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VIRTUAL COLLABORATION

A PHENOMENOLOGICAL STUDY OF REMOTE ONLINE ADJUNCTS VIRTUAL COLLABORATION LIVED EXPERIENCES

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Dissertation

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ProQuest LLC. 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 - 1346 Virtual Collaboration: A Phenomenological Study of Remote Online Adjuncts Virtual Collaboration Lived Experiences

Committee Chair: Dr. John Matt

Online education is rapidly growing in higher education. To stay competitive, many colleges and universities have begun to offer online classes. Some institutions even offer complete degree programs online. This has left colleges needing to hire more part-time remote adjuncts to fill the fluctuating number of available courses. Because remote online adjuncts are susceptible to isolation, the need has arisen to study the benefits and barriers of virtual collaboration. The purpose of this phenomenological qualitative study was to examine the virtual collaboration lived experiences of remote online adjuncts. The study helped unveil the motives and lived experiences of virtual collaboration among online adjuncts.

The current research is sparse when narrowed down to the population of remote online adjuncts. Because remote online adjuncts are a specific population of professors, the barriers and benefits to virtual collaboration may be different from faculty who work full-time in a brick and mortar building. Because virtual collaboration among remote online adjuncts is not pervasive in the current literature, the phenomenological approach allowed the searching of patterns across participants.

The central question asked: What effective virtual collaboration lived experiences are remote online adjuncts using to influence their teaching strategies to develop as professionals? The interview replies from 10 remote online adjuncts created the significant statements about virtual collaboration. The composite description revealed nine themes about how participants experience virtual collaboration. The study suggests that higher education leaders would be well served to focus their efforts on leadership that will promote virtual collaboration practices. It is advisable that higher education leaders look for ways to provide leadership to connect collaborators, create opportunities for collaboration, and define clear roles for virtual collaboration. Remote online adjuncts may find camaraderie, social connections, an opportunity to participate in scholarship, a chance for self-reflection, and develop a sense of pride through virtual collaboration. Barriers that must be overcome for virtual collaboration included trust, a lack of time, and a feeling of pressure to participate.

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TABLE OF CONTENTS

LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER 1 INTRODUCTION TO THE STUDY	1
Background of the Increase in Online Education and Adjuncts	3
Research Questions	7
Central Question	7
Sub-questions.	7
Definition of Terms	7
Delimitations	10
Limitations	11
Significance of the Study	12
Educational Leadership	12
Summary	14
CHAPTER 2 REVIEW OF THE LITERATURE	16
Online Education Trends	17
Virtual Collaboration	22
Computer-Mediated Communication	26
Computer-Mediated Communication (CMC) and Professional Development	28
Virtual Professional Learning Communities	29
Barriers	32
Readiness for Virtual Collaboration	33
Communication Obstacles	36
Trust	37
Sustainability	39
Social Presence	40
Benefits	46
Overcome Isolation	47
Social Context: Vygotsky and Bandura	50
Professional Development	53
Conclusion.	57

CHAPTER 3 METHODOLOGY	60
Design of the Qualitative Approach	60
Phenomenology	61
Research Questions	62
Central Question	62
Sub-questions	62
Role of the Researcher	66
Research Protocol	67
Prior to Step One- Epoche	70
Step One- Significant Statements and Labels	71
Step Two- Display and Combine	72
Step Three- Clustered Meaning Units	72
Trustworthiness	73
Credibility and Confirmability	74
Transferability	75
Dependability	
Confidentiality	
Summary	77
CHAPTER 4 DATA ANALYSIS	
Personal Experiences of Virtual Collaboration	79
Epoche	79
Participant Selection and Demographics	80
Central Question	85
Data Analysis	85
Horizonalization- Significant Statements	86
Interview Data	94
Clustering Meaning Units- Labeling Themes	113
Textural Description	
Structural Description	
Composite Description	
Meaning Theme 1- Need for leadership	123

Meaning Theme 2- Camaraderie (fellowship)	124
Meaning Theme 3- Trust	125
Meaning Theme 4- Social Connections	125
Meaning Theme 5- Scholarship- (research)	125
Meaning Theme 6- Self-Reflection- (How do I measure-up? What is my performance compared to others?)	126
Meaning Theme 7- Pride	126
Meaning Theme 8- Lack of time	127
Meaning Theme 9- Pressure to collaborate	127
Summary of Results	127
Conclusion	128
CHAPTER 5 FINDINGS, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS	130
Findings	130
Central Question answered from the analyses of the sub-questions	139
Virtual Collaboration Model	139
Conclusions	140
Implications	141
Implications for the Discipline	142
Implications for Remote Online Adjuncts	142
Implications for Educational Leaders of Higher Education	144
Implications for Future Research	145
Recommendations	145
Recommendations for Remote Online Adjuncts	146
Recommendations for Educational Leaders of Higher Education	146
Recommendations for Future Research	148
Summary	149
REFERENCES	152
APPENDIX A Letter to International Society for Teaching in Education (ISTE)	166
APPENDIX B Screening Letter to Potential Participants	167
APPENDIX C Letter to Potential Participant	169
APPENDIX D Subject Information and Informed Consent	170

APPENDIX E Consent to be Audiotaped	172
APPENDIX F Participant Demographic Questionnaire	173
APPENDIX G Interview Protocol	175

LIST OF TABLES

Table 1. Participant Demographics	82
Table 2. Participant Reflections From Demographic Questionnaire	83
Table 3. Selected Significant Statements.	87
Table 4. Frequency of Virtual Collaboration Tools by Participants	97
Table 5. Themes or Meaning Units of Evidence.	114
Table 6. Summary of Virtual Collaboration Experiences.	121
Table 7. Structural Description of Virtual Collaboration Experiences	122
Table 8. Virtual Collaboration Themes.	130
Table 9. Meaning Themes and Implications	141

LIST OF FIGURES

Figure 1. Model of Preferred Methods of Virtual Collaboration	131
Figure 2. Meaning Themes- Benefits and Barriers of Virtual Collaboration	138
Figure 3. Model of Virtual Collaboration of Remote Online Adjuncts	140

CHAPTER 1 INTRODUCTION TO THE STUDY

Although hiring adjunct faculty to teach online classes is commonplace in institutions of higher education, less common is a clear understanding of how adjunct faculty collaborate with their peers once they start teaching online (Wolf, 2006). Many institutions of higher education offer online classes and turn to adjuncts to help teach them (Allen & Seaman, 2010). Changing enrollment numbers for online universities have increased the number of adjuncts needed to fill online teaching positions. Over the past five years, students taking online classes increased 10 times faster than traditional enrollments, and 31% of all higher education students take at least one college class via the Internet (Allen & Seaman, 2010). As adjuncts fill these teaching vacancies, many do not have an understanding of how to virtually collaborate with their peers (Wolf, 2006).

According to the American Association of University Professors in 2009, 41.1% of all instructional staff in American institutions of higher education were adjuncts. Increased online class offerings led to the hiring of more adjunct faculty (McLean, 2006). To stay competitive and to meet the growing enrollment of online students, many institutions of higher education added more online classes (Allen & Seaman, 2010; U.S. Department of Education, 2004). Many of these remote online adjuncts teach from offsite locations, isolating them from the physical college campus. Thus, the faculty member is considered to be a remote employee who does not attend the physical campus (Kim & Bonk, 2006). Remote online adjuncts typically work from home offices, sometimes located thousands of miles away from the college where they teach. Working from a home office also results in a geographical separation of faculty members from their peers. The separation often makes face-to-face collaboration difficult (Shattuck, Dubins, & Zilberman, 2011).

Developments, such as, new advancements in pedagogy and frequent changes in technology may have caused online adjuncts to face challenges because of their physical removal from the campus (Shattuck et al., 2011). The increased distance may lead to the remote online adjunct feeling isolated because of the lack of communication or support from other instructors. In a traditional campus setting, adjuncts have the opportunity to collaborate with colleagues face-to-face (Shattuck et al., 2011), however when adjuncts are offsite or remote, face-to-face collaboration with peers is not feasible (McLean, 2006). The distance between online remote adjuncts creates a need to find other solutions for remote online adjuncts to collaborate.

Virtual collaboration is one approach for remote online adjuncts to interact with peers, as the use of the Internet for collaboration removes the barrier of distance (McLean, 2006). Virtual collaboration is a process for working with others to create a product, to examine professional practices, or to discuss topics via the Internet (Puzziferro-Schnitzer, 2005). Though virtual collaboration could offer a viable option to interact with other adjuncts, a gap exists in how institutions of higher education and adjuncts approach the process. Although many institutions who hire remote online adjuncts realize the need for collaboration, it is unclear the best way to support these faculty members (Kudaravalli & Faraj, 2008). The lack of a knowledge about virtual collaboration practices may lead to confusion.

Possessing a clear understanding of how remote online adjunct faculty collaborate virtually could provide higher education administrators with a better understanding of how to foster these practices. By understanding the remote adjunct faculties' lived experiences, administrators and adjuncts who teach online can learn the strengths and weaknesses of virtual collaboration. As adjuncts teach online from remote locations, the need to understand virtual collaborative lived experiences of this population becomes more important (McLean, 2006).

The organization of this chapter begins with background information about the increase in enrollment for online education and the subsequent need for more remote online adjuncts as well as the need to understand virtual collaborative practices, followed by a statement of the problem, the purpose of the study, and the research questions. The chapter concludes with a definition of terms, statement of the delimitations and limitations, and the significance of the study.

Background of the Increase in Online Education and Adjuncts

Changes in the delivery and availability of online education occur because of increased enrollment of students, cost savings to higher education institutions and flexibility for students (Allen & Seaman, 2010; McLean, 2006). Over the past five years, student registration in online classes significantly increased (Coughlin & Kadjer, 2009). Surveys to more than 2,500 colleges and universities nationwide indicated that approximately 5.6 million students enrolled in at least one online course in fall 2009 (Allen & Seaman, 2010). In higher education, 34% of institutions offer a full degree or certificate program online (Santilli & Beck, 2005). Increasing student enrollment in online courses changed the way that many higher education institutions offer courses. Considering the increased desire to stay competitive with other higher education institutions, many colleges offer online courses (Santilli & Beck, 2005).

With the expansion of online enrollment, there was an increase in the number of faculty needed to teach online (McLean, 2006). Many institutions of higher education became more reliant on part-time or adjunct instructors. Administrators of higher education institutions cite cost savings and flexibility as two of the main reasons colleges enlarged their numbers of remote online adjunct instructors (Puzziferro-Schnitzer, 2005; Wyles, 1998). Along with the cost

savings and flexibility, the enrollment of students in online courses also led to more hiring of remote online adjuncts (McLean, 2006).

Statement of the Problem

Adjuncts teaching via the Internet are an integral part of online higher education, yet few studies offer insight into the benefits, barriers, and lived experiences of how this population virtually collaborates. Investigating the advantages and disadvantages of virtual collaboration requires a different approach for researchers than traditional explorations of face-to face collaboration (Hemetsberger & Reinhardt, 2009). Remote online faculty have unique collaboration needs because of their distance from campus. The lack of current knowledge about virtual collaboration of remote online adjuncts does not provide a possible virtual collaboration model for faculty and administration to consider when looking for alternate methods of face-to-face collaboration. The lack of a model could lead to confusion about how remote online adjuncts virtually collaborate. Due to the voluntary nature of virtual collaboration and the lack of face-to-face interaction, the role of collaboration experiences needs attention (Kudaravalli & Faraj, 2008). Little information exists about how adjuncts are using virtual collaboration, and institutions may not be offering opportunities for virtual collaboration to their remote online adjuncts.

Understanding the virtual collaboration practices of remote online adjuncts includes knowing lived experiences of how these faculty collaborate online (Shattuck et al., 2011). The lack of current research limits the development of knowledge about both commonalities and differences in how online remote adjuncts use virtual collaboration. Without a model, remote online faculty cannot gain a clear understanding of virtual collaboration practices. Researchers (Allen & Seaman, 2010; Kudaravalli & Faraj, 2008; Shattuck et al., 2011) suggested that

professional development opportunities focusing on helping remote online adjuncts become familiar with online teaching skills may not be widely available. To help both remote online adjuncts and higher education administration develop future virtual collaboration practices, an awareness of current virtual collaboration lived experiences must exist. A model of virtual collaboration practices provides a framework for remote online adjuncts to follow. Currently, a virtual collaboration model for remote online adjuncts does not exist in the literature.

Purpose of the Study

The purpose of this study was to determine the virtual collaboration experiences of remote online adjuncts and create a model of lived experiences. By examining the current virtual collaboration lived experiences of remote online adjuncts, colleges can compare the opportunities currently offered for collaboration with existing lived experiences. Understanding the lived experiences of remote online adjuncts could provide a framework to improve virtual collaboration practices. By revealing the common practices and experiences of virtual collaboration, educational leaders may continue to work toward the removal of virtual collaboration obstacles while reinforcing operationally productive examples. The common practices and experiences may help administrators to recognize the lived experiences of their remote online adjuncts while tailoring a professional development opportunity from virtual collaboration (Kudaravalli & Farai, 2008; Shattuck et al., 2011).

The rising prevalence of collaborative experiences among professionals makes virtual collaboration an important topic to research (Kudaravalli & Faraj, 2008). The importance of this study hinged on finding greater understanding of the defining components of virtual collaboration. Accordingly, the creation of a virtual collaboration model could offer new

insights and a different outlook on the topic of collaboration for remote online adjuncts. The creation of such a model provides a framework to better understand the topic.

A model is a beginning theory to understand and connect ideas that occur in patterns (Sarker & Sahay, 2003). Remote online adjuncts are important to institutions of higher education, and thus it is important to have a virtual collaboration model for decision-making on how to change current collaboration practices. The exploration of the methods and approaches remote online adjuncts use for virtual collaboration build an understanding of the critical components of these lived experiences. When the purpose is to provide an understanding of the critical components of a situation such as virtual collaboration, one approach is to use a phenomenological analysis. Researchers use case phenomenology to understand essential themes of a lived experience (Creswell, 2007). For the purpose of this study, online remote adjuncts from different institutions of higher education provided data resulting in the conceptual framework for virtual collaboration practices.

In addition to administrators benefitting from a virtual collaboration model, remote online adjuncts may also benefit from the knowledge of how their peers are virtually collaborating. By analyzing the virtual collaboration lived experiences of this population, other remote online adjuncts may apply the same principles. Those who already virtually collaborate may use the new knowledge to change or enhance perception and practices (Wolf, 2006). In addition, remote online adjuncts could benefit by exploring their own professional development needs through a virtual collaboration conceptual model (Shattuck et al., 2011). The conceptual model needs to include an understanding of the benefits and barriers to virtual collaboration as well as lived experiences by remote online adjuncts.

Research Questions

The specific problem required exploring current virtual collaboration lived experiences of remote online adjuncts who teach online. One central question and six sub-questions guided this study to identify virtual collaboration lived experiences.

Central Question

What virtual collaboration practices are remote online adjuncts using to influence their teaching strategies and to develop as professionals?

Sub-questions

- 1. What methods or approaches are remote online adjuncts using for virtual collaboration?
- 2. What are the reasons for virtual collaboration among remote online adjuncts?
- 3. What are the barriers keeping remote online adjuncts from virtually collaborating?
- 4. What are the benefits for remote online adjuncts who virtually collaborate?
- 5. What are the perceptions of remote online adjuncts about virtual collaboration?
- 6. What underlying themes, if any, emerge from remote online adjuncts experiences of virtual collaboration?

Definition of Terms

The following terms are used throughout this study. The definitions are included as follows:

Adjunct. For this study, adjuncts are part-time and not on or near the college campus (Gappa & Leslie, 1993). In addition, an online adjunct is considered *remote* when teaching occurs from a home office. Remote online adjunct are telecommuters who perform their jobs away from the college campus (Dolan, 2011).

Asynchronous. A term used to describe the flexibility offered in an online classroom that allows the teacher and students to access the class without a prescribed time and are not obligated to attend the class on designated days (Tsinakos, 2003).

Collaboration. An organized procedure in which people work together in a combined manner, to examine, and influence professional practice to improve individual and group results (DuFour, Dufour, & Eaker, 2008; Vallance, Towndrow, & Wiz, 2010; Xu, Zhang, Harvey, & Young, 2008).

Computer mediated communication (CMC). The communication by computer that permits and stimulates an extensive ubiquitous, far-reaching form of collaboration with others for professional development and learning (Kabilan, Adlina, & Embi, 2011). CMC incorporates electronic collaboration, which roots grounded in social constructivism theory (Davis & Resta, 2002). The definition now includes social media (Fuchs, 2011). Examples of CMC include Facebook, LinkedIn, Twitter, and other formats such as blogs.

Face-to-face teaching. A process that takes place in a brick and mortar building with no replacements of computer-generated meetings in place of schoolroom meetings (Taylor & McQuiggan, 2008).

International Society of Technology in Education (ISTE). ISTE is a not-for-profit organization dedicated to supporting the use of information technology to aid in learning and teaching of K-12 students and teachers. A special interest group located within ISTE is the Special Interest Group of Teacher Educators (SIGTE) serves professors and other professionals who are focused on education with a peer-reviewed journal and other venues that address inservice training, research in computer education, and appropriate training materials ("International Society For Technology In Education", n.d.).

Isolation. The traditional notion of faculty working alone (Kabilan et al., 2011). The remote online adjunct works in isolation from management and peers (Dolan, 2011).

Online instruction. Teaching entirely online without any ability to meet in a brick and mortar building (Taylor & McQuiggan, 2008).

Online Universities. Higher education institutions that offer instruction via computers through the Internet (Bowditch et al., 2008).

Private practice. The autonomous practices in higher education that promote isolation by teaching in secrecy without sharing teaching practices with others (Donnison et al., 2009).

Professional development. The broad methods and activities faculty use to continue their own learning and participate in training to advance abilities to meet students' various needs and learning styles (Kabilan et al., 2011).

Online professional learning community. A professional learning community that meets virtually. The groups share a common cause and collaborate in learning opportunities meant to improve teaching practices (Ke & Hoadley, 2009).

Socio-cultural theory. A theory that both human beings and technology are best understood when viewed from within a social context (Hemetsberger & Reinhardt, 2009).

Social learning theory. A theory popularized by Bandura and stated that learning occurs through the observation and modeling of others (Witt & Mossler, 2010). The Internet changes how people learn through the sharing of innovations, ideas, and values (Bandura, 2006).

Social presence. Allows the participants of an online group to experience a sense that others are present even though distance separates the community geographically. Social presence in an online platform makes people think that others are present (Garrison, Anderson, & Archer, 2000).

Transcendental Phenomenology. "Focuses on the description of the experiences of the participants and describes the meaning for several individuals of their lived experiences of a concept or a phenomenon" (Creswell, 2007, p. 57). Moustakas (1994) exposed the distinctive features of phenomenology as a way to understand complex social phenomena.

Virtual collaboration. Allows professionals to work together, pool resources, communicate, and share ideas (Coughlin & Kadjer, 2009). A process for working with others to create a product, to examine professional practices, or to discuss topics via the Internet (Puzziferro-Schnitzer, 2005).

Delimitations

Several elements delimited this study. The small amount of participants in this study delimited the findings. The inclusion criteria delimited the participants by requiring them to meet six criteria for participation. First, faculty must only work online from their home computers and not attend a physical campus. Participants must be telecommuters who are isolated from their peers and do not attend a brick and mortar building. The participants for this study were delimited to remote online adjuncts and other full-time faculty were not included. Second, participants must not have any opportunities to collaborate face-to-face with their colleagues. Third, participants must only work as adjuncts who are part-time employees. Fourth, participant can work for more than one college, but all work must be done from the home computer. If the adjunct steps onto a physical campus, he /she is not eligible to participate in the study. Fifth, participants need to have a minimum of three years' experience as a remote online adjunct. Finally, participants must also have experience with virtual collaboration. The inclusion criteria delimited the number of remote online adjuncts which restricts transferability. The participants did not represent all content areas of higher education. Only a few specific fields were

represented, which delimited sharing findings from other content areas, such as criminal justice and psychology will not be included in this study and therefore limited the findings to only certain areas of higher education. The above delimitations identify potential weaknesses of the study.

