidential and the anonymity of all participants will be provided. Your participation is voluntary. As an incentive for your participation, you will be entered into a drawing for gift cards from a local vendor in the community. The survey instrument should take about 15- 20 minutes to complete.

PLEASE COMPLETE SURVEY BY February 27, 2016

This is an approved request for participation in research that has been approved by the California State University San Marcos Institutional Review Board (IRB).

Questions about this research should be addressed to Nancy Rohland, 760-484-1486, and rohla01@csusm.cougars.edu

Reminder to Participate in Online Survey

To: Individual email address

From: Nancy Rohland-Heinrich as principal researcher

BCC: Recommended use for sending the same email message to multiple user addresses

Subject: Research Participation Invitation: Faculty Experience in Online Instruction
(reminder)

Nancy Rohland, a candidate in the joint doctoral educational leadership program at CSU San Marcos and University of California, San Diego, is conducting a study that explores faculty perspectives regarding the unique role changes they may encounter when transitioning from a traditional face-to-face classroom to an online teaching environment and how this experience impacts their professional role.

This correspondence serves as a reminder to invite you to participate in this survey. The purpose of this research is to explore the experiences that faculty in institutions of higher education encounter when transitioning to online teaching and learning environments, and how this impacts their evolving role of instructor within digital contexts. The research is valuable in addressing the growing demand for online education and the increasing number of faculty considering teaching in this environment.

In your valuable roles as a faculty member, your perceptions regarding online instruction and related information are of interest to the researcher. The results of this survey are confidential and the anonymity of all participants will be provided. Your participation is voluntary. As an incentive for your participation, you will be entered into a drawing for gift cards from regional vendors in the community. The survey instrument should take about 15- 20 minutes to complete.

PLEASE COMPLETE SURVEY BY FEBRUARY 27, 2016

This is an approved request for participation in research that has been approved by the California State University San Marcos Institutional Review Board (IRB).

Questions about this research should be addressed to Nancy Rohland, 760-484-1486, and rohla01@cougars.csusm.edu

Appendix C: Invitation for Interview/Questionnaire Participants

To: Individual email address

From: Nancy Rohland-Heinrich as principal researcher

BCC: Recommended use for sending the same email message to multiple user addresses

Subject: Research Participation Invitation: Faculty Experience in Online Instruction

Nancy Rohland, a candidate in the joint doctoral educational leadership program at CSU San Marcos and University of California, San Diego, is conducting a study that explores faculty perspectives regarding the unique role changes they may encounter when transitioning from a traditional face-to-face classroom to an online teaching environment and how this experience impacts their professional role.

Principle objective:

The purpose of this research is to explore the experiences that faculty in institutions of higher education encounter when transitioning to online teaching and learning environments, and how this impacts their evolving role of instructor within digital contexts.

You are being asked to participate in an interview. The interview will be a conversation and with your permission will be audio taped and transcribed. The interview can be conducted by phone or face-to-face and will take approximately 20-30 minutes. After the interview, you will receive a transcript of the interview for checking and clarifying any information. A follow-up questions can be provided to enable you to respond by email to increase your ability to share your experiences.

If you do not have time to schedule an interview, please consider participating by responding to an online open-ended questionnaire and respond electronically. While your participation in this study is voluntary, it has potential to positively affect developing a better understanding of faculty engaging in online teaching.

As an experienced online teacher, I am willing to participate in the following manner:

- Contact me to establish a face-to-face or telephone interview**
- Send me the questionnaire and I will respond electronically**

Faculty Name: _____

Phone: _____

Email: _____

Questions about this research should be addressed to Nancy Rohland, 760-484-1486, and rohla01@cougars.csu.edu

Online Questionnaire Request for Participation

From: Matthew Ceppi <survey@csusm.edu>
Reply-To: CSU San Marcos Survey <survey@csusm.edu>
Date: Monday, February 15, 2016 at 7:21 AM
To: David Avalos <davalos@csusm.edu>
Subject: Reminder: Survey on Faculty Experience in Online Instruction

Dear Faculty (first name),

Nancy Rohland-Heinrich, a candidate in the joint doctoral educational leadership program at California State University San Marcos and University of California, San Diego, is conducting a study that explores faculty perspectives regarding online instruction and the unique role changes they may encounter when transitioning from a traditional face-to-face classroom to an online teaching environment. *Even if you have never taught online*, your perceptions regarding online instruction and related information are of interest.

The purpose of this research is to explore the experiences that faculty in institutions of higher education encounter when transitioning to online teaching and learning environments, and how this impacts their evolving role of instructor within digital contexts. The research is valuable in addressing the growing demand for online education and the increasing number of faculty considering teaching in this environment. Our colleagues in Instructional and Information Technology Services (IITS) and Academic Planning have also indicated their interest in conducting this research at CSUSM.

Your responses will be confidential and your participation is voluntary; you may discontinue participation at any time. The survey instrument should take about 10-15 minutes to complete. Please complete the survey by **February 27, 2016**.

[Click Here to Start the Survey](#)

This is a request for participation in research that has been approved by the California State University San Marcos Institutional Review Board (IRB) and University Survey Committee.

Questions about this research can be addressed to Nancy Rohland, 760-484-1486 and rohla01@cougars.csusm.edu.

Matthew J. Ceppi, Ed.D.
Associate Vice President, Institutional Planning & Analysis
California State University San Marcos

Appendix D: Online Questionnaire

Participants: Faculty with experience in online and classroom teaching

Introductory information gathered from the online survey instrument regarding demographic data, classroom and online teaching experiences, and self-identified categories as innovators.

Please identify how you have experienced a role change in transitioning from face-to-face teaching to online instruction?

- How do you develop an online persona teaching online
- Studies have defined online instruction with the following functions: professional, pedagogical, social, evaluator, administrator, technologist, advisor/counselor, and researcher. How do you see those roles?

In what ways have you experienced any challenges as a faculty member in teaching online?

Describe the most rewarding experiences you have had teaching online?

What techniques have you employed to enhance the online teaching and learning environment?

How would you describe the types of additional support required for teaching in this environment?

What types of professional development opportunities have contributed to your success in making this transition? What else would be helpful?

Please describe how you see yourself on this continuum in adopting innovation at your institution in your role in the field of online education.

REFERENCES

- Al-Hussein, M. O., & Cronje, J. C. (2010). Defining mobile learning in the higher education landscape. *Educational Technology & Society, 13*(3), 12-21.
- Allen, I. E., & Seaman, J. (2010). *Class differences: Online education in the United States, 2010*. Retrieved from ERIC database. (ED529952)
- Allen, I. E., & Seaman, J. (2012). *Conflicted: Faculty and online education, 2012*. Babson Park, MA: Babson Survey Research Group.
- Allen, I. E., & Seaman, J. (2013). *Changing course: Ten years of tracking online education in the United States*. Newburyport, MA: Sloan Consortium.
- Allen, I. E., & Seaman, J. (2014). *Grade change*. Babson, MA: Babson Survey Research.
- Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks, 5*(2), 1-17.
- Appana, S. (2008). A review of benefits and limitations of online learning in the context of the student, the instructor and the tenured faculty. *International Journal on E-Learning, 7*(1), 5-22.
- Archambault, L. (2010). Identifying and addressing teaching challenges in K-12 online environments. *Distance Learning, 7*(2), 13-17.
- Archambault, L., & Crippen, K. (2009). K-12 distance educators at work: Who's teaching online across the United States. *Journal of Research on Technology in Education, 41*, 363-391.
- Aydin, C. H. (2005). Turkish mentors' perception of roles, competencies and resources For online teaching. *Turkish Online Journal of Distance Education, 6*, 501-520.
- 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*, 421-439.
- Baran, E., Correia, A. P., & Thompson, A. (2013). Training successful online teachers in higher education: Voices of exemplary teachers. *Teachers College Record, 115*(3), 1-41.
- Bartley, S. J., & Golek, J. H. (2004). Evaluating the cost effectiveness of online and face-to-face instruction. *Educational Technology & Society, 7*, 167-175.