Limitations

In this qualitative research study, there are several limitations to discuss. First, maturation was a process of change that occurred naturally within the subjects because of the passing of time or experiences during the study. The maturation is not a consequence of the study or the researcher's involvement. Second, a possible threat to this study was the consideration for the current situations of the participants. The participants may have participated in a recent event that would alter their perceptions about virtual collaboration. Third, participants' biases about virtual collaboration may have limited their responses. The participants' experiences and biases may prevent them from answering honestly. Past collaboration experiences in a face-to-face setting or online may have biased the responses. Fourth, the interviews took place over the telephone. The lack of face-to-face communication limited the study because the use of the telephone did not allow the researcher to see the non-verbal cues of the participants (Creswell, 2007). The researcher was not able to see the body language and detect the level of the participant's comfort with the questions. Fifth, other participants may result in different findings of virtual collaborative experiences of remote online adjuncts. The study was limited by the gender distribution of eight women to two men. Finally, participants may have feared that their answers provided information for an evaluation of their job performance. Because the researcher could not control these phenomenon, they are limitations.

Significance of the Study

The proposed study might be significant to both online remote adjunct faculty and higher education administrators. Although remote online faculty may have experienced face-to-face collaboration, the same may not be true of virtual collaboration. The significance of the study lied in researching how these faculty virtually collaborated, given the lack of professional development existing for remote online adjuncts (Wolf, 2006). The study attempted to provide a virtual collaboration model, an imperative for remote online adjuncts. The following section provides more details on the areas of significance.

Educational Leadership

Educational leaders in charge of remote online adjuncts have similar goals to those administrators at brick and mortar colleges in terms of professional development and collaboration for faculty (Dolan, 2011). The challenge for educational leaders at higher education institutions is creating a system that allows for professional development and collaboration among faculty who are geographically isolated from each other. The remoteness creates an isolated work environment that lacks a direct line of communication to address questions, share resources, or obtain support (Ashton, 2013). Dolan (2011) noted that educational leaders and administrators have looked for ways to create a greater sense of community. The idea surrounding the development of community among online remote adjuncts is that they will share best practices, hone their skills, and continue to develop best practices (Dolan, 2011). The challenge for educational leaders is to find ways to foster opportunities for collaboration and professional development among remote online adjuncts.

Educational leaders recognize that remote online adjuncts are significant members of higher education faculty (Wolf, 2006). Understanding the lived experiences of virtual

collaboration of different remote online adjuncts reveals a pathway for collaboration. To collaborate virtually, educational leaders must understand the activities that foster and develop this skill. This study deepened the understandings of how remote online adjuncts virtually collaborate. Through the examination of current structures of virtual collaboration at several institutions, examples of virtual collaboration provided a conceptual model for remote online adjuncts and administrators. Understanding virtual collaboration practices is important for both present and future remote online adjuncts wanting to connect with others in their field.

Virtual collaboration is a novel practice for many remote online adjuncts (Bonk, 2002). The rapid increase of students taking Internet classes coupled with the surge of newly hired remote online adjuncts could lead to more remote online adjuncts seeking ways to improve their skills. Understanding virtual collaboration practices of remote online adjuncts may be a pathway for how remote online adjuncts can share best practices with inexperienced remote online adjuncts. Therefore, newly hired remote online adjunct faculty members could use this information to begin participating in virtual collaboration (Kudaravalli & Faraj, 2008).

Many higher education institutions lack professional development for remote online adjuncts (Wolf, 2006). These institutions may want to consider virtual collaboration to fill some of these professional development needs. Bonk (2002) found that discrepancies existed between perceptions among online adjuncts about online professional development and virtual collaboration as professional development. In addition, Shattuck et al. (2011), discovered that even for higher education institutions that do offer professional development, it generally does not focus on remote online adjuncts' needs. The demonstrated need for a virtual collaboration model and the lack of systems utilized by higher education institutions indicated the significance of this study.

Further, this study includes practical insights and a model for administrators to understand how to make virtual collaboration work to the specific needs of their remote online adjuncts. The multi-faceted purpose of this study added to the research by using a real-world approach to understand the lived experiences of the remote adjuncts teaching online. Using a practical approach to how remote online adjuncts virtually collaborate provided significant data for future and current remote online adjuncts who desire to collaborate with their peers.

Therefore, the most appropriate way to learn about virtual collaboration practices of online remote adjuncts was analyzing their experiences.

Researchers Brooks and Gibson (2012) noted that models for technology-mediated collaboration need to be updated. The results of this study added practical information and a model for lived experiences of remote online adjuncts teaching who want to collaborate virtually with their peers. Thereby, the proposed study added to the body of literature that exists for virtual collaboration. The focus of most research on virtual collaboration described students' needs more so than the faculty needs (Ali et al., 2005). A more nuanced understanding of lived experiences in virtual collaboration among remote online adjuncts could prepare universities and faculty to meet virtual collaboration needs through a conceptual framework. A study that focused on the current virtual collaboration practices of remote online adjuncts provided information needed to develop a model for understanding how to make better use of virtual collaboration opportunities.

Summary

Although many institutions of higher education employee adjuncts to teach online as telecommuters, higher education administrators have struggled to find ways to support professional development of adjuncts (Dolan, 2011). This chapter introduced the study that

included the introduction, problem statement, and purpose of the study. The purpose of this study was to define the virtual collaboration experiences of remote online adjuncts and create a model of these practices. In addition, the research question, definition of terms, delimitations, and limitations provided the boundaries of the study. Finally, this study is significant because virtual collaboration is new, a lack of professional development exists for remote online adjuncts, and the study will add insights about the topic.

The intent of Chapter Two is to present a critical analysis of prior scholarship related to the research questions of the study. The research analysis includes an overview of the face-to-face and virtual collaboration trends in online education and professional learning communities. The literature review explores past and current research of virtual collaboration. The contents of Chapter Two also contains the barriers and benefits to virtual collaboration. The literature review evaluates areas of consensus, dispute, and developments made in virtual collaboration.

CHAPTER 2 REVIEW OF THE LITERATURE

In the last two decades, significant growth occurred in the enrollment of college students in online courses, both from private for-profit online institutions and at traditional brick and mortar institutions (Chau, 2010). Reports provided from the Sloan Consortium found that online enrollments in higher education continued to grow in 2010 (Shattuck et al., 2011). To fill the expanding online course enrollments, many institutions of higher education hire remote faculty to teach online. Shattuck et al. (2011), stated that part-time faculty teach more online classes than full-time faculty in a survey of four-year higher education institutions in the United States. The changes in hiring practices of remote online adjuncts created a new and unfamiliar situation in higher education. Online instruction is a new practice for many higher education faculty (Hawkins, Barbour, & Graham, 2012). As more institutions of higher education move toward online learning, the question of how to foster collaboration arises.

A prominent gap in the research exists regarding higher education remote online adjuncts collaboration practices (Donnison, Edwards, Itter, Martin, & Yager, 2009; Stevenson, Duran, Barrett & Colarulli, 2005). Austin and Baldwin stated that not all of higher education acknowledges or accepts collaboration. For these reasons, conducting comprehensive research on collaboration was an imperative (Martin, & Yager, 2009). Currently, the literature does not contain a model of virtual collaboration practices for remote online faculty. The purpose of this study was to investigate the experiences of online remote adjuncts in an effort to create a model of their virtual collaboration practices. Understanding which virtual collaboration practices to support might manipulate the virtual collaboration of remote online faculty to a more meaningful and productive state. Gaining perspective on the remote online adjunct faculty's lived

experiences would encourage administrators and adjuncts who teach online to develop virtual collaboration opportunities.

The organization of the literature review occurs in three main sections. The first section includes the online trends in education. A small portion of the literature review covers face-to-face collaboration to provide background knowledge of collaboration. The second section of Chapter Two is a summary of three types of collaboration: face-to-face, virtual, and computer-mediated collaboration. The third section is a review of the current knowledge of the barriers and benefits to virtual collaboration. Chapter Two provides research on the virtual collaboration practices of remote online adjuncts.

Online Education Trends

The literature review indicates enrollments for online education have risen in the past 10 years (Allen & Seaman, 2010; Coughlin & Kadjer 2009; McCarthy & Samors, 2009; McLean, 2006; US Department of Education, 2004). According to Allen and Seaman, in the United States 73% of institutions of higher education reported more demand for existing online courses and programs. Institutions of higher education showed 74% of reporting public institutions rated online education as critical to their long-term strategy. Shea (2007) found that trends of online enrollment have changed and more than three million students enrolled in online courses in 2007. The need and use of remote online adjunct faculty increased in accordance with the evolution of online education. The upsurge of online enrollments exerts increasing pressure on remote online faculty to prepare and teach online classes (Roberts, Thomas, McFadden, & Jacobs, 2006). Similarly, community colleges, such as Florida Community College at Jacksonville (FCCJ) offer a large quantity of online course. Puzziferro-Schnitzer (2005) stated that FCCJ enrolls more than 35,000 students online and remote online adjuncts teach more than

75% of these courses. Furthermore, "About 70% of the active 250 adjuncts teaching in the program reside in the state of Florida while the other half live in assorted states" (Puzziferro-Schnitzer, 2005, para. 2). Institutions of higher education that have greater than 15,000 total enrollments make up 14% of all institutions with online offerings (Allen & Seaman, 2010)

The Center for Community College Student Engagement (2010), a research and service initiative, found that 67% of community college faculty members across the United States were adjuncts. Many of these adjuncts have full-time day jobs or simultaneously teach for several universities (Puzziferro-Schnitzer, 2005). From 2002 to 2007, an annual growth rate of 20% occurred in students taking online classes (McCarthy & Samors, 2009).

Online higher education programs offer access, convenience, and flexibility to students (Harris & Martin, 2012). Students and faculty have access to classrooms without traveling or relocating closer to the college. Offering online programs removes constraints on the physical organization (Allen & Seaman, 2010). The college does not have to build new buildings to accommodate more students. Schunk (2008) added that the online courses provide a creative delivery mode for schools that need to offer more courses without stressing the physical campus resources. Online programs offer many advantages to students and faculty, but training faculty to teach in the online environment needs consideration (Schunk, 2008).

Online Faculty Training

Researchers suggested that both remote online adjuncts and tenured faculty have concerns about training, professional development, and support for online teaching (Keramidas, Ludlow, Collins, & Baird, 2007; Kim & Bonk, 2006). Rice and Dawley (2007) surveyed 178 online faculty and found that 93% had five or fewer years of experience teaching online. The structure of online education differs in methods and approaches, generating a desire by faculty

for training and participation in professional development. A new adjunct may be reluctant to ask too many questions in fear of losing the newly acquired position (Kim & Bonk, 2006). Remote online faculty need training to be successful (Shattuck et al., 2011).

Kim and Bonk (2006) suggested that critical components of successful online faculty are training and support. The unique role of an online instructor requires support to meet the various demands of facilitating a class. Kim and Bonk surveyed 562 college adjuncts, including demographic information, questions about online learning, and predictions about online teaching and learning. The researchers found that online faculty had several needs, including abilities to facilitate or manage the online classroom, develop online courses, and continue to develop as a subject matter expert in their fields. Many of the respondents expected to receive training and support from their institutions to prepare for online teaching (Kim & Bonk, 2006). The study indicated that remote online faculty desire training and more research to evaluate if virtual collaboration can fill this void.

Researchers Keramidas et al. (2007) documented the importance of training instructors before teaching in a distance education program for their first time. Hewett and Powers (2007) noted that a significant gap exists in professional development and support of online instructors. Shattuck et al. (2011), added that professional development and training opportunities do not exist for all new online faculty. Even though the numbers of remote online adjuncts continue to grow, the research does not substantively address different options, such as virtual collaboration for training and professional development. Faculty who teach in a brick and mortar building benefit from their peers' nearby availability for asking questions and engaging in discussions, which helps with faculty training (Allen & Seaman, 2010). On-campus faculty have the

advantage of office spaces, providing a more natural integration and evolution of learning from their peers (Palloff & Pratt, 2005).

In a study by Ali et al. (2005) 70 faculty members from University of West Georgia shared ways that the university could assist faculty in delivering online courses. The response of the faculty showed a need to provide more frequent and varied training sessions, but the study did not reveal the types of training needed. Their study reviewed the professional development and training needs of remote online adjuncts, thereby, adding to the knowledge of the demands of online teaching.

Remote online faculty need professional development and training which might be achieved through collaboration. A number of researchers found that many of the needs for training, such as using emerging technology, providing quality feedback, and sustaining participation for remote online faculty are not being met (Keramidas et al., 2007; Kim & Bonk, 2006). Collaboration is imperative to higher education faculty training (Harris, 2010). Stevenson et al. (2005) added that collaboration is a practical approach that offers a flexible option for higher-education faculty development. The next section focuses on the concepts and definition of collaboration in higher education. Changes in higher education collaboration deserves attention (Martin & Yager, 2009) especially as these changes relate to the training and professional development of online remote faculty.

Collaboration

Collaboration is an integral part of education (Vallance, Towndrow, & Wiz, 2010), and defining collaboration and the role it plays in higher education bears importance. Austin and Baldwin (1991) stated that no definition of collaboration provides a description of the numerous examples. The definition of collaboration varies based on its purpose. Some researchers focus on

collaboration as a product while others view collaboration as an intellectual pursuit. Fichter (2005) viewed collaboration as an event by a community of learners that usually leads to a product or culminating project. Vallance et al., (2010) defined collaboration as a group of participants who set out to meet a goal. Blankenstein (2010) described collaboration as faculty frequently working together to improve teaching effectiveness and strategies. Collaboration can take place in many venues and have different outcomes based on the size of the group and the purpose for meeting (Vallance et al., 2010). The definition of collaboration should be broad and flexible (Austin & Baldwin, 1991).

The reasons for faculty collaboration in higher education differ. Austin and Baldwin (1991) stated that collaboration in higher education occurs in two ways: teaching and research. According to Austin and Baldwin, higher education faculty collaborate by conducting research, writing, and partnering in teaching. Collaboration also encourages faculty to think beyond the narrow borders of their classrooms by incorporating diverse teaching strategies, sharing knowledge, and communicating with peers (Stevenson et al., 2005).

Collaboration techniques and strategies in higher education differ based on the setting and needs of the faculty. The types of collaboration can be divided into several categories. The following sections focus on three types of collaboration: face-to-face, virtual, and computer-mediated communication.

In-Person (Face-to-Face) Collaboration

One form of collaboration takes place when faculty meet face-to-face. According to Austin and Baldwin (1991), face-to-face collaboration can include teams of two, small groups meeting regularly, or flexible groups meeting infrequently. Face-to-face collaboration can be

formal or informal. In a structured collaboration, faculty have a clear division of assignments, a fixed schedule in place, and clear deadlines set (Austin & Baldwin, 1991).

Increasing acknowledgment of the value of face-to-face collaboration occurred among higher education leaders and faculty in the past 20 years (Kezar & Lester, 2009). Face-to-face collaboration offers several advantages. According to Kezar and Lester, collaboration affords the benefit of innovation, enhanced teaching and learning, better research, and improved governance and management. Specifically, Kezar and Lester stated that universities using face-to-face collaboration include opportunities for faculty to learn together across a variety of disciplines.

Bower (2001) found that face-to-face collaboration allows higher education faculty to learn from one another that may lead to improved motivation. In addition, Austin and Baldwin (1991) described face-to-face collaboration as a means for individuals to work toward goals that would not be possible for faculty working in isolation. Stevenson et al., (2005) found several advantages of face-to-face collaboration in a 3-year study of 60 faculty at University of Hartford. One goal of the project was to intensify the effectiveness of the teaching strategies used by faculty (Stevenson et al., 2005). At the end of the training, 22 of the 60 faculty members participated in focus groups. One common theme that emerged from the focus groups was the advantages of frequent interaction that face-to-face collaboration allowed such as flexibility, sharing a wide variety of strategies, and the ability to build templates for course design (Stevenson et al., 2005).

Virtual Collaboration

Definitions of virtual collaboration differ throughout the literature. Coughlin and Kadjer (2009) offered one definition of virtual collaboration as process that uses a variety of methods for professionals to work together, pool resources, communicate, and share ideas, fostering

opportunities for self-development. For the purposes of this study, a more simple definition offered by Hu et al., (2011) will be used: faculty learn from each other by sharing knowledge and reflecting on common experiences. Similar to K-12 learning communities, college professors also build learning communities to become more effective and improve pedagogy (Hu et al., 2011). Virtual collaboration may take place via e-mail, online faculty forums, virtual learning communities, online mailing lists, and other forms of communication facilitated by technology.

Advancements in technology have allowed faculty and adjuncts to move collaboration practices to online settings (Hu et al., 2011). The development of the Internet unlocked constraints to allow collaboration without limits by physical location (Hemetsberger & Reinhardt, 2009). Other forms of audio and video communication for collaborative purposes include the telephone, writing letters, sending e-mail, and other documents meant for communication (DeRosa et al., 2004; Hantula et al., 2004).

The purposes for such modes of virtual collaboration vary based on the goals of the collaborators and on the types of universities and their visions (Kabilan et al., 2011). The tools the Internet presently offers provide opportunities for faculty to collaborate virtually in partners, small groups, or larger learning communities. The practice of virtual collaboration frequently occurs through online communities of professional faculty (Kabilan et al., 2011). The Internet offers professionals an opportunity to contribute to groups that support their interests, respond to others intellectual writings, and aid in collaborative problem-solving (Coughlin & Kadjer, 2009).

An urgent transition from traditional courses to online courses prompted Roberts et al. (2006) to describe the beginning of their online faculty teaching and learning community through their experiences at Western Carolina University (WCU). A study group originated based on a review of the literature of faculty learning communities. The group used the literature as a

framework for the evolution of their faculty learning community. Roberts et al., (2006) noted that meetings and collaboration allowed participants to learn from each other while trying new skills. In this example, virtual collaboration helped faculty members discuss their teaching practices. Another advantage that researchers at WCU found through virtual collaboration was that that tenured faculty could support inexperienced faculty (Roberts et al., 2006). The WCU faculty used virtual learning communities to collaborate across disciplines (Roberts et al., 2006). Through the study, they found that virtual collaboration was an alternate method for sharing instructional strategies that included different approaches for feedback, course management, voice technology, and problem-solving. The different modes of virtual collaboration used by the WCU faculty show that there are several types of virtual collaboration.

Types of Virtual Collaboration

Forms of virtual collaboration vary. Farooq, Schank, Harris, Fusco, and Schlager (2008) reviewed 5 months of extracted data from January through May 2007 from an educational networking site called Tapped In. In 2009, Tapped In had approximately 20,000 members with 500 active groups (Farooq et al., 2008). The primary dependent variable was online participation. Farooq et al., (2008) also provided the two main categories for participation. The sample evolved from groups based on synchronous versus asynchronous discussions. A definition provided criteria for what comprised an active versus inactive group. The researchers collected participation data of faculty by gathering data from online systems by counting levels of participation. Although the researchers cautioned the generalizability of the study, they found that social networking and online communication provided a means for virtual collaboration (Farooq et al., 2008). Sistek-Chandler stated, "One out of every 6 minutes spent online is spent on a social networking site, and one half of the total United States Internet audience visits a

social networking site in any given day" (2012, p. 81). The data from this study did not provide information on specifically how people are using the sites, but the results offer insights into the profuse use of social networking. Tapped In is only one of the many social networking platforms available for virtual collaboration and the generalizability offers transferability to other social networks with some modifications (Farooq et al., 2008).

Other successful forms of online collaboration include e-mail, online discussions, and weekly reflections serving as the collaboration framework, as found by Hu et al. (2011), who noted that these tools allowed five college instructors to reflect on and become better faculty. The researchers sought answers to how online learning communities could support teacher effectiveness (Hu et al., 2011). The participants posted their journals on a weekly basis so that others could reply to them and supported each other with a question and answer thread. The participants used a course management system to share ideas. The study, grounded in a theoretical framework of social constructivism, offered the online learning community a social place where members virtually collaborated to influence online teaching practices (Hu et al., 2011). According to the researchers, the completed coding emerged with categories for self-reflection on assignments, course design, and seeking help for technical issues. The results indicated that course design was the most referenced theme for self-reflection, followed by general themes based on the literacy learning community itself, seeking and providing advice, and finally reflections on teaching and learning (Hu et al., 2011).

Virtual collaboration proved successful in a variety of modes and venues. Computer mediated communication (CMC) is one form that continues to evolve and expand opportunities for collaboration. The following section addresses the nuance of CMC.

Computer-Mediated Communication

As early as 1968, researchers for the Department of Defense predicted that a type of computer communities would occur in the future (Fuchs, 2011). Early virtual communities made their debut as early as 1985 with a community of approximately 3,000 learners known as Whole Earth 'Lectronic Link (Sistek-Chandler, 2012). The group formed as an early form of social media where people gathered to communicate online. The earlier uses of CMC included e-mail, chat rooms, and instant messages. Later the definition expanded to include social media because of the change in available tools and platforms (Fuchs, 2011).

The use of CMC provides a diverse group of people the opportunity to come together who could not communicate otherwise (Greene, 2008). In addition, Greene added that CMC allows a broader population to collaborate and permits a social context to exist. CMC differs from face-to-face communication because of its added advantage of threading discussions for archival purposes (Greene, 2008). When opened to the public, CMC permits others to read and provide insights into topics of interest. The advantage of CMC permits communication to be publishable, which allows others access and fosters the social nature of learning (Greene, 2008).

Computer-mediated communication (CMC) offers possibilities for educators to create a process of learning and social connections via the online environment (Kabilan et al., 2011). Alderton, Brunsell, and Bariexca (2011) added that faculty need to engage in dialogue with others who can give support and advice so they can try new and different online strategies. CMC can take many forms from informal dialogue to professional development. For example, online professional development activities and programs have the capability of inspiring virtual collaboration among faculty in a variety of locations in the world (Kabilan et al., 2011). The

CMC and Internet applications make collaboration and social connection possible across a variety of programs for different faculty.

One of the most prevalent social networking locations that incorporate the concepts of CMC is Twitter (Alderton et al., 2011). A group of researchers set out to examine how educators use Twitter to collaborate virtually with other faculty. In the study participants originated from a group of educators who used Twitter regularly. Researchers used 200 consecutive individual messages from a random selection for analysis from each of the participants' Twitter accounts (Alderton et al., 2011). The participants also completed a survey consisting of multiple-choice and open-ended questions. Alderton et al., (2011) stated that for the study, respondents indicated if they had ever collaborated virtually on a professional task, implemented something in their professional practice from virtual collaboration, or professionally benefitted from their participation in Twitter. The results reflected that participants used Twitter to collaborate virtually with other educators. Their connections summoned support, asked questions, and shared materials and ideas (Alderton et al., 2011).

In addition, Alderton et al., (2011) stated "Four unique themes emerged from their responses: access to resources, supportive relationships, increased leadership capacity, and development of a professional vision" (p. 360). All 10 of the participants described specific influences regarding their teaching from collaborating on Twitter. The researchers concluded that the majority of the participants' dialogue on Twitter had an educational focus and offered categories of practice, philosophy, questions, and sharing of resources (Alderton et al., 2011). The participants in this study successfully used the social-networking site of Twitter for CMC.

Other research showed that CMC offers a possible approach to professional development and allows online faculty to experience professional growth in innovative ways. The following section will explore examples of CMC used for professional development purposes.

Computer-Mediated Communication (CMC) and Professional Development

Researchers noted that CMC proved to be a vital means for professional interaction among faculty for professional development (Kabilan et al., 2011). Working with a partner or team with CMC and online networks develops a new opportunity that allows faculty to influence their skills (Jarvenpaa & Leidner, 1999). The advances in computer-mediated communication permit members to engage in collaborative work, when distance would permit them from doing so otherwise (Jarvenpaa & Leidner, 1999). According to the research team of Hu et al., (2011):

Results indicated that 90% of the responding universities (63 of 70) used some form of computer-mediated communication, such as e-mail or online discussion groups, to support their interaction within learning communities. E-mail systems were the most commonly used tools (98.4), followed by online discussion forum tools (42.9%), websites (49.2%), course management systems (27%), and virtual chat tools (7.9%). (p. 58)

The research indicated that higher education faculty uses computer-mediated communication as a means to collaborate. In addition, according to Sistek-Chandler (2012) e-mail and search engines are the most popular applications on the Internet, followed closely by social networking sites. Although the opportunities of CMC allow professional development, some disadvantages also exist.

Noted drawbacks to CMC in the literature include CMC as a less exciting and not as emotionally fulfilling experience when compared to face-to-face interactions (DeRosa et al.,

2004; Hantula et al., 2004). Because the CMC offers a different environment than face-to-face collaboration, some faculty may not want to participate (Hawkins, et al., 2012). Others argued that the specific dialogue that takes place in the online environment outweighs the lack of emotional connection (Fichter, 2005; Sistek-Chandler, 2012). For example, communication in an online environment may be more deliberate because a face-to-face environment creates an atmosphere where participants are overly polite to each other in fear of contradicting the other (Fichter, 2005).

Computer-mediated communication provides a pathway, making virtual professional communities a possibility. According to Kezar and Lester (2009) faculty need a means for creating Professional Learning Communities (PLC). CMC provide the means for virtual PLCs. The following section will review virtual professional learning communities.

Virtual Professional Learning Communities

One form of virtual collaboration occurs through online professional learning communities. The online learning community promotes virtual collaboration and reflection (Digenti, 1998). In an online learning community, faculty communicate through the Internet to achieve a shared goal (Baghdadi, 2011). As professionals collaborate virtually and construct knowledge, they develop communities that support learning and development (Alderton et al., 2011). Reichstetter (2006) emphasized the work of professional learning communities as a team whose members regularly collaborate toward continued improvement in meeting learner needs through a shared vision. The professional learning community takes the form of different groups based on different collaboration needs.

Duncan-Howell (2010) explored the experiences of online groups and offered some decisions concerning possibilities for serving as professional learning communities for faculty.

Participants consisted of 98 faculty in different regions of Australia belonging to online communities with diverse teaching experiences. The results reflected that participants sustained their engagement from 1 to 3 years in the online professional learning communities (Duncan-Howell, 2010). The researchers noted that data indicated the faculty who belonged to online communities involved in the study committed 1–3 hours per week in professional learning communities. The outcome of the study represents an additional 60–80 hours per year spent on professional learning (Duncan-Howell, 2010). Study results indicated that membership to online communities provided faculty a meaningful way to train and support their development (Duncan-Howell, 2010). From this study, professional learning communities might offer a valuable alternative to traditional professional development. In addition, Duncan-Howell (2010) noted that the most significant result collected from the survey was that 86.7% of members considered the experience to be a meaningful form of professional development.

Collaboration and professional learning communities share many of the same traits.

DuFour (2004) stated, "To create a professional learning community, focus on learning rather than teaching, work collaboratively, and hold yourself accountable for results" (p. 6) in reference to Professional Learning Communities (PLCs). Blankenstein (2010) used the term "professional practice forums" to describe how faculty can collaborate by sharing concerns, best practices, and strategies for instruction (p. 153). Collaboration provides the online instructor an opportunity to learn from other online instructors and share ideas. The goal of the professional learning community is to help online faculty understand and learn from their peers (Kabilan et al., 2011). The professional learning community focus allows faculty to communicate and develop skills with their peers while developing a sense of camaraderie (Kabilan et al., 2011). Duncan-Howell (2010) stated that professional learning communities provide a connection to other peers. Online

professional learning communities offer a chance for faculty to engage with their peers and gain insights to others experiences.

Online PLCs offer other advantages. Roberts et.al (2006) offered that PLCs create an opportunity to take the practice of teaching from private to public. Teaching in private means faculty work in isolation and do not share their practices with others. One study of 20 colleges and universities who had higher than predicated graduation rates found that the most important difference among these schools was an intentional focus on improvement that came from sharing practices through PLCs (Roberts et al., 2006). Online professional communities propagate the sharing of ideas and practices when members share their experiences (Kabilan et al., 2011). Similarly, online forums are a suitable approach for supporting collaboration and professional development through networking with other professionals (Davis & Resta, 2002). Finally, as Duncan-Howell (2010) mentioned, online professional learning communities provide a cooperative medium to collaborate around effective teaching strategies.

Other educational settings reflect similar results about the advantages of PLCs. Although the following quote is about K-12 educational communities, it offers relevancy to higher education PLCs. The National Commission on Teaching and America's Future (2002) encouraged the implementation of professional learning communities:

Quality teaching requires strong professional learning communities. Collegial interchange, not isolation must become the norm for faculty. Communities of learners can no longer be considered utopian; they must become the building blocks that establish a new foundation for America's Schools. (p. 17)

Many studies noted the concepts of collaboration, PLCs, mentorships, and teaming as concepts utilized in educational practices. Although the procedures for collaboration may look different

between faculty from different institutions of higher education, many faculty seek to collaborate with peers (Coughlin & Kadjer, 2009). Collaboration takes form in a bevy of different ways, and the evolution of collaboration is noted by Coughlin and Kadjer, who stated "Whether expressed as the peer coaching model in the 70s and 80s, Professional Development Schools in the 80's through the present, or current day professional learning communities, collaboration is increasingly central to emerging models for professional development" (p. 4).

The previous sections provided an overview of several different types of collaboration. Face-to-face collaboration, virtual collaboration, and computer-mediated communication all provide a means for higher education faculty to work in tandem. To understand the possible outcomes of collaboration, the benefits and barriers need exploration. The following sections offer an overview of the barriers and benefits specific to virtual collaboration.

Barriers

To manage virtual collaboration, the connection between communication outcomes such as efficiency and satisfaction require review (Vallance et al., 2010). Studies should explore the impacts of what creates a meaningful online collaboration experience (DeRosa et al, 2004). Understanding the barriers to virtual collaboration may help universities address the factors prohibiting remote online adjunct faculty from participating. Difficulty marks the creation of successful online collaboration experiences and they may not be the best source of professional development (Vallance et al., 2010). Factors such as visibility and social presence may partially serve as reasons for difficulty in replacing face-to-face interaction with computer-mediated communication (Kudaravalli & Faraj, 2008). Vallance et al., (2010) stated that beginning and managing virtual collaboration is unexpectedly complicated in the absence of a strong

foundational understanding of its nature. For virtual collaboration to be successful, it must be recognized as a value-adding endeavor (Vallance et al., 2010).

The next section continues to focus on the common barriers, including readiness to collaborate, communication obstacles, trust, sustainability, social presence, and Internet tools.

According to Kezar and Lester (2009) one of the first steps to removing collaboration barriers is to understand the structures preventing such partnerships.

Readiness for Virtual Collaboration

The culture of higher education does not always welcome collaboration (Donnison et al., 2009; Kezar & Lester, 2009). The research team of Stevenson et al., (2005) noted possible reasons that higher education faculty do not collaborate, which included: a philosophy of private practice, lack of collaborative tools, and time. Donnison et al., (2009) added that the autonomous practices in higher education promote isolation. Kezar and Lester (2009) added that the division and fragmentation of faculty into separate departments is a fundamental principle of higher education faculty who develop a habit of working independently may not be open to the concept of collaboration. Characteristics of higher education institutions include competition for recognition, which can manifest as individualism (Donnison et. al, 2009). Overcoming a competitive culture serves as a significant barrier to virtual collaboration among higher education faculty.

Readiness to collaborate requires knowledge about best practices for virtual collaboration. Even when faculty decide to join a professional learning community, they do not always understand the correlates of effective collaboration. Fullan (2006) noted:

The term [professional learning community (PLC)] travels faster and better than the concept. Thus, we have many examples of superficial PLCs – people calling what they

are doing 'professional learning communities' without going very deep into learning, and without realizing that they are not going deep. (p. 6)

Faculty should seek meaningful collaboration experiences that is tailored and customizable to their needs (Brooks & Gibson, 2012). Blankenstein (2010) noted several elements to reassuring readiness for collaboration in the K-12 setting, including motivation and commitment. Not all faculty welcome collaboration (Blankenstein, 2010). The term private practice describes faculty who close their doors to teach in isolation (Blankenstein, 2010); faculty who teach in isolation, or "private practice" do not have a readiness level to collaborate virtually.

According to Brooks and Gibson (2012), many online collaboration communities are vacant because to be successful, these forums require participants who are willing to contribute. The skills necessary to manage a collaborative activity are not natural to most individuals (Dittman et al., 2010). The skill set necessary for virtual collaboration includes developing a system to perform work, setting goals, and creating channels of communication (Dittman et al., 2010). Confounding the lack of skills is the active nature of participation in Internet mediums (Schunk, 2008). Faculty need motivation to collaborate to improve their teaching skills, and Fullan (2006) cautioned that external motivation is not enough and that readiness for change comes from the internal desire to improve. Dolan (2011) added that the lack of social cues influences motivation, trust, and ultimately job satisfaction with many remote employees leaving their positions or disengaging from the organization. The lack of motivation may be a barrier for remote online adjuncts if they are not willing to contribute to online collaboration.

Unwillingness to contribute is based on a number of factors. Faculty may find locating a online group to collaborate with overwhelming, due to the sheer volume of Internet communities, forums, and people. For example, LinkedIn, a professional networking site had the

following message posted on its website, "As of September 30, 2012, LinkedIn operates the world's largest professional network on the Internet with over 187 million members in over 200 countries and territories" ("LinkedIn Facts," 2012, para. 1). A search of the LinkedIn site by the researcher found 13 different communities using the key word 'adjunct' in the search menu. The largest group contained 4,288 members and the smallest group contained two participants (LinkedIn, 2012). Finding a virtual collaboration group, partner, or site presents a barrier in spite of, or potentially due to a myriad of options.

Remote online adjuncts may also find difficulty starting virtual collaboration because finding other faculty members who share the same ability levels and reasons for collaboration is difficult (Dolan, 2011). Researchers cautioned that seeking others who have identical teaching personalities and experiences can be detrimental (Brooks & Gibson, 2012). Participants should avoid finding compatible participants to collaborate because the practice does not lead to growth that usually evolves from thought-provoking circumstances (Brooks & Gibson, 2012). Although faculty might seek collaborating with others who have similar characteristics, the comfort of collaborating with like-minded peers may interfere with successful collaboration.

A further barrier to faculty virtual collaboration is that they do not find Internet forums a natural means for communication and therefore rely on the familiarity of modes such as email (Brooks & Gibson, 2012). Researchers found some faculty members took an extended time to transition to the idea of online teaching and required time and assurance to move fully to virtual collaboration (DeRosa et al., 2011). The study by DeRosa et al. (2011), found that Internet users became complacent in the applications they use to communicate. Successful virtual collaboration requires participants' readiness for using the Internet for communication and a willingness to try new modes of communication (DeRosa et al., 2011).

Communication Obstacles

Virtual platforms may pose communication obstacles because of the distance and differences in technology between collaborators (DeRosa et al., 2004; Hantula et al., 2004). Virtual communication stunts the use of emotions and nonverbal cues (Garrison et al., 2000). Emotion indicates social presence, but in a text-based environment, representing feelings becomes difficult (Garrison et al., 2000). Lack of emotions can impede communication when collaborators are from different cultures and rely on nonverbal cues and gestures to interpret interaction (DeRosa et al., 2004). Without social cues, online communication and collaboration may frustrate participants. Visual cues are a significant mode of communication in face-to-face situations and the lack of visual prompts may act as a barrier in virtual collaboration.

Forming virtual communities takes more than writing words on a screen (Sistek-Chandler, 2012): the messages need to be succinct and convey clarity in the communication.

Betts (2009) offered that preparation to collaborate requires an understanding of the differences in face-to-face versus virtual communication. Garrison et al., (2000) described the components of a quality virtual message as one where "... the tone of the messages is questioning but engaging, expressive but responsive, skeptical but respectful, and challenging but supportive" (p. 15). In one study, the researcher examined communication and the interpretation tone of e-mails to find that participants overestimated their ability to interpret the meaning of e-mails sent and received (Betts, 2009). Virtual communication and collaboration conducted through virtual communities can be challenging.

Davis and Resta (2002) noted several of these challenges: prioritizing other group members' needs through responsiveness to e-mail, taking the necessary time to collaborate, and sharing feelings. Tensions can easily form from lack of communication or absence of strong or

agreed upon rules (Bauerlein, 2011; Hemetsberger & Reinhardt, 2009). For example, a member not replying to an e-mail within a timeframe that the other participant expects can cause frustration (Sarker & Sahay, 2003). Online communication can give new meaning to the phrase, 'lost in translation' (Garrison et al., 2000).

Computer mediated communication does not offer the same feedback as face-to-face interaction. When people collaborate in traditional settings, face-to-face conversations play a significant role in determining the effectiveness and satisfaction of the experience by the physical reaction or evidence of understanding the listener provides (Kabilan, et al., 2011). The absence of face-to-face communication jeopardizes the ability to create common ground among the collaborators, which may lead to communication failure (Kudaravalli & Faraj, 2008). Understanding the lack of cues usually relied upon in face-to-face communication; faculty must plan for a lack of non-verbal signals and find other means for meaningful exchanges (Betts, 2009). Online communication does not provide the same subtleties to sustain group work as face-to-face exchanges (Garrison et al., 2000) and thus participants must be mindful of this lack of visual and social cuing.

Trust

Without social and visual cues, trust in fellow participants becomes imperative to successful online collaboration. Several researchers found that trust is an integral component of successful virtual collaboration (DeRosa et al., 2004; Jarvenpaa & Leidner, 1999; Moore, 2006). Trust and common purpose characterize successful collaboration experiences among professional learning communities (Moore, 2006). Of all of the influences required to create and maintain a positive experience in virtual collaboration, trust may be one of the most significant (DeRosa et al., 2004; Jarvenpaa & Leidner, 1999). Trust permits participants to establish norms

that guide online interactions (Bowditch et al., 2008). Trust also influences how much a participant shares and the attitude toward accepting others' criticisms (Hu et. al, 2011).

Virtual collaborators who never meet face-to-face may experience difficulty trusting each other because virtual meetings do not reinforce social relationships, shared values, and expectations (DeRosa et al., 2004). Brown et al., (2004) noted that "For participants accustomed to face-to-face contact, the uncertainty and ambiguity inherent in virtual relationships is likely to raise doubts that may constrain interactions and transactions—and trust, by definition, mitigates such constraints" (p. 116). Individuals engaging in face-to-face collaboration use signals such as changes in vocal patterns, body language, and facial expressions to establish trust (Hall, 1999).

An opposing view suggested building relationships is easier and more readily accepted with successful online communication practice (Jarvenpaa & Leidner, 1999). Experienced individuals who learned to trust others through virtual communication may report fewer difficulties with social processes such as trust (DeRosa et al., 2004). Participants lacking virtual collaboration experience may not comprehend the factors needed to build online trust. Jarvenpaa and Leidner stated:

In virtual interaction, trust is likely to be particularly important because collaboration can be effective only if both parties enter into it with a willingness to open themselves to one another and cooperate in carrying out a task, solving a problem, and learning. (p. 117)

Some online communities have bulletin board systems that allow users to share profiles that include pictures, research interests, and contact information. Sharing personal information helps members of the communities get to know each other and discover others who share similar interests or backgrounds (Fichter, 2005).

Researchers recognized trust is a foundation of cooperative behavior such as collaboration (DeRosa et al., 2004; Jarvenpaa & Leidner, 1999; Moore, 2006). Trust is a common barrier to virtual collaboration (Brown et al., 2004; Jarvenpaa & Leidner, 1999). The lack of face-to-face interaction sometimes leads to heightened suspicions and lack of trust by collaborators (Hughes et al., 2002). The absence of trust creates an environment in which participants do not feel safe to share experiences and therefore may lead to difficulties with sustaining ongoing communication.

Sustainability

The inconsistent community of participants may present another barrier to effective online collaboration (DeRosa et al., 2004). The instability of participants leaves a collaborative group in an indeterminate state. When membership rapidly fluctuates, quality of virtual collaboration suffers and unreliable or sporadic participation impedes virtual collaboration (DeRosa et al., 2004). When participants have different agendas or reasons for collaboration, communication frequently fails. Hemetsberger and Reinhardt (2009) found that contradictory goals impede virtual collaboration, which may cause participants to lose their desire to contribute and leave the forum. Longer periods of collaboration and meaningful dialogue increase the levels of sustainability. Association with others who do not substantively participate or who only interact for a short period may lead to failed collaboration (DeRosa et al., 2004). However, the ability to cooperate in an online atmosphere does not equate to social connectivity or guarantee the development of a relationship with others that last (Dolan, 2011).

Continued communication and inquiry are two elements needed by the community to construct meaning (Sistek-Chandler, 2012). Although creating an online collaboration system through Google, Yahoo groups, and other sites is easy, participation requires commitment to

make collaboration valuable and long-lasting (Brooks & Gibson, 2012) and sustaining dialogue may be problematic for some participants. Another facet of nourishing a virtual community requires prolonged interchange. Because virtual participants' geographical locations vary, they do not always share a common background or experience (Kudaravalli & Faraj, 2008). The group is more likely to sustain attendance when participants experience ownership or loyalty because of the sharing of commonness with others. The group must share the responsibility for prolonged, meaningful, sustained dialogue, underscoring the need for trust among participants.

Time is also a factor in sustaining virtual collaboration. Online remote adjuncts spend a great deal of time managing their online courses (Kim & Bonk, 2006). Many courses have a large student population, which could leave an instructor grading 30 to 40 papers a week (Brabazon, 2002). To add to their already heavy workload, Brabazon suggested that an assumption already exists that faculty are not compensated for much of their work or training. The lack of compensation may lead to a sense of resentment about added obligations and demand that a learning community could place on a remote online adjunct (Brabazon, 2002). The best intentions to collaborate may not be sustainable because of time constraints. The lack of time committed to the online community results in a lack of social presence (Kim & Bonk, 2006).