- Bates, C., & Watson, M. (2008). Re-learning teaching techniques to be effective in hybrid and online courses. *Journal of American Academy of Business, Cambridge, 13*(1), 38.
- Bates, T. (2010). New challenges for universities: Why they must change. In U.-D. Ehlers & D. Schneckenberg (Eds.), *Changing cultures in higher education: Moving ahead to future learning* (pp. 15-25). Heidelberg, Germany: Springer.
- Batts, D. (2008). Comparison of student and instructor perceptions of best practices in online technology courses. *Journal of Online Learning and Teaching, 4*, 477-489.
- Bawane, J., & Spector, J. M. (2009). Prioritization of online instructor roles: Implications for competency-based teacher education programs. *Distance Education, 30*, 383-397.
- Berge, Z. L. (1998). Barriers to online teaching in post-secondary institutions: Can policy changes fix it? *Online Journal of Distance Learning Administration, 1*(2).
- Berge, Z. L. (2008). Changing instructor's roles in virtual worlds. *Quarterly Review of Distance Education, 9*, 407-414.
- Bigatel, P. M., Ragan, L. C., Kennan, S., May, J., & Redmond, B. F. (2012). The identification of competencies for online teaching success. *Journal of Asynchronous Learning Networks, 16*(1), 59-77.
- Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education, 30*(1), 103-116.
- Carroll-Barefield, A., Smith, S. P., Prince, L. H., & Campbell, C. A. (2005). Transitioning from brick and mortar to online: A faculty perspective. *Online Journal of Distance Learning Administration, 8*(1).
- Christensen, C. M. (2016). *Disruptive innovation*. Retrieved from <http://www.claytonchristensen.com/key-concepts/>
- Christensen, C. M., Aaron, S., & Clark, W. (2003). Disruption in education. *Educause Review, 38*, 44-55.
- Christensen, C. M., Horn, M. B., Caldera, L., & Soares, L. (2011). *Disrupting college: How disruptive innovation can deliver quality and affordability to postsecondary education*. Washington, DC: Center for American Progress.
- Christensen, C., Horn, M. B., Johnson, C. W. (2008). *Disrupting class: How disruptive innovation will change the way the world learns*. New York: McGraw-Hill.

- Conceicao, S. C. (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.
- Cook, R. G., Ley, K., Crawford, C., & Warner, A. (2009). Motivators and inhibitors for university faculty in distance and e-learning. *British Journal of Educational Technology*, 40(1), 149-163.
- Coppola, N. W., Hiltz, S. R., & Rotter, N. (2002). Becoming a virtual professor: Pedagogical roles and asynchronous learning networks. *Journal of Management Information Systems*, 18, 169-190.
- Cox, R. (2005). Online education as institutional myth: Rituals and realities at community colleges. *The Teachers College Record*, 107, 1754-1787.
- Cozzens, S., Gatchair, S., Kang, J., Kim, K. S., Lee, H. J., Ordóñez, G., & Porter, A. (2010). Emerging technologies: Quantitative identification and measurement. *Technology Analysis & Strategic Management*, 2.
- Crawford-Ferre, H. G., & Wiest, L. R. (2012). Effective online instruction in higher education. *Quarterly Review of Distance Education*, 13(1), 11-14.
- Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Creswell, J. S. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson.
- Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Darabi, A. A., Sikorski, E. G., & Harvey, R. B. (2006). Validated competencies for distance teaching. *Distance Education*, 27(1), 105-122.
- De Gagne, J. C., & Walters, K. (2009). Online teaching experience: A qualitative Metasynthesis (QMS). *Merlot Journal of Online Learning and Teaching*, 5(4).
- De Laat, M., Lally, V., Lipponen, L., & Simons, R. J. (2007). Online teaching in networked learning communities: A multi-method approach to studying the role of the teacher. *Instructional Science*, 35, 257-286.
- Dillenbourg, P. (2000). *Virtual learning environments*. Workshop presented at EUN Conference 2000: Learning in the New Millennium: Building New Education Strategies for Schools.