Social Presence

Negative experiences in virtual collaboration may arise from social causes. Various researchers include and define social presence as a key element in online communication (Betts, 2009; Bingham & Conner, 2010; Hawkins et al., 2012; Hughes et al., 2002). Social presence provides a sense that others are present and is necessary for virtual collaboration in which the participants have never met in person (Hughes et al., 2002). Virtual worlds should allow

participants to feel as if they are working together and sharing a space (Bingham & Conner, 2010). Betts conveyed the importance of online faculty feeling connected to a group that maintains communication through online communities. In addition, the research team of Hawkins et al., (2012) found social presence to be an ability to portray oneself as a genuine person in an online comunity. According to Garrison et al., (2000) participants in computer conferences who never met the other participants find the lack of visual cues challenging to establishing the sense of having a conversation with a genuine person (Garrison et al., 2000). Social presence gives the collaborators a sense of emotional connection to others when online (Scarpetta, 2008).

Taking turns or remembering to respond to others provides a sense of social presence (McConnell et al., 2012). Transmitting documents, responding to requests, and acknowledging receipt of documents or messages facilitates turn taking (Sarker & Sahay, 2003). In a 12-week study of online collaboration of novice faculty, Davis and Resta (2002) noted that virtual collaborators found it challenging to remember to respond to e-mails. Participants expect that the receivers will respond in a turn-taking fashion. Disruptions to turn taking happen with easily distractible participants. McConnell and research partners described some of the distractions that can interrupt virtual meetings and communication as pets, family members, and telephones. These interruptions can lead to a lack of social presence or the sense that the other participant is not attending.

Strategies to incoporate a feeling of social presence into virtual collaboration are complex. Social presence must compel the participants to navigate through the community (Sistek-Chandler, 2012). Social presence requires more interaction between participants than simply reading discussion posts or e-mails (McConnell et al., 2012). A differentiation exists

between a collaborative community where inquiry occurs and a place where people go to find information (Garrison, 2006). Social presence requires purposeful interactions among participants. For example, when users create fake identities for communicating with others, social presence is not reinforced (Schunk, 2008). Hawkins et al., (2012) specified, "Indicators of social presence include humor, self-disclosure, and the use of informal language to show affection" (p. 126). Hemetsberger and Reinhardt (2009) noted that technology usually follows agreed upon social rules and norms to create social presence. These rules and norms include cooperating with others, sharing of information, and acceptance of new collaborators (Hemetsberger & Reinhardt, 2009). Social presence comes from representing oneself in a realistic form, while following group norms. The interaction required to develop social presence may be difficult for first time users of social networking sites or virtual collaboration forums.

Further, Garrison et al. (2000) viewed social presence as necessary for personal fullfillment so that the participants continue to contribute to the collaborative experience. In addition, social presence develops through "familiarity, skills, motivation, organizational commitment, activities and length of time using the media" (Garrison et al., 2000, p. 13). Duncan-Howell (2010) found that online communities are not inhibited by time, which provides members to fluctuate in terms of participation, unlike face-to-face collaboration in which specific timelines are in place. Researchers Garrison et al. stated "Social presence in the form of socioemotional communication is possible in computer mediated communication, but not automatic" (2000, p. 13); thus, these goals are achievable with signifigant commitment from participants. Bauerlein (2011) stated that socialness is achievable through the Internet, but more research should be conducted to find if these connections could be satisfying enough to warrant continued collaboration.

Tools

The popularity of the Internet led to great advancements in terms of collaborative tools. The advancements and variety of collaboration tools on the Internet offer both advantages and disadvantages. According to Xu et al., (2008) the first examples of virtual collaboration tools included e-mail, chat, whiteboards, and file sharing. Specifically, e-mail is still a major communication tool for virtual collaboration (Fichter, 2005; Sistek-Chandler, 2012). Hu et al., (2011) saw the variety of social media tools as a benefit for online collaborators. However, Fichter noted that the large selection of Internet tools is a disadvantage of successful virtual teamwork, as too many tools might overwhelm collaborators. Fichter (2005) added that virtual collaboration failure could result from unusable software that requires complex routines.

A useful Internet tool for virtual collaboration must meet the needs of the participants (Schunk, 2008). Specifically, the tool should be easy to use and accommodate a wide variety of users. Many people do not have time or desire to learn different tools (Fichter, 2005; Hu et al., 2011). Schlager et al., (2009) mentioned that professional networks between educators are a growing movement, but Jarvenpaa and Lediner (1999) cautioned that user acceptance of the technology is only one ingredient to successful collaboration. Advocates of virtual collaboration may argue that an online remote adjunct teaches in a virtual world and therefore should have the basic skills required to navigate the Internet, but some remote online adjuncts might not feel comfortable outside their own online classrooms and might not use outside resources provided by the Internet (Shattuck et al., 2011). Schunk (2008) found that technology only has value when it aids in finding solutions to the dilemmas that people are trying to solve; indeed, the prolific development of online products responds to the problems people encounter online, but the sheer quantity of these products may present further issues to users.

Bauerlein (2011) found that "users are remarkably good at repeated tasks on their favorite sites [but], they're stumped by the smallest usability problems when they visit new sites for the first time" (p. 55). Too many collaboration tool choices leads to users feeling overwhelmed by the available options (Xu et al., 2008). Virtual collaborators feel comfortable navigating known Internet sites because of the familiarity with the tools (Xu et al., 2008). Bauerlein added that "first-time visitors to a site don't have the conceptual model needed to correctly interpret menu options and navigate to the appropriate place" (p. 56). This confusion leads to prematurely exiting the site before accomplishing meaningful work. Online collaborators require a platform that offers a user-friendly infrastructure. Farooq et al., (2008) studied the need for design interventions to foster online community and collaboration for educational professionals. To facilitate virtual collaboration, tools need to allow for efficient and easy collaboration (Xu et al., 2008).

Restrictions of some Internet collaboration tools hinder communication: Twitter is one example of a restrictive tool that participants use for virtual collaboration. Although Twitter is advantageous as a tool for virtual collaboration, Twitter limits the user to typing a small amount of characters into the response (Alderton et al., 2011) and for new virtual collaborators, the limited characters cause dissatisfaction. In a dissenting study by Alderton et al., (2011) researchers found Twitter to be an effective collaborative tool for educators. One part of the study looked at dialogue between the participants to show evidence of collaboration versus unidirectional sharing of information (Alderton et al., 2011). The researchers coded the dialogue to differentiate between collaboration and conversation. They noted that the survey results indicated that 9 of the 10 participants gave concrete examples of collaboration that occurred with fellow Twitter users. The researchers found that because of the limits of a 140-character

message, the participants used Twitter as a place to make initial connections but moved their collaboration to other venues (Alderton et al., 2011). Researchers offered one way to measure the usefulness of a virtual collaborative tool by comparing the tool to traditional face-to-face communication as well as the amount of effort necessary to use the communication medium (DeRosa et al., 2004; Hantula et al., 2004).

Another problem unique to virtual collaboration are the perceptions that software is difficult to use or users experience problems with connectivity and access (Hughes et al., 2002). Tools that take too much time to learn can be drawbacks for virtual collaboration (Fuchs, 2011). Finally, contradictory technical skill levels among participants may also inhibit efforts causing nervousness, misperception, and ineffective collaboration (Ge, Yamashiro, & Lee, 2000). Understanding how to use the technology and experiencing technical difficulties hinders communication, interaction, and virtual collaboration among participants, generating frustration (Ragoonaden & Bordeleau, 2000). Even with 3 years and more experience, participants in one study still struggled to use Internet tools (Bauerlein, 2011). Collaborators may find that virtual collaboration is too difficult because of the software and Internet tools.

Summary of Barriers

Several barriers exist for successful virtual collaboration. First, individual readiness levels might influence virtual collaboration. Second, communication obstacles provide a barrier to understanding other intentions because the lack of visual cues. Next, participants have difficulty developing trust in online forums. Another barrier to virtual collaboration is sustainability. An inconsistent community of participants is a barrier to creating a cohesive group (DeRosa et al., 2004). A lack of social presence may also deter participants from virtual collaboration (Garrison et al., 2000). The true attention belongs on what the tools support in

terms of collaboration. The tools themselves can serve as a barrier to virtual collaboration (Sistek-Chandler, 2012). Understanding the barriers provides remote online adjuncts and higher education administration with an understanding of what issues inhibit successful virtual collaboration.

This section reviewed barriers to virtual collaboration. To achieve a level of success with virtual collaboration, faculty members need artificial and intentional barriers removed (Dolan, 2011; Kezar & Lester, 2009). Those who experience collaboration without barriers experience a greater sense of happiness, fulfillment, and as a result are more effective in their positions (Inch & McVarish, 2003). The chapter will continue with a summary of the benefits of virtual collaboration.

Benefits

The benefits of virtual collaboration are similar to face-to-face collaboration benefits. The following section will focus on three benefits of virtual collaboration: overcoming isolation, providing a social context, and creating professional development opportunities. An online remote adjunct works in isolation from a home computer. One possible benefit of virtual collaboration is a decrease in the sense of being isolated from peers (Scribner-MacLean & Miller, 2011). Another benefit of virtual collaboration is the social connectivity that online communities provide. Social contexts provide an important outlet for learning (Greene, 2008). Researchers found that virtual collaboration is an effective means to professional development among higher education faculty (Dolan, 2011; Puzziferro-Schnitzer, 2005). In the next section, these three benefits will be explored more closely.

Overcome Isolation

In a brick and mortar building, faculty can meet in a lounge or by the water cooler to socialize (Bauerlein, 2011). Remote online adjuncts do not have a physical faculty room to socialize with their peers, although some online universities do offer online faculty forums. The sense of isolation may affect an online remote adjunct's performance (Scribner-MacLean & Miller, 2011). Dolan (2011) stated that limited opportunities for communication with peers appear to be harmful to morale, leading to lower performance. According to Shea (2007) less experienced instructors are not motivated to teach online because of the newness of online training, inability to watch others teach online before attempting online teaching, and inadequate time to learn about online teaching. Brooks and Gibson (2012) found that faculty show interest in virtual collaboration because of curriculum needs or the desire to communicate and receive advice from peers.

Isolation experiences come from feeling like an outcast by the academic mainstream (Dolan, 2011). Shea stated "... a perennial concern is that online learning may be marginalized from the core cultural practitioners, i.e. traditional faculty, and reside at the periphery of college life with the stigmatizing impact that such marginalization implies" (2007, p. 12). Virtual collaboration may offer a solution to isolation and a sense of being unsupported. People are social; Bingham and Conner (2010) stated that people always have wanted to connect, communicate, and share with one another. Instructing online without face-to-face interaction may influence an adjunct's view of teaching. To this, Dolan (2011) added that without opportunities for socialization, low morale could lead to less effort and lower quality of instruction.

Paloff and Pratt (2001) provided further impetus to examine online teaching because faculty isolation may result in an online program that appears fragmented. Remote online educators without a strong sense of connectedness to their employing institution often have less dedication and contribute to faculty attrition (McLean, 2006). Nationally, adjuncts teach one-third to half of the courses and represent approximately two-thirds of all community college faculty (Puzziferro-Schnitzer, 2005), and thus their sense of connection to their colleagues and the institution is critical to effective instruction. Bingham and Conner (2010) found that people desire a chance to collaborate and feel connected to others. Duncan-Howell (2010) added that the Internet provides opportunities for virtual collaboration so that remote online adjuncts might connect with their peers.

One form of virtual collaboration with positive results comes in the form of online mentorships. Some universities offer their new online adjuncts virtual mentorships as a means for initial training and professional development (Bauerlein, 2011). According to Roberts et al., (2006) peer mentors provided an effective way to help new faculty transition to and online teaching. Mentors play an essential role in helping new faculty overcome the sense of isolation. The mentor can also act as a point of contact, which helps remote online adjuncts become more effective and successful instructors (Puzziferro-Schnitzer, 2005). One role of the virtual mentor is to communicate with the new faculty and offer suggestions about instruction, pedagogy, and using the technological tools specific to the institution (Puzziferro-Schnitzer, 2005). The researchers also added that mentoring is a meaningful way to support, coach, and improve instructional strategies and teacher effectiveness.

In a self-study, Roberts et al., (2006) documented the transition from face-to-face teaching to online teaching in the educational leadership department at Western Carolina

University (WCU). One result of the study showed that faculty at WCU could connect socially to each other (Roberts et al., 2006). Although faculty reported working in isolation before the transition to online teaching, afterwards the instructors reported a feeling of friendship among their colleagues because of virtual collaboration (Roberts, et al., 2006). The online faculty learning communities at WCU provided a safe venue to vent frustrations and ask for assistance (Roberts et al., 2006). Kabilan et al., (2011) found similar results with K-12 faculty who moved to online teaching. Participants who had worked in isolation found virtual collaboration to remove traditional notions of working alone and reported benefits from the experience (Kabilan et al., 2011). Virtual collaboration benefitted participants in the evolution from face-to-face to online teaching (Kabilan et al., 2011; Roberts et al., 2006).

Simple forms of virtual collaboration such as e-mail remove the traditional barriers of time and space (Davis & Resta, 2002). E-mail helps to develop and lengthen virtual conversation and offers an ability to extend the boundaries of geography (Davis & Resta, 2002). Even with other advancements, e-mail is an important way to collaborate (Xu et al., 2008). One benefit of virtual collaboration via E-mail is the ability for archiving. Storing computer-mediated communication gives the collaborators time to reflect and provides control of interaction time (Seddon, Skinner, & Postlethwaite, 2008).

Other forms of virtual collaboration present participants the ability to enter into continual discussion. Instant messaging provides users the chance to collaborate and offers immediate gratification by providing real-time immediate response (Fichter, 2005). The interactive capabilities of instant messages or chat features allow virtual collaborators to feel a sense of connection to others. The benefits of virtual collaboration include a variety of ways that users can connect to others in discussion.

Research team Hawkins, Barbour, and Graham (2012) recommended the virtual schools seek methods to incorporate social media to reduce the feelings of isolation that come from remote online teaching. They also noted in their K-12 virtual high school case study that online faculty felt disconnected from other online faculty. The participants expressed feelings of disconnection and isolation. The researchers suggested that the faculty create a virtual staff room so that faculty could collaborate, socialize, and share practices (Hawkins, et al., 2012). Socialization opportuntuies are one means for decreasing the isolation that a remote online adjunct may experience. Understanding the social learning theory provides insights into how remote online faculty might overcome isolation.

Dolan (2011) researched 28 adjunct faculty members' views on motivation in a qualitative grounded theory study. One of the common findings was that adjuncts felt disconnected from peers and the college. Dolan established that an absence of communication and engagement in collaboration led to a lack of identification with the college. He also found from participant interviews that adjuncts desired a means to learn from peers and thought the communication would make them better faculty. The impact on faculty engagement for this unique set of employees still requires attention.

Social Context: Vygotsky and Bandura

In addition to overcoming social isolation, it is important to consider the Social Learning Theory which emphasized education that takes place in a social setting. Two psychologists led the way in the social learning theory: Vygotsky and Bandura. First, Vygotsky's sociocultural theory viewed the construction of learning through social interactions (Alderton, et al., 2011). One of Vygotsky's main premises was that learning does not occur in isolation (Schunk, 2008). Observational learning, imitation, and modeling are three key components of the social learning

theory (Ormrod, 2003). Bandura (1977) stated, "Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do" (p. 22).

Researchers consider Vygotsky's theory of social learning a constructivist approach (Schunk, 2008). Researchers further stated that a constructivist approach is one in which social experiences create knowledge (Schunk, 2008). The PLC originates from a social constructivist view of knowledge that considers the exchanges and relationships to be an integral part of understanding new concepts (McConnell, et al., 2012). Social learning theorists Bandura (1991) and Vygotsky (1978) found that learning is highly social and naturally collaborative. Alderton and associates (2011) suggested that faculty needed to collaborate with others for guidance to reflect upon and change their practice and participation in a virtual collaborative mentorship may fill a social need for remote virtual adjuncts. Seddon et al., (2008) added that participants could experience motivation from engaging in virtual collaboration.

Virtual collaboration may begin for one reason but continue because of a different motivation or unintended outcome. Some of the reasons to continue collaborating may include wanting to make more meaningful changes, desiring a social connection to a group, or a need to develop more as a professional (Seddon et al., 2008). Vygotsky (1978) emphasized the interpersonal nature of social learning and according to Schunk (2008) he revealed that a social atmosphere was necessary for learning. Fullan (2006) stated, "Professional learning communities are in fact about establishing new collaborative cultures. Collaborative cultures, ones that focus on building the capacity for continuous improvement, are meant to be a new way of working and learning" (p. 6). Seddon et al. (2008) also found that the developing a virtual community could

increase the diversity of a group and reduce competition while creating a culture of collaboration.

Studies in computer-mediated communication (CMC) rely on the idea that both human beings and technology require understanding within a social context (Hemetsberger & Reinhardt, 2009). Researchers ground virtual collaboration in a theoretical framework of social constructivism (Davis & Resta, 2002). In addition, Bonk (2002) defined key sociocultural terms such as scaffolding when researching virtual collaboration. Garrison (2006) noted that higher education communities require active social presence to establish significant and meaningful learning. Social exchanges and sharing of knowledge becomes open to the community, which improves learning (Greene, 2008). The Massachusetts Institute of Technology (MIT) recognized the importance of human connections, socialization, and collaboration by opening sections of its course content to the world (Schunk, 2008). In contrast, because virtual communication lacks social cues present in face-to-face collaboration, participants may find it easier to concentrate on the group project instead of on the commonalities and communicative intricacies of body language (DeRosa et al., 2004).

Although some studies suggested that the lack of face-to-face and non-verbal cues might impede virtual collaboration, others noted that missing cues might not be a detriment. Bauerlein found the Internet's ability to foster socialization surpasses naysayers' original opinions by "augmenting our people skills . . . widening our social networks, and creating new possibilities for strangers to share ideas and experiences" (2011, p. 33). The Internet is instrumental in fostering a social context for learning. Virtual collaboration fosters collective intelligences while establishing a means to avoid isolation through social situations (Bauerlein, 2011).

Professional Development

"The Internet enables some of the best teaching minds to bond together in powerful learning communities" (Berry, Norton, & Byrd, 2007, p. 48) and online communities are common practice in education, offering many ways for adjuncts to share resources and apply new learning to their own practice (Puzziferro-Schnitzer, 2005). Professional development activities are one means to provide opportunities for instructors to increase their effectiveness by developing new knowledge and practicing new strategies (Anderson & Kanuka, 1997). Quality instructors yearn to learn new skills and pedagogy through professional development (Puzziferro-Schnitzer, 2005). In terms of developing as a professional, one suggestion that the research team of Hu et al., (2011) offered is that faculty may further their knowledge base through collaboration or by seeking advice from a professional learning community. One way to limit teacher isolation and focus on professional development is with virtual learning communities.

The Association of American Colleges and Universities realized the significant role that collaboration plays in its vision of education (Schunk, 2008). In addition, Brooks and Gibson (2012) noted the following about effective online professional development:

It allows professional development to be more relevant, meaningful and engaging to faculty because they are able to 1) have choices in their learning experiences (e.g. opting in and out), 2) take advantage of the flexibility of the technology (e.g. learn when and where it suits their schedules), 3) customize the experience (e.g. connecting with specific colleagues and researchers) and 4) have space to be reflexive. (p. 3)

Remote online adjuncts who teach in uncommon fields may find a solution for acquiring meaningful professional development through virtual collaboration. Virtual collaboration may offer a variety of professional development choices for faculty.

Virtual collaboration provides the pooling of resources from a range of fields (DeRosa et al., 2004). Bauerlein (2011) stated that virtual spaces for collaboration offer a means to gather and share collective knowledge and experience. Lifting the boundaries of time and distance provide more flexibility and applicability to different fields. Fullan (2006) also stated that professional development has to be meaningful to motivate people to put in the effort and reap the benefits of the activities. Virtual collaboration may also provide greater flexibility and freedom in terms of training because online adjuncts do not experience confinement to a traditional workday or place (DeRosa et al., 2004). Budget constraints may also limit the availability of guest speakers, renting conference rooms, and travel expenses. However, well-designed virtual collaboration as a means for professional development can be affordable and not limited by the restrictions imposed on face-to-face faculty (Brooks & Gibson, 2012).

Fichter (2005) noted several reasons for virtual collaboration as a means to professional development, "Some collaboration initiatives are targeted specifically at communities of practice, helping them find specific information on a topic, share successes, develop best practices, replicate ideas, and identify experts" (p. 48). Virtual collaboration permits faculty a chance to view their online classrooms and practices from a new perspective. The self-reflective practices heighten their understanding of their own professional strengths and weaknesses, which fosters investigating pedagogy and teaching philosophy (Kabilan et al., 2011). Brabazon (2002) found that too much emphasis is placed on design issues in online education instead of on faculty training. Bingham and Conner (2010) suggested that faculty should begin virtual collaboration

by learning through trial and error. Professional development provides a means for remote online faculty to test ways of virtual collaboration and learn best practices in a safe environment.

Manchester Metropolitan University (MMU) faculty members participated in a 1998 study to determine the reasons for lack of participation in professional development opportunities. Although the survey focused on many issues, two areas remained noteworthy. First, Forsthy (2002) noted that 43% of respondents stated that they had not attended professional development trainings recently because the times or places were inconvenient. The university's location is in a large urban setting and has multiple sites. Second, over half of the participants reported interest in using online methods for professional development (Forsthy, 2002). The study offered online professional development courses for instructors through asynchronous discussions, online resources, and e-mail. Ninety-six instructors out of 1200 opted to participate in the online professional development offerings instead of the face-to-face trainings. The levels of engagement and participation by the instructors were poor. In fact, Forsyth stated, "Only 15% completed all of the tasks with approximately 70% finishing most of the activities" (2002, p. 252). Approximately 14 of the participants attended a few times and never logged into the workshop again.

The follow-up surveys suggested that faculty members could not find the time to participate in the one-hour sessions over six weeks, but instead preferred whole day doses of professional development. The university responded to the unsatisfactory results and revamped the workshops (Forsyth, 2002). The coordinators instituted changes to make the online professional development activity more meaningful, including less flexibility and shorter sessions that focused the participants on building community and offered opportunities for discussion and information exchange (Forsthy, 2002). Redesigning the workshops proved to be

beneficial. The second set of data showed that online collaboration and learning occurred through the project with most of the participants reporting they learned at least the same amount of knowledge as compared to a face-to-face opportunity for professional development (Forsthy, 2002).

Anderson and Kanuka (1997) investigated virtual professional development by measuring the amount of participation and the faculties' perceptions of usefulness and worth in a three-week mixed methods study. The participants consisted of 23 experts in adult education and community development. The mixed method study used the Internet for asynchronous computer-mediated communication. The results did not favor online collaboration as a preferred method to professional development. Anderson and Kanuka observed that most participants believed that the information exchanged during the online forum was not as valuable as the information exchanged in a face-to-face forum. Even so, 22 of the participants commented that the activity augmented their knowledge. The goal of increasing the content related knowledge of the participants was successful (Anderson & Kanuka, 1997). The researchers discussed several limitations of the study, including the moderator's role, older technology, and the need to compare the findings to those created from the same training in a face-to-face setting. One benefit that Anderson and Kanuka mentioned was that the participants built upon the knowledge of others while constructing their own knowledge.

A significant body of research shows that professional development needs to be meaningful and flexible to meet the time restrictions of the participants (Brooks & Gibson, 2012). The adjuncts have time constraints for training because many remote faculty work for multiple universities or in a separate full-time position. Davis and Rose (2007) offered a change in the way professional development occurs, shifting from all day marathon sessions to shorter

dashes using virtual methods. Schunk (2008) further noted that a university should provide for the development of an online faculty community for faculty to share effective pedagogy. The research supports the need for high quality professional development for online faculty.

Brabazon (2002) demanded more attention be paid to online faculty training "The laissez-faire attitude to teacher training has relied on 'gifted amateurs' rather than structural change to initiate Internet-based education" (p. 13). Although the role of virtual collaboration in professional development of remote online adjuncts remains undetermined, many of the elements in face-to-face professional development share the same needs as virtual collaboration.

Summary of Benefits

Understanding benefits helps online remote faculty and higher education administration determine the best practices for virtual collaboration. Primarily, online remote faculty are prone to isolation (Scribner-MacLean & Miller, 2011) and virtual collaboration may be a benefit to remote online adjuncts. Participation in a social learning situation such as virtual collaboration may provide the social outlet needed for learning to occur. Finally, virtual collaboration is a means for professional development. Remote online adjuncts might learn new skills and pedagogy through virtual collaboration (Puzziferro-Schnitzer, 2005). The benefits to virtual collaboration needs attention as researchers point to virtual collaboration as an effective way to improve faculty effectiveness (Puzziferro-Schnitzer, 2005).

Conclusion

As Bingham and Conner stated, "Collaboration is something we have known to do our entire lives. Working together to produce something more significant than one person can do alone is timeless" (2010, p. 8). Many educators have moved away from operating in private practice. Several of the reviewed articles specifically addressed that teaching in isolation is less

popular for many faculty. Many articles indicated that collaboration builds a sense of community or friendship among colleagues. Brooks and Gibson (2012) illustrated how the meaning of professional learning communities is evolving and restructuring to include online opportunities. As the literature indicated, these new learning opportunities provide resources, problem-solving approaches, and effective strategies to share with others through collaboration. Moreover, collaboration provides a support system for educators in terms of professional development. Adjuncts desire to work for colleges who demonstrate a commitment to their employees and offer high quality professional development (Puzziferro-Schnitzer, 2005). The researchers highlighted the need for faculty training and support for remote online adjuncts. Faculty appreciate the way that online professional development allows collaboration that meets their unique needs (Brooks & Gibson, 2012). Schunk (2008) stated that online faculty will need to vigorously seek both formal and informal professional development to be effective in virtual course delivery.

Isolation among online instructors emerged as a common theme in the literature. Collaboration can construct bridges to support new online educators as a means of social experience. The effective use of virtual collaboration depends on a range of technical and practical matters as well as social factors (Vallance et al., 2010). Faculty need to have the desire to collaborate for the tools to be effective. Although technology can be both a benefit and a barrier to collaboration, technology should act as a means to accomplish collaboration and not as the reason for collaboration (Fichter, 2005).

Promoting and sustaining significant virtual collaboration experiences for higher education faculty is important due to ever changing technology tools, higher expectations of accountability, and competition for attracting students. For these reason, universities will need to

plan and provide ways to involve all online faculty in developing their skills and pedagogy. Therefore, supporting and training faculty so they instruct their online course in an effective manner is important (Betts, 2009). The theory and practice of virtual collaboration has benefits and barriers. For adjuncts to effectively virtually collaborate, they will need to understand the obstacles and be willing to overcome them. Successful virtual collaboration demands active participation, social presence, and sustained involvement.

Chapter 2 provided an overview of the current literature on virtual collaboration. The literature review included the new trends in online education and recent changes. Two examples of virtual collaboration were computer-mediated communication and online professional learning communities. The literature review encompassed the barriers and benefits to virtual collaboration. The social context considered ways for overcoming isolation. Finally, the literature review included virtual collaboration as an approach for online professional development.

The methodology for this study is detailed in Chapter Three. The design choice, participant selection methods, proposed data collection, and data analysis provided information on the study's procedures.

CHAPTER 3 METHODOLOGY

The chapter will begin with a description of the study's design. The purpose of Chapter Three is to elaborate on the design of the study, including the methodology, selection of participants, research questions, role of the researcher, data collection procedures, data analysis, and credibility procedures. The design of the study and rationale explain why a qualitative method is the best choice. The chapter ends with a summary of the methodology.

The purpose of this study was to determine the virtual collaboration experiences of remote online adjuncts and create a model of lived experiences.

Design of the Qualitative Approach

A major obstacle to understanding virtual collaboration is the lack of appropriate frameworks, tools, and techniques to study it (Schlager et al., 2009). The literature review did not reveal a specific tool or technique for studying virtual collaboration. A validated survey instrument was unavailable even after contacting several of the key authors in the field. To understand how remote online faculty collaborate virtually, this study needed to address their lived experiences. The nature of this study required a qualitative method to understand the specific ways that remote online faculty collaborate virtually.

The purpose of a qualitative approach was to investigate the unknown variables needing exploration (Creswell, 2009). Because the study sought to find the current virtual collaboration practices of remote online faculty, the study needed to review the lived experiences of remote online adjuncts' virtual collaboration practices. Specifically, the design employed a phenomenological approach to understanding virtual collaboration practices of remote adjunct faculty. The main purpose of this study was to conduct exploratory qualitative research to determine the virtual collaboration experiences of remote online adjuncts and create a model of

lived experiences in the form of a transcendental phenomenological approach to describe the virtual collaboration experiences of remote online adjuncts. Creswell (2007) stated, "Moustakas's transcendental or psychological phenomenology is focused less on the interpretations of the researcher and more on a description of the experiences of the participants" (p. 59).

Phenomenology

Moustakas (1994) exposed the distinctive features of phenomenology as a way to understand complex social phenomena. Given the problem that there is not much known about virtual collaboration of remote online adjuncts, the optimal methodology for this study was a qualitative design, primarily using a phenomenological approach. The phenomenological approach provided a description of an understudied topic. Creswell (2007) further provided a technical definition of the phenomenological approach "...a phenomenological study describes the meaning for several individuals of their lived experiences of a concept or a phenomenon" (p. 57). Moreover, transcendental or psychological phenomenology focuses on the experiences of the participants (Creswell, 2007; Moustakas, 1994).

A transcendental phenomenological approach provides the best methodological approach for this study:

- To identify intersections between how remote online adjuncts are virtually collaborating.
- To collect data from the individuals who have experienced the phenomenon (Creswell, 2007).
- To study a phenomenon of interest that requires looking at several individuals' common or shared practices (Creswell, 2007).

- To develop a deeper understanding of virtual collaboration practices of remote online adjuncts.
- To inform development of practices or policies surrounding virtual collaboration.
 Merriam (2009) recommended investigating each participant with a general analytical approach. To accomplish this, qualitative research methods were used to study and describe the virtual collaboration practices of remote online adjuncts.

Research Questions

Central Question

What effective virtual collaboration practices are remote online adjuncts using to influence their teaching strategies and to develop as professionals?

Sub-questions

Each sub-question was generated from the literature review as follows:

1. What methods or approaches are remote online adjuncts using for virtual collaboration?

The research of Coughlin and Kadjer (2009) offered one definition of virtual collaboration as a process that uses a variety of methods for professionals to work together, pool resources, communicate, and share ideas, fostering opportunities for self-development. For this reason, sub-question number one was created to reveal what methods remote online adjuncts used in their lived experiences of virtual collaboration. Because many remote faculty expect to receive support while teaching online, the first sub-question will help determine what common virtual collaboration experiences are in place. Understanding the procedures remote online adjuncts use for virtual collaboration is also necessary to provide a pathway for making virtual collaboration a possibility (Kezar & Lester, 2009).

2. What are the reasons for virtual collaboration among remote online adjuncts?

In order to add to the virtual collaboration model of the lived experiences of remote online adjuncts, it is important to understand their reasons for collaboration. The impetus for the second sub-question was derived from the work of Roberts et al., (2006) who noted that meetings and collaboration allowed participants to learn from each other while trying new skills. A study by Coughlin and Kadjer also was significant in the development of this question. Coughlin and Kadjer (2009) offered that virtual collaboration provides an opportunity for professionals to work together, pool resources, communicate, and share ideas.

- 3. What are the barriers keeping remote online adjuncts from virtually collaborating?
 Vallance et al., (2010) stated that beginning and managing virtual collaboration is unexpectedly complicated in the absence of a strong foundational understanding of its nature. For virtual collaboration to be successful, it must be recognized as a value-adding endeavor (Vallance et al., 2010). In order to create a model of virtual collaboration, research needs to discover the barriers keeping remote online adjunct from virtually collaborating. Sub question number three offered insights into the barriers of virtual collaboration. Finally, to manage virtual collaboration, it is necessary to study the barriers (DeRosa et al., 2004).
- 4. What are the benefits for remote online adjuncts who virtually collaborate?

The literature review revealed three main benefits to virtual collaboration: overcoming isolation, a social context, and professional development. The development of sub question four was derived from the work of Puzziferro-Schnitzer (2005) who found a need for the benefits of virtual collaboration to be studied.

- 5. What are the perceptions of remote online adjuncts about virtual collaboration?

 Sub question five was employed to discover the insights of remote online adjuncts lived experiences of virtual collaboration. Due to the voluntary nature of virtual collaboration and the lack of face-to-face interaction, the role of collaboration experiences needs attention (Kudaravalli & Faraj, 2008). In addition, a noticeable gap in the research exists in regards to virtual collaboration practices among higher education (Donnison et al., 2009; Stevenson et al., 2005).
- 6. What underlying themes, if any, emerge from remote online adjuncts experiences of virtual collaboration?

To understand the lived experiences of virtual collaboration among remote online adjuncts, it was necessary to discover new themes about virtual collaboration. Studies should explore the impacts of what creates a meaningful online collaboration experience (DeRosa et al, 2004). Sub question six was also created to discover how administration could support remote online adjuncts' virtual collaboration. Many higher education institutions realize the need for collaboration but do not know how to foster it among faculty (Kudaravalli & Faraj, 2008).

The study originally set out to interview participants from two online universities.

Neither university would approve the IRB application, so a new method for finding participants was needed. The researcher than considered a national organization that she belongs to. The organization is called International Society for Technology in Education (ISTE). ISTE is a not-for-profit organization dedicated to supporting the use of information technology to aid in learning and teaching of K-12 students and teachers. A special interest group located within ISTE is the Special Interest Group of Teacher Educators (SIGTE). SIGTE serves professors and

other professionals who are focused on education with a peer-reviewed journal and other venues that address in-service training, research in computer education, and appropriate training materials.

For this qualitative study, selection of the participants occurred by collecting a specific group of participants. First, participants met a defined set of operational criteria through preliminary screening, whereby candidates qualified to serve as participants (Yin, 2008). The screening took place via an e-mail to ISTE list serve asking for volunteers to participate in the study, specifically those faculty who had experience with virtual collaboration and were remote online adjuncts. The inclusion criteria was as follows:

- Participants must only work online from their home computers and not attend a physical campus. Participants must be telecommuters who are isolated from their peers and do not attend a brick and mortar building.
- 2. Participants must not have any opportunities to collaborate face-to-face with their colleagues.
- 3. Participants must only work as adjuncts who are part-time employees.
- 4. The participant can work for more than one college, but all work must be done from the home computer. If the adjunct steps onto a physical campus, he /she is not eligible to participate in the study.
- Participants need to have a minimum of three years' experience as a remote online adjunct.
- 6. Participants must also have experience with virtual collaboration.

Participants received an e-mail assuring that participants met the inclusion requirements of the study. Merriam (2009) further described how a qualitative design is emergent because the

researcher may not know ahead of time every person who should be interviewed or where to look next unless data is analyzed during its collection. Each selected participant received an email with a consent form to participate in the study, including permission to participate in a semi-structured interview. The purposeful sample intentionally samples a group of people who can best inform the researcher about the situation (Creswell, 2007).

Role of the Researcher

Eisner (1991) drew attention that the researcher's background influences the interpretation of the data. The researcher has five years of remote online adjunct experience working for University of Phoenix (UOPX) as an adjunct in the bachelors' of science of education program at UOPX. In conjunction with my role as a faculty member, I have also participated in virtual collaboration in preparation for online content area meetings and facilitated workshops and mentorships for UOPX. I taught as an adjunct for Ashford University in the College of Education for 2.5 years. I have also been in K-12 education for 20 years serving as a principal for 10 of those years.

Yin (2008) noted that an investigator must have a firm grasp of the study's issues. The researcher was the primary instrument for data collection and analysis. For this reason, researchers need to state any biases toward the topic. I participated in both successful and unsuccessful forms of virtual collaboration. I experienced several of the barriers to virtual collaboration listed in the literature review, including lack of trust, deficiency in social presence of co-collaborators, and communication barriers. The benefits I experienced included decreased feelings of isolation, skill development in online teaching, and professional development opportunities. Although noting bias is important because the researcher is responsible for data

collection and analysis, Yin added that a grasp of the phenomenon helps a researcher to avoid missing certain clues (2008).

Epoche or Bracketing

Epoche, also known as *bracketing* is a method that researchers can use to set aside biases when conducting phenomenological research (Creswell, 2007; Moustakas, 1994). To begin the process, the researcher created a rich description of her own experience about the phenomenon of interest in order to help prevent her assumptions from tainting the study. The proactive approach allowed the research to first consider her own opinions so that the research can be perceived "freshly, as if for the first time" (Creswell, 2007, p. 60).

Research Protocol

Several sources of data provide a broader overview of remote online adjuncts collaboration practices. Yin (2008) noted that the use of multiple sources of evidence permits a researcher to address the phenomenon in its totality. A background and demographic questionnaire provided information about the final selected participants; the purpose of this data was to formulate a description of the participants and prepared the data for analysis.

The final step of data collection resulted in phone interviews of the participants. The researcher called each participant after setting a predetermined time. The phone interviews took place separately, within two weeks of each other. The short time span allowed the researcher to adhere to the same phone interview protocol for all participants. Written permission from each participant allowed for recording of phone interviews. Recordings permit a more accurate rendering of the interview than any other method (Yin, 2008). A tape recorder application on the computer recorded the phone interviews. The researcher transcribed interviews verbatim from

phone recording into a Word document. Pseudonyms were used to protect the identity of the subjects.

The semi-structured interview permited follow-up questions and changing the order of the questions based on responses. Yin (2008) recommended that a study contain specific questions and intentions so that it stays within realistic parameters. With this in mind, the interviews guide the conversations instead of structuring the interviews with surveys (Yin, 2008). Semi-structured interviews allow the use of predetermined questions, while leaving space for probing beyond given answers (Esterberg, 2002). The interview questions are written under each Sub-question as follows:

Sub-questions:

- 1. What methods or approaches are remote online adjuncts using for virtual collaboration?
 - What collaborative tools do you use for virtual collaboration?
- 2. What are the reasons for virtual collaboration among remote online adjuncts?
 - How has socializing with your peers influenced your morale?
- 3. What are the barriers keeping remote online adjuncts from virtually collaborating?
 - Describe your readiness level to collaborate virtually.
 - What communication obstacles have you encountered before or during virtual collaboration?
 - How has trust with other collaborators played a role in your virtual collaboration experiences?
 - How does time play a role in your virtual collaboration practices?

- What are your experiences with virtual collaboration groups or partnerships lasting over time?
- What social rules and norms have you experienced during virtual collaboration?
- 4. What are the benefits for remote online adjuncts who virtually collaborate?
 - What types of best practices have you shared during virtual collaboration?
 - How has virtual collaboration influenced your connection to the university or your peers?
 - What are some of the reasons for your participation in virtual collaboration?
 - What impact has virtual collaboration had on your practices?
- 5. What are the perceptions of remote online adjuncts about virtual collaboration?
 - How do you feel about the philosophy of private practice?
 - As a remote online adjunct, what are your perceptions of virtual collaboration?
 - How does departmentalization affect virtual collaboration?
 - Does competition for recognition from the university influence virtual collaboration practices?
- 6. What underlying themes, if any, emerge from remote online adjuncts experiences of virtual collaboration?
 - As an online adjunct, what have you experienced in terms of virtual collaboration?
 - As an online adjunct, what contexts or situations have influenced or affected your virtual collaboration experiences?

Finally, interviews require the researcher to fulfill the needs of the inquiry at the same time establishing a comfortable non-threatening environment (Yin, 2008). To achieve a non-

threatening atmosphere, the researcher first asked questions unrelated to the study such as questions about the weather (refer to Appendix G, Interview Protocol).

A database consolidated the documents into a manageable system. The purpose of the database was to provide a structure of organization so that the researcher was able to easily locate specific data during analysis (Bogdan & Biklen, 2007; Merriam, 2009). A filing system created a catalogue of interview and demographic data organized by a table of contents. The large amounts of data collected in a qualitative study require ordering in a functional system (Merriam, 2009).

Three Steps to Data Analysis

Miles and Huberman (1994) offered three steps in the analysis process. The first step was to decontextualize and recontextualize the data (Miles & Huberman, 1994). This complex process of data analysis examined the data by dissecting and arranging it. Specifically Moustakas (1994) called the first step horizonalization. In this step, the significant data in the interview transcripts were highlighted (Creswell, 2007). Step two provided a means for the researcher to cluster the findings into themes (Creswell, 2007) The third step drew conclusions from step one and two by creating a description of what the participants experienced (Creswell, 2007). Finally, the researcher wrote a summary of the descriptions that presented the "essence" of the phenomenon (Creswell, 2007, p. 62).

Prior to Step One- Epoche

I wrote a summary of both my experiences and biases towards virtual collaboration practices. Before analyzing the data, I wrote a memorandum describing my own views and lived experiences of the research questions in an effort to bracket my experiences.