- Dillenbourg, P. (2008). Integrating technologies into educational ecosystems. *Distance Education*, 29(2), 127-140.
- Eagan, M. K., Stolzenberg, E. B., Berdan Lozano, J., Aragon, M. C., Suchard, M. R. & Egan, T. M., & Akdere, M. (2005). Clarifying distance education roles and competencies: Exploring similarities and differences between professional and student-practitioner perspectives. *The American Journal of Distance Education*, 19(2), 87-103.
- Escoffery, C., Leppke, A. M., Robinson, K. B., Mettler, E. P., Miner, K. R., & Smith, I. (2005). Planning and implementing a public health professional distance learning program. *Online Journal of Distance Learning Administration*, 8(1).
- Fagan-Wilen, R., Springer, D. W., Ambrosino, B., & White, B. W. (2006). The support of adjunct faculty: An academic imperative. *Social Work Education*, 25(1), 39-51.
- Gates, B. (2014, July 21). *Top 10 quotes on education from 2014*. Retrieved from <http://blog.chalkup.co/top-10-education-quotes-from-2014>
- Gold, S. (2001). A constructivist approach to online training for online teachers. *Journal of Asynchronous Learning Networks*, 5(1), 35-57.
- Goodyear, P., Salmon, G., Spector, J. M., Steeples, C., & Tickner, S. (2001). Competences for online teaching: A special report. *Educational Technology Research and Development*, 49(1), 65-72.
- Green, T., Alejandro, J., & Brown, A. H. (2009). The retention of experienced faculty in online distance education programs: Understanding factors that impact their involvement. *The International Review of Research in Open and Distance Learning*, 10(3).
- Herman, J. (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.
- Herman, J. H. (2013). Faculty incentives for online course design, delivery, and professional development. *Innovative Higher Education*, 38, 397-410.
- Hislop, G. W., & Ellis, H. J. (2004). A study of faculty effort in online teaching. *The Internet and Higher Education*, 7(1), 15-31.
- Hoffmann, R. L., & Dudjak, L. A. (2012). From onsite to online: Lessons learned from faculty pioneers. *Journal of Professional Nursing*, 28, 255-258.
- Hopewell, T. M. (2012). Risks associated with the choice to teach online. *Online Journal of Distance Learning Administration*, 15(4), n4.

- Howell, S. L., Williams, P. B., & Lindsay, N. K. (2003). Thirty-two trends affecting distance education: An informed foundation for strategic planning. *Online Journal of Distance Learning Administration*, 6(3), 1-18.
- Jaggars, S. (2011). *Online learning: Does it help low-income and underprepared students?* New York. Community College Research Center.
- Jolliffe, A., Ritter, J., & Stevens, D. (2012). *The online learning handbook: Developing and using web-based learning*. New York: Routledge.
- Keengwe, J., & Kidd, T. T. (2010). Towards best practices in online learning and teaching in higher education. *Merlot Journal of Online Learning and Teaching*, 6, 533-541.
- Keeton, M. T. (2004). Best online instructional practices: Report of phase one of an ongoing study. *Journal of Asynchronous Learning Networks*, 8(2), 75-100.
- Kim, K., & Bonk, C. J. (2006). The future of online teaching and learning in higher education: The survey says. *Educause Quarterly*, 29(4), 22.
- Lederman, D., Stradford, M., & Jaschik, S. (2014, February 7). Rating (and berating) the ratings. *Inside Higher Education*. Retrieved from insidehighered.com/news/2014/02/07/colleges-and-analysts-resond-Obama-ratings
- Lloyd, S. A., Byrne, M. M., & McCoy, T. S. (2012). Faculty-perceived barriers of online education. *Merlot Journal of Online Learning and Teaching*, 8(1).
- Lorenzo, G., & Moore, J. (2002). Five pillars of quality online education. *The Sloan Consortium Report to the Nation*, 15-09.
- Lowes, S. (2008). Online teaching and classroom change: The trans-classroom teacher in the age of the internet. *Innovate: Journal of Online Education*, 4(3), n3.
- Major, C. H. (2010). Do virtual professors dream of electric students? University faculty experiences with online distance education. *Teachers College Record*, 112, 2154-2208.
- Marks, B. T., & Reid, K. W. (2013). The race against time: Preparing black students for the changing landscape of higher education. *The Journal of Negro Education*, 82 , 213-225.
- Mayadas, A. F., Bourne, J., & Bacsich, P. (2009). Online education today. *Science*, 323(5910), 85-89.