After my own biases had been bracketed, the interviews and data collection process began. This allowed me to compare my own experiences with that of the participants.

Step One- Significant Statements and Labels

Selection, summary, and highlighting of the data reduced and transformed it to organize and focus the data (Bogdan & Biklen, 2007). Moustakas (1994) suggested listing the significant statements relevant to the experience. The significant statements provided a range of perspectives about virtual collaboration. The significant statements were phrases or paragraphs mentioned by the participants.

Codes are the labels attached to words, phrases, sentences, or whole paragraphs, connected, or unconnected to a specific setting (Miles & Huberman, 1994). Codes or labels assigned meaning to the data by using new and emerging themes from each participant and through the conceptual framework found in the literature review on the barriers and benefits of virtual collaboration. The coding is the step that linked diverse observations and statements and connects patterns and themes drawing all of the examples together (Merriam, 2009).

After journaling the Epoche, the researcher started by reading through the interviews and demographic forms. Note taking occurred in the margins of the interview dictation. On the second read, the researcher used the margins to label chunks of data (Bogdan & Biklen, 2007). The first list of codes provided a framework for explanation building. The codes acted as a way of assigning labels to designate the data (Merriam, 2009). The researcher made notes based on ideas that produced divisions for the codes that described and developed the themes (Creswell, 2007). To narrow the data, Merriam suggested that the researcher interacts with the data by making notations next to data that seems relevant to answering the research questions. This critical step helped process the data into patterns or themes.

Step Two- Display and Combine

After working through the data and compiling the spreadsheet, the researcher made connections by combining corresponding codes. Creswell (2007) offered that the data are most suitable when condensed and combined to five or six themes. The data display was the second major activity that the researcher used to help reduce, display, and organize the data in a compressed way to draw conclusions (Bogdan & Biklen, 2007; Merriam, 2009). The researcher constructed categories or themes that captured any recurring patterns that translated across the data (Merriam, 2009). Merriam suggested that the categories be responsive, exhaustive, mutually exclusive, and informing. To do this, the researcher displayed the categories by listing the reduced significant statements next to the emergent themes in a table.

Step Three- Clustered Meaning Units

A final step in reaching and verifying a conclusion in qualitative research is making the data tangible (Merriam, 2009). The researcher began to decide what the data meant during this process. A graphic organizer was created to highlight patterns, similarities and differences, and explanations. Merriam also suggested using a model to represent how categories work together. The creation of a model allowed the researcher to study the interrelationships to explain the meaning of the data (Merriam, 2009). Miles and Huberman (1994) also added that the researcher should remain open-minded and flexible during this process.

Yin (2008) recommended using research questions as a protocol to keep the investigator on track as data collection proceeds. During the data analysis, the researcher sought to answer the following sub-questions:

SQ1: How are remote online adjuncts virtually collaborating?

SQ2: What methods or approaches are remote online adjuncts using for virtual collaboration?

SQ3: What are the reasons for virtual collaboration among remote online adjuncts?

SQ4: What are the barriers keeping remote online adjuncts from virtually collaborating?

SQ5: What are the perceptions of remote online adjuncts about virtual collaboration?

SQ6: What underlying themes, if any, emerge from remote online adjuncts experiences of virtual collaboration?

The purpose of the word tables and diagrams was to present information based on the Central Question:

What effective virtual collaboration practices are remote online adjuncts using to influence their teaching strategies and to develop as professionals?

The researcher identified evidence that addressed the central and sub-questions. If discrepancies existed between the participants, the researcher drew tentative conclusions based on the weight of the evidence (Yin, 2008). The researcher attempted to build an account of virtual collaboration among remote online adjuncts that suited the participants. Although the specific details of the participants varied, the researcher tried to construct a general explanation of the phenomenon that fit the individual participants (Yin, 2008).

Trustworthiness

Specific strategies throughout the study increased the value of the research. The trustworthiness of a qualitative study is critical to its ability for offering sound conclusions. This study offered four strategies for trustworthiness: credibility, confirmability, transferability, and dependability (Guba & Lincoln, 1994). The next section lists a description of each trustworthiness strategy used in this study.

Credibility and Confirmability

In qualitative research, perspectives are important because the researcher is the primary instrument of data collection. Merriam (2009) described, "... it is important to understand the perspectives of those involved in the phenomenon of interest, to uncover the complexity of human behavior in a contextual framework, and to present a holistic interpretation of what is happening" (Internal Validity or Credibility, 2009, para. 6). Provisions were made by the researcher to promote confidence that the findings were accurate. The operational procedures, such as the line of questioning, were created from the literature review (Yin, 2008). Asking clear interview questions that were easy to comprehend helped to achieve construct validity (Yin, 2008). Yin noted that researchers should use multiple sources of evidence, in a manner encouraging convergent lines of inquiry (2008).

Confirmability is the ability to ensure accuracy in how the findings and conclusions evolved. Triangulation was the collection of information from multiple sources aimed at corroborating the same fact or phenomenon (Yin, 2008). For this study, triangulation of the research data offered more than one source of evidence to support the findings (Yin, 2008). For this reason, multiple data was collected from the participants that included evidence from the interviews and demographic forms. Guba and Lincoln (1994) offered the idea of triangulating the data sources. By using several sources of data, the researcher checked that the different artifacts led to similar conclusions when analyzed.

Reflexivity relates to the researcher's biases, dispositions, and assumptions regarding the study (Merriam, 2009). The researcher shared her role in the beginning of this chapter under the section entitled role of the researcher and Epoche. By sharing the researcher's background, the reader received the clarification needed to understand how the researcher may have come to

certain interpretations (Merriam, 2009). Opportunities for scrutiny by using member checking and review by peers allowed for researcher biases to be uncovered.

Member checking or respondent validation solicited feedback from the participants (Merriam, 2009). Sharing the data with the participants allowed the opportunity to see if the interpretations *rang true* (Merriam, 2009). The researcher provided interview transcripts for each participant to review.

Transferability

In qualitative research, the researcher purposefully chooses participants to understand a particular situation (Merriam, 2009). For this qualitative study, rich, thick descriptions allowed for transferability. This outcome included the use of a rich narrative, including direct quotes, components of the demographic forms, and any questionnaire (Merriam, 2009). The participants' purposeful selection intended to capture the typical practices of remote online adjuncts.

Yin (2008) further suggested that the researcher record field notes into a database. In an effort to create a chain of evidence, the researcher kept a database of notes generated during the interviews and data collection process. By documenting the steps and taking notes, the researcher created an identifiable and traceable decision trail. In fact, Yin provided the definition of this norm:

The principle is to allow an external observer— in this situation, the reader of the case study— to follow the derivation of any evidence from initial research questions to ultimate case study conclusions. Moreover, this external observer should be able to trace the steps in either direction (from conclusions back to initial research questions or from questions to conclusions). (p. 2526)

Esterberg (2002) mentioned two main types of memos: procedural memos and analytic memos.

The procedural notes allow the researcher to document the research process as the data develops.

The researcher's analytic notes will focus on the data and ideas about the data as findings evolve.

Dependability

A study's dependability comes from the ability to replicate its findings (Meriam, 2009). In this study, the researcher sought to provide consistent results with the data collected by employing techniques that attempted to produce the same results if the study were repeated (Merriam, 2009). For this study, the researcher kept fidelity in mind by documenting the processes and procedures. Yin (2008) recommended conducting research as if someone were always looking over your shoulder. One way this type of dependability was achieved was through the inclusion criteria of the participants. Another manner for offering fidelity predicts contrasting results because of specific reasons so that a theoretical replication is possible (Yin, 2008). The researcher recorded each data collection procedure, so the study is repeatable. Detailed notes provided for accuracy and reproducibility of the original study by another investigator (Yin, 2008). In addition, articulating the design with enough detail allowed the reader to analyze its design. In fact, Guba and Lincoln (1994) used the term *auditable* to explain the importance of record keeping. To create dependability, it is imperative to record the exact methods and procedures.

Confidentiality

All data were kept in strict confidentiality in accordance with the guidelines of the Institutional Review Board (IRB) of the University of Montana. The IRB- Human Subjects Approval from University of Montana granted permission to conduct research before the study began. The participants signed a consent form before participating in the study. Pseudonyms

protected the identity and maintained confidentiality of the participants. The researcher's personal computer and a backup drive holds the data. A data matrix provided an inventory system for all documents. A tape recorder application on the computer archived the interview recordings. Shredding all documents at the end of the study retained confidentiality of the participants.

Summary

Chapter Three contained the methodological approach for the study. The strength of a qualitative study centers on the competency of its methodology (Miles & Huberman, 1994). Chapter Three offered the specific steps for this qualitative study. The phenomenological analysis offered an opportunity to study the lived experiences of virtual collaboration of remote online adjuncts. Because the research does not offer a summary of the virtual collaboration practices of remote online adjuncts, the phenomenological approach offers a practical methodology for this study. Chapter Four will present the results of the data collection from the interviews and artifacts of the study.

CHAPTER 4 DATA ANALYSIS

The purpose of Chapter Four is to analyze the data and describe the findings of virtual collaboration practices of remote online adjuncts. The chapter begins with a presentation of the data collected. To explore the data gathered in this study effectively, five sections divide the chapter. First, the researcher presents an overview of personal experiences. Second, a summary of the participants' demographics sets the groundwork for the textural description of what the participants experienced. The third section reviews data collection procedures. The fourth section provides a list of significant statements and associated meaning of units or themes. The chapter ends with a composite description containing the textural and structural descriptions (Creswell, 2007). The interview questions and demographic forms generate the composite descriptions. The components of the chapter provide the framework for data analysis of the phenomenological research study.

According to Moustakas (1994), "Phenomenology is rooted in questions that give a direction and focus to meaning, and in themes that sustain an inquiry, awaken further interest and concern, and account for our passionate involvement with whatever is being experienced" (p. 50). The purpose of this study was to determine the virtual collaboration experiences of remote online adjuncts and create a model of lived experiences. A review of the related literature on virtual collaboration revealed several areas of consideration regarding benefits and barriers, which guided the data collection and analysis. The barriers found in the literature consisted of readiness for virtual collaboration, communication obstacles, trust, sustainability, social presence, and Internet tools. The benefits found in the literature consisted of overcoming isolation, providing a social context, and creating professional development opportunities. The literature and Central Question guided the research for this phenomenological study: what virtual

collaboration practices are remote online adjuncts using to influence their teaching strategies and to develop as professionals?

Personal Experiences of Virtual Collaboration

Creswell (2007) suggested that researchers should first describe personal experiences with the topic of study. By journaling personal experiences, the researcher attempted to set aside any personal judgments (Creswell, 2007). Moustakas (1994) described the concept of setting aside personal judgments by the researcher as Epoche or Bracketing. In addition, Moustakas (1994) stated, "Although Epoche is rarely perfectly achieved, the energy, attention, and work involved in reflection and self-dialogue, the intention that underlies the process, and the attitude and frame of reference, significantly reduce the influence of preconceived thoughts, judgments, and biases" (p. 84). Journaling begins the initial process of the data reduction.

Epoche

Epoche is the first step of the phenomenological reduction process (Moerer-Urdahl & Creswell, 2004). It is an approach taken at the beginning of the study by the researcher to set aside personal views of the phenomenon so that the focus shifts to the views reported by the participants (Moustakas, 1994). Moustakas suggested that "No position whatsoever is taken ... nothing is determined in advance. The researcher remains present and focuses on one's own consciousness by returning to whatever is there in...memory, perception, judgment, feeling, whatever is actually there" (p. 84). To achieve Epoche, the researcher must set aside personal perceptions and judgments before beginning data collection (Moerer-Urdahl & Creswell, 2004).

To begin the Epoche process, the researcher journaled personal experiences as a remote online adjunct with virtual collaboration during the past five years. The journaling reflected both positive and negative virtual collaboration experiences. Through this process, the researcher first

considered a starting point with virtual collaboration as mentoring while teaching an initial class. Although the process was meant to be a collaborative experience, the experience felt more like training when information was received. The main goal of the researcher was to satisfy the mentor and "pass" the process. There was no evidence of a collaboration or trust built through the process. More recently, the researcher has experienced successful virtual collaboration with a colleague. Content was shared jointly for a new class that both parties were solicited to teach. Overall, the process was rewarding but the partnership quickly dissolved once the course syllabus and a few rubrics had been built. The partnership did not last over time because the other collaborator's class was cancelled. For the past five years of the researcher's remote online adjunct experience, opportunities for virtual collaboration have been sought. The process has assisted the researching in learning to be more effective in feedback and participation with students. The researcher believes some remote online adjuncts are more interested in borrowing the work of others as opposed to entering into a truly collaborative situation.

Through the process of examining personal biases towards virtual collaboration, the researcher was able to concentrate more on what the participants said about their own perceptions of virtual collaboration. The journaling process helped to set aside preconceived notions and listen more closely to the participants lived experiences. After journaling about the personal experiences of virtual collaboration, research participant selection began.

Participant Selection and Demographics

For this phenomenological study, purposeful sampling was necessary to provide a group of remote online adjuncts who could best inform the researcher about virtual collaboration (Creswell, 2007). Purposeful selection of participants included those who met a set of inclusive criteria. To begin the search for participants, the International Society for Teaching in Education

(ISTE) sent an email request for participants that included the criteria for participation. ISTE was chosen because it is a professional organization that hosts several special interest groups. The Special Interest Group of Teacher Educators (SIGTE) includes higher education faculty teaching in graduate and undergraduate programs, graduate students, K-12 teachers, administrators, information technology specialists and curriculum specialists teaching and conducting research in teacher preparation and instructional technology. Seventeen participants replied via email to the original call for participants. Twelve participants met the inclusion criteria. Two participants were not eligible to participate because they work both on-ground and online. The other three participants were ineligible because they had less than three years of experience teaching online. Two of the participants backed out of the study because they were afraid they did not have time to participate. Narrowing the participants to include those who met selective criteria was necessary to find the population who had only online contact with their peers, had at least three years of experience, and who had participated in virtual collaboration. In the end, ten participants met the inclusion criteria and were willing to participate. With the participants established, data collection began.

The following sections present the findings in detail, beginning with Table 1, a demographic overview of each participant. Table 1 describes the participants' teaching experiences, types of technology tools used for virtual collaboration practices, and reasons for participating in virtual collaboration. Creswell (2007) noted the importance of understanding the common experiences of the participants in order to recognize the key features of the phenomenon.

To develop an overview of the participants, each participant completed a demographic questionnaire. Phenomenological research should develop a description of the lived experience

of individuals (Creswell, 2007). To understand the lived experiences, participants explained their perceptions and experiences with virtual collaboration. Table 1 lists the significant information about the participants' demographics and experiences.

Table 1. Participant Demographics

	Age	Level of Education	Years teaching as an online adjunct	Academic Work		
S1	59 and older	Doctorate	10	1 University Teaching Elementary and Secondary Education Students		
S2	37to 47	Master's Degree	5	2 Universities Teaching Elementary Education Students		
S3	48 to 58	Master's Degree	5	1 University Humanities and Science		
S4	37to 47	Master's Degree	7	1 University Health Education		
S5	48 to 58	Master's Degree	4.5	2 Universities 1 Tribal and Community College Humanities (Critical and Creative Thinking) Teaching Developmental English Intro to Computers Microeconomics Global Citizenship		
S6	37 to 47	Doctorate	9	5 Universities IT and Business		
S7	59 and older	Doctorate	15	3 Universities Business and Advanced Studies		
S8	59 and older	Doctorate	9	2 Universities Nursing		
S9	37 to 47	Master's Degree	5	1 University Humanities		
S10	48 to 58	Post Master's Degree	12 years	3 Universities Economics		

There were 10 total participants, 8 of which were women and 2 men. Each participant works in a for profit institution. Four of the participants hold doctorates and the other six hold

master's degrees. All of the participants were at least 37 or older, with three participants fitting into the 59 and older category.

Demographic forms provided insight into how remote online faculty experiences have changed over time. It is important to understand how their experiences have changed over time to develop an understanding of the dynamism in virtual collaboration practices. Moustakas (1994) described the importance of considering the experience of participants as imperative data in understanding the lived phenomenon. The demographic form asked participants to consider how online education has changed. Table 2 summarizes the participants' reflections.

Table 2. Participant reflections from demographic questionnaire.

S1	When I began teaching online, the platform was in the form of newsgroups. Over time that changed to a classroom based platform. I have been through two versions of that platform. Recently we moved to a new model, which has everything incorporated in one place. In addition to the classroom models, the grading platforms have changed. Initially I had to keep a personal spreadsheet. Then we went to a grading program, which was part of our new platform but also separate. Now the grading is integrated with the facilitation platform. In addition, to streamlining the facilitation program, the university has enhanced the library and other areas, such as student support programs. There are a wealth of tools and programs, which augment and help us to create a successful experience for the student.
S2	In the first few years, I was nervous about teaching because I did not understand how the administration was evaluating my efforts. I was not sure what the standards or expectations were for my facilitation. Over time, I was offered more responsibilities including becoming a peer evaluator. That experience helped me to learn what the college expected. I also took more workshops that the college offered so that I could learn best practices. I feel that I have become more efficient and effective in online teaching because of the workshops. Not only do I learn from the content, but also even more importantly, I learn what other teachers are doing in their courses. It is a great way to learn tips and tricks of the trade.
S3	I have been facilitating since 2008. My experience has not changed all that much. The platform I started using is still the same one that I am teaching in today. The biggest [sic] difference is that when I started, facilitators had to use the canned syllabus. Now, we can change assignments and point allocations.
S4	My remote online adjunct teaching experience has changed in the format of online teaching and the number of students in each course. Currently, my student size in each course is approximately 7-9 students in my elective courses and up to 15 students in entry-level courses. The academic rigor for student assignments have increased to approximately 25-30 hours per week on homework assignments and reading

	assignments. Learning team assignments are due in 4 out of the five weeks of class.
S5	Amount of time for student participation has changed and there have been some
	formatting changes. For the most part, any other changes have been minimal.
S6	The platform I use for my university has changed 5 times.
\$7	When I first started the broadband rate for a modem was just being released at 1200 bandwidth. We had to do batch reporting using DOS and the upload and download times in some courses exceeded 45 minutes, but it took almost 5 minutes to boot up your PC. Two of the universities that I work for both advanced as new technology came out. One university used several different types of platforms and changes. For email, they went to Outlook Express and remained there for several years. One university went to Blackboard, while another went to a private program and the last university went to new software as well. Chat time was unheard of when I first started and sending an attachment was not an option. There was no statistical software available so you had to learn to write formulas in Symphony, later called Lotus1-2-3 and of course, Excel came in later. A laptop if you
	could find one looked like a typewriter and it weighed around 15 lbs. I remember the first time I got an actual hard drive, because until it was placed into a PC, all you had was programs on one disk and your data on another disk. My how things have changed and the way we teach and who we teach has changed. People had to be able to send and receive files and had to know how to send and receive. The entire online system ran off about 6 modems and an XP PC, which was considered high tech at the time.
	Today we do not have to stress how to connect and send and receive data, and we can focus more on the education of the student. You no longer have to have a big mailbox so that your books you needed for class could be delivered. The adding of an online library got my students and me out of the library and of course the web has made it so easy to get information but it is also very easy to get back information. Where we were in 1992 to where we are today is so advanced and we continue to advance with each passing year. When I told my employer I was getting an online degree he laughed, only to have me mentoring a new faculty member one day and he was a student in the class. Many people did not think it would be the "thing of the future", but I still have students who struggle to learn online and need the face to face.
S8	I teach graduate and doctoral level classes. My content delivery is now customized for each student to optimize productivity.
S9	I have taught new student orientation and courses, workshops, cultural diversity, and general studies for five years. My online teaching has changed over time. One major change now requires calling students on the phone. When I first started, I did not call students.
S10	Teaching online to international students has changed for me. The platforms have also changed. Technology has improved over the years, which helps me teach more efficiently.

Central Question

The central question guided the research: What virtual collaboration practices are remote online adjuncts using to influence their teaching strategies and to develop as professionals?

Moustakas (1994) discussed the use of literature in a phenomenological study for framing the research problem and creating a platform for inquiry. The Sub-questions arose from a review of the literature. The review of the literature set the foundation for the creation of the interview questions. The purpose of the interview questions was to determine the virtual collaboration experiences of remote online adjuncts. The interview questions encompassed the majority of the data collection process.