- McLean, J. (2005). Addressing faculty concerns about distance learning. *Online Journal of Distance Learning Administration*, 8(4).
- McQuiggan, C. A. (2012). Faculty development for online teaching as a catalyst for change. *Journal of Asynchronous Learning Networks*, 16, 27-61.
- McShane, K. (2004). Integrating face-to-face and online teaching: Academics' role concept and teaching choices. *Teaching in Higher Education*, 9(1), 3-16.
- Meixner, C., Kruck, S. E., & Madden, L. T. (2010). Inclusion of part-time faculty for the benefit of faculty and students. *College Teaching*, 58, 141-147.
- Meyer, J. D., & Barefield, A. C. (2010). Infrastructure and administrative support for online programs. *Online Journal of Distance Learning Administration*, 13(3).
- Meyer, K. A. (2012). The influence of online teaching on faculty productivity. *Innovative Higher Education*, 37(1), 37-52.
- Meyer, K. A., & McNeal, L. (2011). How online faculty improve student learning productivity. *Journal of Asynchronous Learning Networks*, 15(3), 37-53.
- Moore, J. C. (2005). The Sloan Consortium quality framework and the five pillars. *The Sloan Consortium*. Retrieved from <http://onlinelearningconsortium.org/about/quality-framework-five-pillars/>
- Morris, L. V., Xu, H., & Finnegan, C. L. (2005). Roles of faculty in teaching asynchronous undergraduate courses. *Journal of Asynchronous Learning Networks*, 9(1), 65-82.
- O'Neil, T. (2009). How distance education has changed teaching and the role of the instructor. *Information Systems Education Journal*, 7(48). Proceedings ISECON 2007, v24 (Pittsburgh).
- Oblinger, D. G., & Hawkins, B. L. (2006). The myth about online course development. *Educause Review*, 41(1), 14-15.
- Ormrod, J. E., & Leedy, P. D. (2005). *Practical research: Planning and design*. Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
- Orr, R., Williams, M. R., & Pennington, K. (2009). Institutional efforts to support faculty in online teaching. *Innovative Higher Education*, 34, 257-268.
- Otter, R. R., Seipel, S., Graeff, T., Alexander, B., Boraiko, C., Gray, J., & Sadler, K. (2013). Comparing student and faculty perceptions of online and traditional courses. *The Internet and Higher Education*, 19, 27-35.

- Palloff, R. M., & Pratt, K. (2007). *Building online learning communities: Effective strategies for the virtual classroom*. New York: John Wiley & Sons.
- Palloff, R. M., & Pratt, K. (2010). *Collaborating online: Learning together in community* (Vol. 32). New York: John Wiley & Sons.
- Partlow, K. M., & Gibbs, W. J. (2003). Indicators of constructivist principles in Internet based courses. *Journal of Computing in Higher Education*, 14(2), 68-97.
- Paulus, T. M., Myers, C. R., Mixer, S. J., Wyatt, T. H., Lee, D. S., & Lee, J. L. (2010). For faculty, by faculty: A case study of learning to teach online. *International Journal of Nursing Education Scholarship*, 7(1).
- Project Tomorrow, Speak Up & Blackboard K-12. (2011). *Learning in the 21st Century: A five year retrospective on the growth in online learning*. Retrieved from <http://www.blackboard.com/CMSPages/GetFile.aspx?guid=bde5cb81-8bfa-43f4-abea-3437d37b4a44>
- Ray, J. (2009). Faculty perspective: training and course development for the online classroom. *Journal of Online Learning and Teaching*, 5(2), 263-276.
- Reilly, J. R., Vandenhouten, C., Gallagher-Lepak, S., & Ralston-Berger, P. (2012). Faculty development for e-learning: A multi-campus community of practice (COP) approach. *Journal of Asynchronous Learning Networks*, 16(2), 99-110.
- Roby, T., Ashe, S., Singh, N., & Clark, C. (2013). Shaping the online experience: How administrators can influence student and instructor perceptions through policy and practice. *The Internet and Higher Education*, 17, 29-37.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York: The Free Press.
- Rogers, E. M. (n.d.). Roger's innovation adoption curve. In J. Curtis (Ed.), *Social media tutorials*. Retrieved from <http://www.jacobcurtis.com/rogers-adoption-curve/>
- Salmon, G. (2004). *E-moderating: The key to teaching and learning online*. United Kingdom: Psychology Press.
- Salmon, G. (2004). *E-moderating: The key to teaching and learning online*. United Kingdom: Psychology Press.
- Sammons, M. C., & Ruth, S. (2007). The invisible professor and the future of virtual faculty. *International Journal of Instructional Technology and Distance Learning*, 4(1), 3-13.