Data Analysis

In this section, representative data gathered from the interviews and demographic forms present the discoveries of virtual collaboration practices for remote online adjuncts. The researcher recorded and transcribed the interviews. The interviews lasted between 48 and 125 minutes. Recording of the phone calls took place via a cell phone placed on speakerphone and recorded by the computer using Windows 7 sound recorder. Transcription occurred by using Dragon SpeakNaturally 11.5. The researcher used a headset to play back the recordings while repeating the participants' statements into the microphone. All interviews were transcribed within 36 hours of the phone call. Each participant received an emailed transcript of the interview to allow for member checking. Only one of the participants responded to the email transcript asking for a change. The researcher had inadvertently left the name of the participant's college in the transcript and the participant asked that it be removed. Once the transcript was edited, the participant received a new copy and was satisfied with the change. The transcribed interviews formed the starting point of the phenomenological data analysis process.

A description of the main methods for data analysis provides an understanding for the conception of the composite description. Moustakas (1994) described data analysis of phenomenology as a means to determine both the meaning of an experience and an inclusive account of it. To begin the process, the eighty-two pages of interview transcripts were reviewed many times in an attempt to find the significant statements.

Horizonalization- Significant Statements

Early stages of analysis began with listing and preliminary grouping. Moustakas (1994) recommended a system called horizonalization that lists "each expression relevant to the experience" (p. 120). Specifically, Moustakas (1994) asked the following questions to test for possible reduction and elimination of data:

Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding it? Is it possible to abstract and label it? If so, it is a horizon of the experience. Expressions not meeting the above requirements are eliminated. Overlapping, repetitive, and vague expressions are also eliminated or presented in more exact descriptive terms. The horizons that remain are the invariant constituents of the experience. (p.120)

The phenomenological themes that emerged from the study were the result of ten phone interviews with remote online adjuncts. The first step of data analysis required the identification of specific statements in the transcripts about the experiences of the participants (Moerer-Urdahl & Creswell, 2004). Significant statements chosen from the transcripts provided a range of perspectives about the phenomenon (Moustakas, 1994). Table 3 lists the significant statements and identifies original statements made by the participants. The statements in Table 3 represent participants' testimonials. The statements attempt to show individual views of virtual

collaboration. During this first step of data analysis, specific statements were identified that provided an overview of participant experiences (Moerer-Urdahl & Creswell, 2004). The significant statements were gathered and organized by the Sub-questions to identify the range of perspectives about the phenomenon (Moustakas, 1994).

Table 3. Selected Significant Statements

What methods or approaches are remote online adjuncts using for virtual collaboration?

- I use my IPhone, laptop, or tablet. I don't have to be at my computer or at my home when I collaborate with anyone.
- I do not care for Facebook. I do not trust it. I belong but I do not use it. I have never figured out Twitter. I subscribe to Linked in but I have not done much with it. For me it is what the college offers the faculty for collaboration like the faculty forums.
- Technology has to be available. People do not use the tools they have right in front of them. You have to learn to change and not just use email or the telephone.
- It is hard to know how to invite people to collaborate.
- You do not have peers' contacts and you need some way of communicating, sharing, and comparing.
- I think most faculty use the sites provided by the college or LinkedIn for discussions. I do not use Facebook professionally.
- I use Google Docs, Skype, blogs, and WebEx.
- Webcam, whiteboard, and Next Meeting

What are the reasons for virtual collaboration among remote online adjuncts?

- I collaborate because it plays a role in my interests. Virtual collaboration is the way that I connect with my colleagues. I get to bounce ideas off people who are in similar situations. Without it, I would feel very isolated.
- Different people have different experiences and they have different backgrounds some
 have different degrees different corporate experiences and some only have educational
 knowledge or experience so you can get answers to your questions from different
 perspectives.
- Every single person you meet has something to teach you.

- Socializing is helpful. The camaraderie that a lot of us have formed over the years is important.
- I think it increases morale because for one when I am working in a virtual environment I am in my own zone. I am in a comfortable spot for myself, so I tend to be more social then if I actually had to go to a physical location. It enables me to be more involved than face-to-face.
- One of the instructors that teach the same class that I teach was struggling with his students to complete an assignment. The college gave him my number and he contacted me. I tried to help him so that we could come up with something that could be used for all the students and hopefully help the course.
- Virtual collaboration has lifted my morale I do not feel like I'm the only idiot out there. I
 think other people are having moments of confusion that I can identify with. I don't feel
 quite so alone in my confusion.
- It has helped me so much. I don't feel like I'm alone anymore. My colleagues online get it. I can tell them something that happened and they feel the same way. Through collaboration, I'm getting to know more people.
- Just having that communication and connection certainly help.
- It helps me develop my morale to create and exchange ideas. It has made me more proactive. My collaboration with my peers has influenced me in a good way. If I helped one of my peers, it is satisfying.

What are the barriers keeping remote online adjuncts from virtually collaborating?

- I am comfortable but posting that first note takes a little bit of courage because you're always wondering what are people going to think. Am I asking a question that has been asked 500 times. Are people going to be judgmental?
- The only thing that holds me back is the time.
- I like to work alone. I want my ideas. I am selfish. But a lot of that has to do with not having [collaboration] when I first started teaching.
- People do not know where to go to collaborate virtually.
- You have to decide pros and cons.
- It also seems to be the way the organization is doing it and if you want to be part of the organization, then you have to learn it so you might as well recognize that it is one of the prerequisites to serving as a faculty.

- Some people are scared of new technology so I have struggled with collaboration because people do not know how to use the technology especially if it's not user-friendly. People are not always technically savvy. I think many issues with collaboration arise when the faculty are not "technically there".
- Collaboration can be good or bad. It can be sensitive because you don't know what to expect.
- Connectivity is a problem.
- Content over form is more important and it takes too long for pages to load different plug-ins and flashes and fancy stuff. You just want to get where you're going and communicate.
- Different time zones especially if somebody's in a different country. Sometimes I need an immediate answer and because of the time zone or because it is in an asynchronous world people may not respond quickly enough for what I need.
- The learning curve [technology] keeps people from virtually collaborating.
- The lack of body language is also a communication obstacle. I try to be so careful on the sites that when I write it, I reread it twice to make sure I craft my message so that it is not derogatory, condescending, or negative.
- You have to have the trust that there's not going to be backlash from your questions or replies
- Trust has to be there if we do not trust each other then I cannot trust the information you give me and we would waste time. The trust would be one of the main aspects that have to be in place when you do virtual collaboration.
- I am very careful what I say in the faculty forms. I think we owe it to each other to be careful in the faculty forms. There are topics I may not bring up in the faculty forms. I think it has more to do with a particular level of misunderstanding that can happen.
- As an online adjunct faculty we have to find people who know what it's like.
- Sometimes it is not always good for morale because in the virtual setting there are some people who tend to be brass for whatever reason. They do not have a personal connection and they have a tendency to be unprofessional, critical, and condescending. In the situations, I pull out of those discussions. There are people on the other end and communication is 10% of what is said and 90% body language, but you don't have body language, facial expression, and voice inflection virtually.

- I am doing some research right now with around eight people and at any given time, only four people are actually functional. People dropout they have psychological, health, and job problems or they get sick. I trust all of them but you have to be realistic.
- I think that people who are working together are more trustworthy than the ones who are not willing to be involved. Sometimes there are misunderstandings, which happen in the online environment.
- Trust has to be there that people have your back. When you are working together you have to have trust.
- You have to have time. It is a misperception that online collaboration takes less time.
- I have seen virtual collaboration groups fail because there was not enough consistency and people did not really know what was happening.
- The size of the group can be a problem and if there isn't a leader, people do not know where [collaboration] should go.
- The roles need to be clear for relationships to last.
- I cannot be part of a group of people who are just sitting and not getting work done. I have worked with teams of 10 to 12 people and there is only 3 to 4 people working at a time. People come and go. It seems like in the morning people want to join a group and then by the afternoon, they leave or somebody else leaves. Online you are going to get a constant change of people.
- You think that the people are your friends and your colleagues and you work really well with them and then all of a sudden they leave. You wonder what happened.
- Someone needs to be the timekeeper. There needs to be an agenda.
- Sometimes you have to be the learner and sometimes you have to be the leader. You have to know when to put yourself in each one of the roles. There is a time and a place for each one of them. You have to know that when you are collaborating with people when to listen and when to lead
- There are rules within collaboration that everyone has to understand and if everyone does not understand those rules you do not make a good team.
- In the virtual world, once you hit the send button it is too late, it [message] is gone ... it is there forever. There are times where you concede that people will never be able to work together.
- I really feel that some of the sites and forums that I have been in people do not follow the social rules or norms as far as netiquette is concerned. You always have to keep in mind that the person you are communicating with is a real life person with feelings, thoughts,

perceptions, and life. I try to visualize that there is a person on the other end and be very careful what I say and how I say it.

- I have to prepare to make sure that I do not appear unprepared.
- Having to incorporate time zones can be difficult. English as a second language can limit communication.
- The vocabulary you are using can be hard because people do not always understand the words you are using.
- Some people's cultural beliefs are different about "showing up" on time to a meeting.
- Without trust, there is no understanding. You do not want to lose credibility with your peers. Because without credibility there is not understanding.
- Collaboration may not succeed because of time. Collaborators have to be dependable and responsible to meet the time deadlines or online meetings.
- I think some of private practice is happening in the online division with new faculty because the colleges are getting so big.
- I see departmentalization happening and it segregates the fields so that they cannot collaborate. Even within the college there can be segregation of the different fields. The segregation of the different fields has gotten to where the cohesiveness and the collaboration between the fields is gone.

What are the benefits of virtual collaboration to remote online adjuncts?

- Ways to improve grading by using a rubric. Specifically designing and developing curriculum for different classrooms.
- Using case studies and real examples are important.
- Instead of saying this is how I do it why don't you do it this way. I want whoever is listening or reading to understand where I'm coming from.
- When we collaborate we talk about experiences where we were able to connect to students. You need to hear how other faculty handle it. When we collaborate we have to agree that we are there for the students.
- It's pretty much the main form of connection I have with the University and certainly the main form of connection that I have with my peers.
- All those different people add to your knowledge about the way the university works.

- I see it as it has built my confidence. The collaboration is paramount. I am sitting in state all by myself and there's not another person near me that teaches for the University. So that form [virtual collaboration] is my lifeline.
- Sometimes I feel like I know people better than I would face-to-face because I get used to how they write. I feel more connected because I'm a visual learner and I can read their responses online in the social media sites.
- I have made some strong connections online in the virtual world. They are my virtual friends.
- New ideas collaborating virtually keeps me in the loop so I understand more perspectives. It keeps my perspective focused.
- The big one is just that social aspect of it, the connection with peers and other people in the organization, because without that you are essentially working in your home office isolated.
- It's just nice to know that there are other people out there who have the same issues that you have and the same problems. You can bounce ideas off of people otherwise you're left to your own discretion and left wondering is this normal? Is this appropriate? Is this really benefiting the student? Am I being too harsh? Am I being too lenient? You start to self-doubt.
- Many people have misperceptions about the virtual learning and it's nice to talk with others who understand those misconceptions.
- Virtual collaboration can help with job security by fulfilling the obligation to do research.
- I think the professional growth would be my main reason and that sense of personal satisfaction and expanding my world and horizons. I think to see new perceptions and see new people in the world.
- How can I express how much. If you would've seen me in 2002, what I did then and what I do now as a teacher is immeasurable.
- We really have no choice you either change or you're not going to be teaching. You have to find out what other people are doing and how they're doing it. If you want to stay working there you have to take the time to update yourself.
- Using social media like LinkedIn is good for me because it keeps me stretching as a faculty member.
- Teachers have to see what other teachers do.

- You hinder your peers if you do not collaborate. Imagine- If I am the instructor who is supposed to teach the students' next class and I'm not aware of what others are doing with their students. It [not collaborating] puts me at as an instructor at a disadvantage because that person is not sharing information.
- If someone is not collaborating outside of the classroom they can only teach you what they know. It creates a gap and people become more passive when they are in a closed practice.
- But I really think you sabotage your own efforts because you may think you have the best strategies and practices in the world but you can benefit from finding solutions to common problems. Private practice is self-defeating.
- It builds up morale and built a consciousness about a problem.
- The ability to obtain a greater avenue of shared information. I use it with different individuals within different disciplines to increase the knowledge of shared information amongst a larger group of disciplines.
- When you attend training and you hear what some of the other faculty are doing in terms of best practices it makes you want to do it because you realize that what they're doing is good and you want to be the best as possible.
- I have never felt that I'm competing with people that I'm collaborating with because most of them are far superior to me and I'm just happy to be included.
- Collaboration gives me the feeling that I can reciprocate by helping others. You will do better in your job and find more satisfaction and it would help students better through collaboration.
- I think I find it easier to do virtually. I do not have to see the expression on your face if I say something and you do not like it. I do not have to see that body language. So virtually, that keeps the body language separate so it does not interfere because we can misinterpret body language. I like the anonymity. I do not have to see people's reactions to me.
- I think it's a little bit easier to trust in the online environment. Because you have a chance to word your questions deliberately not to offend somebody. So I think that it's easier online because you have more time -you're not speaking off the top of your head-you have more time to design what you are going to say and how you're going to say it.
- With my peers there is a trust relationship. This [the interview] is an example of virtual collaboration even though we don't know each other we have trusted each other. You have to trust that people are willing to help through collaboration.
- I would say that I have a greater sense of trust with the connections that I've made during virtual collaboration opposed to face-to-face. I think the trust increases [virtual

collaboration] because for example most of my peers I have built greater relationships with because we are more inclined to share information.

- The good thing is that when you are working with other people they bring strengths that help complement my weaknesses. Were all in the same boat and we all want to learn more.
- Time makes it easier because with the interactions that I have shared with others I don't have to drive someplace and I can use the technology that I have. So I can pretty much be collaborating anywhere with any group of people and at any given time as long as I have my resources and tools.
- I think it's easier, in many ways virtually, to keep that tone positive. How do you write sarcastically? I have been a mentor to new faculty and this makes me proud to help someone new to online teaching.

What underlying themes, if any, emerge from remote online adjuncts experiences of virtual collaboration?

- I wanted to be involved in research and I did not want to take on the research project on my own because I have absolutely no experience with it. Being part of a research group, we are all kind of new and thrown in together, so the responsibility for all of the research and all the tasks don't fall on just me, the workload is shared.
- I am trying to do more collaboration with people for things like conferences and presentations.
- Mainly what I have gained is the diversity because online often times it takes international presence.
- In the virtual world I can get the most up-to-date information because you are sharing so much there is so much information out there as peers are using that they share all the time so I am always learning about a new program, new software, just different things that I would not get in a day to day, face-to-face situation.

Interview Data

During the course of ten phone interviews, the remote online adjuncts extensively shared their lived experiences of virtual collaboration. Participants responded to eighteen different questions about their virtual collaboration experiences. The questions served to form the answers to the six sub-questions in this qualitative study. The data were summarized by each

corresponding Sub-question. The list of interview questions provided a framework for the responses.

Sub-question #1. What methods or approaches are remote online adjuncts using for virtual collaboration?

Interview Question:

• What collaborative tools do you use for virtual collaboration?

Participants used a variety of tools or platforms for virtual collaboration. Most commonly, the tools were email, faculty forums, and social networking sites. Tools can be a barrier for virtual collaboration, so it is important to understand how the participants are currently using the tools (Bauerlin, 2011). Every participant mentioned email in the interview when asked what collaborative tools they used. Joe added that email is not a strong enough tool and that faculty "have to learn to change and not rely soley on email." Faculty forums were also used with high frequency. Table 4 outlines the frequency of tools used by the participants.

Faculty forums were used on a regular basis by the participants. One participant noted that the faculty forums are casual and allow faculty to talk about anything. Ann stated, "The faculty forums give opportunities to make connections and collaborate." Carol expressed gratitude for the faculty forums in their university, "When the faculty forums came along, I jumped in right away. I see it as a system that has built my confidence for virtual collaboration." Linda also expressed appreciation for faculty forums as a collaboration tool, but noted, "The forum is going to have to change to meet our collaboration needs." Linda felt that the faculty forums are not robust enough to meet their virtual collaboration needs.

Several of the participants mentioned the importance of Internet tools that can be used through their smartphones. Sophie elaborated, "There is a tool called Collaborate which has an

app for the iPhone. Therefore, I don't have to be at my computer or at my home when I collaborate with anyone." Norm felt confident about using an iPhone for collaboration purposes by comparing it to a laptop. Norm added, "I can record on my iPhone and send it. I can also Skype and use lots of technologies applications on my phone."

Although over half of the participants listed Facebook as a daily or weekly collaboration tool, the participants used the tool for family and friends. Carol stated her dislike for Facebook.

Instead, Carol prefers to use the tools provided by the university such as faculty forums.

Some participants were clear on the purpose for using specific collaborative tools. Ann explained her use of Internet tools for virtual collaboration, "I use faculty chat which is also called Academic Social Networking, LinkedIn for different types of responding to various blogs, Skype for the ability to share my desktop and information. I also use Google hang out and chat." Norm shared disappointment with others when he stated, "People don't use the tools they have right in front of them." Others did not understand how their peers were using certain tools such as Twitter. Mary added, "I have a Twitter account but I just haven't found that it is helpful for me as far as faculty." Sue discussed difficulty with learning new technologies and her insecurity about what each platform accomplished in terms of virtual collaboration. Issues arise with collaboration when faculty fails to keep pace with updates in technology with Norm noting that faculty are not "technically there." In addition, Joe admitted, "In the past I didn't keep up with the amount of technology out there but today I feel like I am up-to-date."

Four of the participants did not trust some of the collaborative tools that are available.

Janice explained her fears: "I'm very strict [about using Internet tools] because once I had instant message on my computer and it wrecked my entire computer with a virus." Yet others such as Mary stated, "I am open to try to learn the different types of platforms especially for more

effective collaboration." One participant noted that although he doesn't have any concerns with collaborative tools, some of his peers are apprehensive, hindering collaboration. Lindsey stated, "Some people are scared of new technology so I have struggled with collaboration because people don't know how to use the technology especially if it's not user-friendly."

Connectivity seemed to be a obstacle for many of the participants in terms of tools. Janice described frustration with Skype, "There can be a lot of disconnects online with equipment so it's not the best for me." Carol echoed the concern of connectivity, "It's overwhelming when you want to start [collaborating] and you cannot get connected to the Internet. It makes me feel truly desperate to connect to the Internet." All participants noted that technology tools for connecting to the Internet have to be available. The other challenge can be the weakness of the technological application.

Table 4. Frequency of Virtual Collaboration Tools by Participants

	Daily	Weekly	Monthly	Less than	Never
				once a	
				month	
Email	8	2	0	0	0
Twitter	1	1	1	2	5
LinkedIn	0	3	5	1	1
FaceBook	3	3	0	2	2
Blogs	0	4	2	1	2
Wikis	0	2	0	3	5
Faculty Forums	8	2	0	0	0
Other Social Media Sites	1	2	1	5	1
Other Online Learning	2	2	2	3	1
Communities					

Sub-question #2. What are the reasons for virtual collaboration among remote online adjuncts?

Interview Question:

How has socializing with your peers influenced your morale?

Understanding how morale is impacted by remote online faculty virtually collaboration provides possible insights into participation motives. Participant responses repeatedly showed that remote online adjuncts value the ability to socialize with peers. Carol commented, "It certainly plays a role in my interests, because that is the way that I connect with my colleagues. That is the way I get to bounce ideas off of other people who are in a similar situation. Without it, I would feel very isolated." Linda noted, "The camaraderie that a lot of us have formed over the years is important." Sue found benefits to socializing with peers, stating, "I think it increases morale because for one when I'm working in a virtual environment I am in my own zone, so I tend to be more social then if I had to actually go to a physical location." Linda found that her morale was increased because she found that, "Other people are having moments of confusion that I can identify with. I don't feel quite so alone in my confusion." Lindsey shared, "I don't feel like I'm alone anymore. My online colleagues get it; I can tell them something that happened and they feel the same way."

Others found it hard to socialize. Janice mentioned that it was hard to socialize in a virtual world adding, "It takes an individual deciding how much they want to get involved with someone. Those of us that are older may not be as easy or at ease with that." Lindsey also shared concerns about socializing through virtual collaboration: "It is not always good for morale because I find that in the virtual setting there are some people who tend to be brass for whatever reason- they don't have a personal connection and they have a tendency to be unprofessional, critical, and condescending." High quality interactions may benefit morale while unsatisfactory experiences may negatively impact morale. Socialization was viewed as a benefit for some of the participants, but not all of them.

Sub-question #3. What are the barriers keeping remote online adjuncts from virtually collaborating?

Interview Questions:

• Describe your readiness level to collaborate virtually.