- Schifter, C. (2002). Perception differences about participating in distance education. *Online Journal of Distance Learning Administration (OJDLA)*, 5(1). University of West Georgia, Distance Education Center.
- Seaman, J. (2009). *Online learning as a strategic asset*. Volume II: The paradox of faculty voices--views and experiences with online learning. Results of a national faculty survey, part of the Online Education Benchmarking Study conducted by the APLU- Sloan National Commission on Online Learning. Association of Public and Land-grant Universities.
- Shank, P. (2004). *Competencies for online instructors*. Retrieved from https://www.mnsu.edu/cetl/teachingwithtechnology/tech_resources_pdf/Competencies%20for%20Online%20Instructors.pdf
- Sharples, M., Taylor, J., & Vavoula, G. (2007). A theory of learning for the mobile age. In R. Andrews & C. Haythornthwaite (Eds.), *The SAGE handbook of e-learning research*, (pp. 221-247). Thousand Oaks, CA: Sage.
- Shea, P. (2007). Bridges and barriers to teaching online college courses: A study of experienced online faculty in thirty-six colleges. *Journal of Asynchronous Learning Networks*, 11(2), 73-128.
- Silva, E., White, T., & Toch, T. (2015). The Carnegie Unit: A century old standard in a changing educational landscape. Stanford, CA: *Carnegie Foundation for the Advancement of Teaching*.
- Tallent-Runnels, M. K., Thomas, J. A., Lan, W. Y., Cooper, S., Ahern, T. C., Shaw, S. M., & Liu, X. (2006). Teaching courses online: A review of the research. *Review of Educational Research*, 76(1), 93-135.
- Thompson, M. M. (2003). Faculty satisfaction in the online teaching-learning environment. In J. Bourne & J. Moore (Eds.), *Elements of quality online education: Practice and direction*. Needham, MA: Sloan Center for On Line Education.
- 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), 111-119.
- Varvel, V. E. (2007). Master online teacher competencies. *Online Journal of Distance Learning Administration*, 10(1).
- Visser, J. A. (2000). Faculty work in developing and teaching web-based distance courses: A case study of time and effort. *American Journal of Distance Education*, 14, 21-32.

- Wallace, R. M. (2003). Online learning in higher education: A review of research on Interactions among teachers and students. *Education, Communication & Information*, 3(2), 241-280.
- Whitelaw, C., Sears, M., & Campbell, K. (2004). Transformative learning in a faculty professional development context. *Journal of Transformative Education*, 2(1), 9-27.
- Wiesenberg, F., & Stacey, E. (2005). Reflections on teaching and learning online: Quality program design, delivery and support issues from a cross-global perspective. *Distance Education*, 26, 385-404.
- Wray, M., Lowenthal, P. R., Bates, B., & Stevens, E. (2008). Investigating perceptions of teaching online & F2F. *Academic Exchange Quarterly*, 12, 243-248.
- Yin, R. K. (2009). *Case study research: Design and methods*. Thousand Oaks, CA: Sage Publications.