Eighty percent of the participants described a high level of readiness to collaborate virtually. Eight of the participants described their preparedness to collaborate virtually in many different situations. Mary stated, "I am pretty open because I learned so much from sharing with others in a virtual world." Two of the participants felt ready to collaborate but also shared their fears. Carol worries that peers will be judgmental of their contributions. Ann finds themselves ready to collaborate but also feels selfish and wants to work alone.

• What communication obstacles have you encountered before or during virtual collaboration?

A few participants noted two reoccurring communication obstacles: time and the lack of body or facial cues. Communication obstacles can hinder the virtual collaborative efforts of remote online adjuncts.

One participant shared that time can be a negative factor in virtual collaboration. Specifically, the participant is at the mercy of other contributors due to turnaround time to receive an answer to a question. Norm and Sophie both noted that the time zones also create a communication barrier to virtual collaboration. Sophie clarified, "Sometimes I need an immediate answer and because of the time zone, I cannot get it."

The lack of body language is also a communication obstacle for some participants. Carol stated, "I try to be so careful on the sites that after I write a statement, I reread it twice to make sure that it [message] is crafted so that it is not derogatory condescending or negative." Ann finds that face-to-face gestures communicate that people understand and such nonverbal cues are

lacking in the virtual world. Ann described the lack of body language as a disadvantage because, "You may have to take additional steps in order to process the information and get what you're seeking."

Others found the lack of body language to be helpful in concentrating on the written message. Janice had the strongest reaction to the question, stating, "I do not have to see the expression on your face if I say something and you don't like it. I don't have to see that body language. So virtually, that keeps the body language separate so it does not interfere because we can misinterpret body language. I like the anonymity, for me, I don't have to see people's reactions to me."

 How has trust with other collaborators played a role in your virtual collaboration experiences?

A frequent theme in response to this question was that trust was not a factor in virtual collaboration practices among remote online adjuncts. Trust was described as a though it was automatically given to peers in the online world. Carol said she trusted others because, "I think that just working online you have to grant people a certain level of trust to begin with." Norm added, "If we don't trust each other then I can't trust the information you give me and we would waste each other's time." Linda felt a greater sense of trust virtually than in a face-to-face situation. When asked why, Linda replied, "Perhaps because we live in different states and so we inclined to share more information." Ann credited a trust of other virtual collaborators to the concept that remote online adjunct faculty have to find people who know "what it is like." Lindsey shared Ann's sentiment by adding, "We are all in the same boat and we all want to learn more." Furthermore, Janice stated, "You have to realize that when you're working with people it's going to take trust. It's not that people aren't trustworthy, they are

trustworthy, but they have to deal with life problems that are not always their fault." Mary concluded with her feelings about trust when she stated, "Trust has to be there and that people have your back when you're working together."

• What role does time play in your virtual collaboration practices?

Nearly all of the participants found time to play a considerable role in their virtual collaboration practices. Although all participants mentioned time as a significant consideration, only two of the ten found it to be problematic. Janice found time to be "the enemy" and felt that time was an element of stress. Sue also found time to be a challenging element and struggles to find time to collaborate virtually.

Other participants found that the essence of virtual collaboration saved them time. Joe stated, "Virtual collaboration from an asynchronous point of view works because you have access any time of day. It is not as if you need to be at this meeting at this specific time like at eight o'clock in the morning, so that aspect of time is very beneficial." Norm found time to be helpful because interactions can happen quicker, especially when participants do not have to drive somewhere to meet peers. Finally, Lindsey feels that a misperception exists that virtual collaboration takes less time. Lindsey added that collaborating from home means that a remote faculty member must have time free of distraction.

 What are your experiences with virtual collaboration groups or partnerships lasting over time?

In some cases, faculty found some virtual collaboration partnerships lasted over time while other groups dissolved. A lack of leadership leading to group dissolution seemed to be a common response from participants. Carol found that only collaborative groups originating through the university lasted over time, and relationships with outside learning communities

did not last. Carol defined part of the problem as, "Different people having different viewpoints. I think that there was not enough consistency nor really knowing what was happening." Linda shared concern that virtual groups do not last over time because there is, "No one to man the ship." Janice shared their experience of working in groups of 10 people that only had 3 to 4 people working at a time.

In addition to the lack of leadership in virtual learning communities, others commented that virtual groups do not last over time because of the instability of members. Janice commented, "People come and go. It seems like in the morning someone wants to join a group and then by the afternoon they leave or somebody else leaves." Lindsey also discussed the exodus of people from groups, "I've had one person who I've become really good friends with when we met on LinkedIn we clicked and we e-mailed for year. And she just dropped off the face of the earth." Sue noted that a small amount of virtual partnerships had lasted for about a year. Sue explained that virtual collaboration can be overwhelming, stating, "You don't always have the full explanation in a face-to-face situation where you can ask for clarification. It can take a lot of energy and time to be able to do those well."

• What social rules and norms have you experienced during virtual collaboration?

The participants seemed to concur on a need for consistent social rules for virtual collaboration. The participants noted several commonalities in social rules and norms, such as using a professional tone in written messages, listening, and showing respect. Two participants also mentioned the importance of understanding cultural differences while collaborating virtually.

Several participants expressed a need for virtual collaboration to include well-developed messages. Carol voiced that collaborators must be mindful of how they express ideas. More

specifically, Joe discussed the need for, "Everyone to understand the rules of netiquette and if everyone does not understand those rules you do not make a good team." Netiquette is an abbreviation for network etiquette, which Berk (2011) described as the appropriate and polite way to communicate online.

Three participants discussed the importance of listening. In particular, Norm commented, "People who are presenting in a collaborative way should have a specific amount of time to talk and they shouldn't exceed it because it affects the collaboration. It takes time from others who need to say things or ask questions." Norm offered a suggestion that someone needs to be the timekeeper and set an agenda. Additionally, Janice discussed the need for collaborators to take different roles, stating, "Sometimes you have to be the learner and sometimes you have to be the leader. You have to know when to put yourself in each one of the roles."

Respect was a common need shared by the participants. Mary mentioned that, "People hunger for respect, whether they are worthy of it is another story, but they expect to be treated with respect." An example of respect provided by Mary was allowing people to be able to finish their sentences. Mary also noted that in the virtual world, hitting the send button makes it impossible to take back a message. Lindsey mentioned that one online learning community discussed the possibility of using a team charter as a way to set guidelines for being respectful. Janice shared that they practiced respecting others by visualizing the real person on the other end of the computer; Janice uses this method to be mindful of what they say.

Understanding diversity is essential to successful virtual collaboration. Norm described culturally diverse experiences virtually collaborating with others: "Different people have

different backgrounds and different understandings and different cultures." Norm shared an example of how a joke they made in an online learning community about their wife was found to be offensive to another collaborator, who viewed the joke as insulting to women. Norm said. "I have learned to be careful of other cultural beliefs, especially about women." Sophie also noted the importance of culture because one of the schools they work for is in another country. Sophie has found that the cultural norms are different and that they need to be considerate of differences in cultural norms, such as time. Lindsey stated, "Some cultures do not share the same views of time as Americans do. In one example, I learned that some cultures do not honor times for meetings. When I asked about it, I was told that having to be on time is like being enslaved." Lindsey was frustrated by the different viewpoints of time because they were waiting for the other participant to work on a project together. Mary also noted the need to understand how to best teach cultural diversity through discussions and understandings of social norms. In addition, Sophie stated, "For me having that diversity is invaluable culturally, geographically or otherwise. It's helpful for me as a professional to have input from the various designs perceptions and culture of others to broaden my horizon."

Sub-question #4. What are the benefits for remote online adjuncts that virtually collaborate?

Interview Questions:

• What types of best practices have you shared during virtual collaboration?

Eight different examples of what remote online collaborators share or consider as best practices were offered. Participants did not specifically rank the best practices by the most important or most used. The list consisted of:

- Grading
- Using case studies
- Using visuals in the online classroom
- o Spreadsheets used in classes for tracking purposes
- Developing relationships with students
- Time saving tips
- o Incorporating technology into the classroom
- Quality participation as a faculty member.

Mary discussed the importance of sharing best practices, saying, "Instead of saying this is how I do it why don't you do it this way. I want whoever is listening or reading to understand where I'm coming from." Norm also noted that fellow collaborators need specific examples of best practices to relate to their own classroom. Janice provided great insight into the topic of best practices, stating, "With sharing best practices you have to realize that there is not a one-size-fits-all." The variety of topics shared as best practices illustrates the diversity of the participants' experiences. The variety also illustrates how virtual collaboration is defined by each member based on their own needs.

• How has virtual collaboration influenced your connection to the university or your peers?

The most common response to this question indicated that virtual collaboration provided a connection to the participants' institution of higher education. Participants recognized that they would feel alone without the ability to collaborate virtually with peers. Carol stated, "The collaboration is paramount. I am sitting in state all by myself and there's not another person near me that teaches for the University. So that form is my lifeline." Sue said, "I feel more connected because I'm a visual learner and I can read their responses online in the

social media sites." Sue also mentioned that they sometimes feels more connected to people online than face-to-face because they develop familiarity with their writing style.

Several participants noted that virtual collaboration has helped them form a sense of loyalty to the college. Linda remarked, "It's pretty much the only form of connection I have with the university and without it, I would not be connected to my peers." Joe discussed how their connection to the university has increased through collaboration even though, "All three colleges that I work for are learning how to have online collaboration because it is new to them." Mary referred to the strong connections made online as "virtual friends."

• What are some of the reasons for your participation in virtual collaboration?

For remote online adjuncts in this study, the most common reasons for virtual collaboration included having social opportunities, developing professionally, and conducting research. Others found it vital to stay current on events and changes in their colleges. Two participants mentioned the value in staying well informed of new technology.

Participants mentioned the social connection helped them feel less isolated while working from a home office. Specifically, Carol found the social connection as a way to affirm their decision making as an online instructor. Two participants, Carol and Lindsey, both commented that before virtual collaboration, they would speak to their families about online teaching and their families did not empathize with their work. Virtual collaboration provided several of the participants with a means to share with peers who can relate to the nuances of online teaching. Sue had a similar response, discussing the misperceptions about the quality of virtual education. Sue stated, "Many people have misperceptions about the virtual learning and it's nice to talk with others who understand those misconceptions." Sue finds the social

aspect of virtual collaboration as an avenue for talking with others who understand the challenges of online teaching.

Norm noted the main reason for participation in virtual collaboration was to improve as a professional, stating, "Every single virtual collaboration experience or activity I have learned from and has added to my knowledge." Linda and Joe also mentioned that virtual collaboration was a way to learn how to hone their effectiveness as online adjuncts. In addition, Sophie found a, "sense of personal satisfaction from expanding my world and horizons." Similarly, Janice said that using a variety of technologies such as LinkedIn helped them grow professionally, specifically, "because it keeps me stretching as a faculty member."

Research was a common response amongst participants for participating in virtual collaboration. Norm, Sue, and Janice all felt pressured to publish in their fields to continue working in their colleges. Through virtual collaboration, the remote online adjunct can share the burden of conducting research. Lindsey also mentioned research as a main reason for participating in virtual collaboration, and was trying to publish as a means to add to their resume to secure a full time online teaching position. All four participants indicated that virtual collaboration helped them share the workload and feel more secure about embracing research projects.

What impact has virtual collaboration had on your practices?

Although there were a variety of responses to the influences of virtual collaboration, one common thread was the importance of staying current with best practices. Several participants discussed the need to "stay in the loop."

Remote online adjuncts are compelled to identify how peers are managing issues in the online classroom. For this reason, Carol virtually collaborates to gather recommendations

from others with common problems like plagiarism. Linda admits that an original motivation for virtual collaboration was to have a means to compare their practices with those of peers. However, Linda has been teaching online for 5 years and that motivation has changed with increased confidence in their facilitation skills. Additionally, Joe clarified that their use of virtual collaboration is a means to evaluate effective and ineffective practices in the online classroom.

Janice offered a candid explanation, saying," Over the years, a lot has changed. We really have no choice, you either change or you're not going to be teaching. You have to find out what other people are doing and how they are doing it. If you want to stay working there, you have to take the time to update yourself."

Sub-question #5 What are the perceptions of remote online adjuncts about virtual collaboration?

Interview Questions:

• How do you feel about the philosophy of private practice?

The participants responded unanimously that private practice prevents remote online faculty from improving as educators. Carol reflected on their first year of working alone online compared to now, with the influence of frequent collaboration, and found the difference to be immeasurable. Ann described private practice as "detrimental," and further explained that adjuncts should examine the practices of other adjunct instructors. Ann added that, "In private practice mode, there is no expectation to reflect on what's going on behind those 'closed doors'. When we open 'those doors', and when we let people in I think in the long run it helps us engage with the students of the current time. We cannot afford to keep the 'doors' closed."

Others described private practice as hindrance to their peers. Sue described private practice as a philosophy that "places [me] at a disadvantage" when colleagues do not share information. Sue added that private practice is detrimental to students when teachers are "too focused and limited in their practices." Joe also had a strong reaction to the idea of private practice, complaining, "If someone is not collaborating outside of the classroom, they can only teach you what they know. It creates a gap. People become more passive when they are in a closed practice. They can't go any further because they haven't collaborated with anyone, and they haven't tried to improve their studies and understandings of different generations." Lindsey viewed private practice as "self-sabotaging and self-defeating."

• As a remote online adjunct, what are your perceptions of virtual collaboration?

All ten of the participants reported fondness for virtual collaboration. Several participants identified their experiences with virtual collaboration as both positive and negative, but were quick to note that positive aspects outweighed negative components. Some shared that their slow start to virtual collaboration was due to a lack of knowledge on how to begin. Carol shared an experience of finding the faculty forums in their college for the first time, saying the forums nurtured their confidence and acted as a gateway to other social media sites. Carol likened the academic social network site of their college to, "get[ting] together with friends for drinks after work."

Several participants reflected on the need to share with colleagues virtually. Sue stated, "At some point when you are online, you have to get together with people to see how to improve." Norm echoed the need for virtual communication to give the faculty a chance to ask, "What can we do better?"

• How does departmentalization affect virtual collaboration?

The majority of participants in this study found departmentalization to impede virtual collaboration. Joe shared experiences for teaching remotely for three different colleges, describing departmentalization as injurious to virtual collaboration because there is no consistency in how different departments collaborate. Joe is also frustrated that each university provides a different collaboration platform for faculty. Norm, who teaches for several universities, dislikes the inconsistencies of virtual collaboration opportunities in different departments. Norm described one university as having random opportunities for collaboration, providing the example that a forum for faculty who teach a certain class is only open for a short time period. Limiting the period that the forum is open does not allow the faculty time to collaborate with others before the forum disappears.

Carol echoed the sentiment that departmentalization is a barrier to virtual collaboration. Carol's experiences showed not only a lack of articulation amongst departments, but also intra-departmental flaws in communication. She compared the lack of communication to the same phenomenon that occurs in K-12 education, "Elementary teachers have no clue what goes on in high school and vice a versa." Sue labeled departmentalization as "segregation" between different fields, finding that the isolation of the different departments has damaged the "cohesiveness" among employees of the same college. Janice concurred with the other participants, adding, "Some departments are insular. It depends on how the department is structured and what the rules are for that department. Some administration encourage faculty to collaborate with others think it is disloyal if you talk to the 'other' programs. But enlightened leadership is not universally found."

The only opposing viewpoint was Sophie who liked collaboration that is limited to one department. Sophie found that departmentalization "helps to keep collaboration more focused," defining departmentalization as, "A means for keeping virtual collaboration from going in too many different directions."

 Does competition for recognition from the university influence virtual collaboration practices?

Participants represented both viewpoints pertaining to competition for recognition. The multifaceted replies from participants illuminate the complexities of higher education recognition among online remote adjuncts. Five participants wanted to be recognized for their teaching practices, but recognition did not decrease motivation for participation in virtual collaboration.

Carol, Linda, Norm, and Janice all mentioned a need for the administration to see them as active in professional development, collaboration, and participation in learning communities. Norm described the need for faculty to be visible, explaining, "You want the administrators and deans to see you collaborating with your peers." One participant described how faculty compete in different ways: "You are striving for the 'powers that be' to know and understand that you are doing an excellent job and that you want recognition."

A divergent theme was that competition for recognition improved virtual collaboration. Mary found that competition for recognition increases desire to virtually collaborate because when they collaborate, they learn how to improve. Lindsey provided yet another viewpoint, stating, "I have never felt that I'm competing with people that I'm collaborating with because most of them are far superior to me, and I'm just happy to be included. Many people who collaborate are truly scholarly." Sue also agreed that competition did not negatively impact

virtual collaboration because they did not think that their college acknowledged remote online adjuncts.

Sub-question #6. What underlying themes, if any, emerge from remote online adjuncts experiences of virtual collaboration?

Interview Questions:

- As an online adjunct, what have you experienced in terms of virtual collaboration?
- As an online adjunct, what contexts or situations have influenced or affected your virtual collaboration experiences?

One consistent theme was the desire for faculty to be active in different mechanisms for participation in inquiry and scholarship. For some, the avenue for scholarship was using virtual collaboration for research. For others, it developed through the desire to create curriculum. A desire to help others was clear from the participants' responses.

Joe shared a desire to join with others in a collaborative research project. Ann also feels pressured to publish and finds that online learning communities provide an opportunity to find others share similar interests. Lindsey further discussed virtual collaboration as a vehicle to participate in scholarship through presentations at conferences. Lindsey views virtual collaboration as way to contribute to the learning community while networking with peers.

Several participants use virtual collaboration as way to improve curriculum or teaching practices. Carol uses collaboration to share ideas and create lesson plans, adding that virtual collaboration is easier because of the ability to collaborate with a larger number of colleagues, due to the, "virtual capacity of sharing information."

Helping others was a common theme among responses. One participant shared the sense of accomplishment felt when contributing to an online learning community. The desire to

assist peers surfaced in the comment, "I don't want to leave out anything for my peers, so I give out a lot more than I would in face-to-face [collaboration]." Two other participants mentioned satisfaction from mentoring other faculty through virtual collaboration.

The eighteen interview questions generated data regarding virtual collaboration experiences and practices. The interview questions help to answer the six Sub-questions in this qualitative study. The meaning units evolved from the summary of the significant statements and subsequent development of emerging themes.

Clustering Meaning Units- Labeling Themes

Moustakas (1994) noted that the clustered and labeled themes create the essential themes of the experience, stating, "From the individual descriptions, general or universal meanings are derived, in other words the essences or structures of the experience" (p. 4). The next step for data analysis occurred through deleting irrelevant, repeated, or overlapping statements (Moerer-Urdahl & Creswell, 2004). The remaining statements were then considered the horizons or textural meanings (Moerer-Urdahl & Creswell). The researcher carefully examined the identified significant statements about virtual collaboration and clustered the statements into themes or meaning units (Moustakas, 1994).

Nine themes emerged from this analysis about how participants experienced virtual collaboration (see Table 5). Through a process of reduction and elimination, the researcher extracted the invariant horizons. These were coded and clustered into meaning units from which nine themes emerged:

- 1. Need for leadership
 - a. Clear roles
 - b. Create opportunities for collaboration

- c. Connect collaborators
- 2. Camaraderie (fellowship)
- 3. Trust
- 4. Social Connections
- 5. Scholarship (research)
- 6. Self-Reflection (How do I measure-up. What us my performance compared to others)
- 7. Pride
- 8. Lack of time
- 9. Pressure to collaborate

Table 5. Themes or Meaning Units and Evidence

Clustering Units of Meaning/Themes		Evidence in Participants' Statements
Need for Leadership	Clear Roles	"It can be sensitive because you don't know what to expect."
		"I have seen virtual collaboration groups fail because there was not enough consistency and people did not really know what was happening."
		"The roles need to be clear for relationships to last."
		"Someone needs to be the timekeeper. There needs to be an agenda."
		"Sometimes you have to be the learner and sometimes you have to be the leader. You have to know when to put yourself in each one of the roles. There is a time and a place for each one of them. You have to know that when you are collaborating with people when to listen and when to lead."
		"There are rules within collaboration that everyone

	has to understand and if everyone does not understand those rules you do not make a good team."
Create Opportunities	"I think most faculty use the sites provided by the college"
	"The size of the group can be a problem and if there isn't a leader, people do not know where [collaboration] should go."
	"I think some of private practice is happening in the online division with new faculty because the colleges are getting so big."
	"I see departmentalization happening and it segregates the fields so that they cannot collaborate. Even within the same college there can be segregation of the different fields"
Connect Collaborators	"It is hard to know how to invite people to collaborate."
	"You do not have peers' contacts and you need some way of communicating, sharing, and comparing."
	"One of the instructors that teach the same class that I teach was struggling with his students to complete an assignment. The college gave him my number and he contacted me."
	"People do not know where to go to collaborate virtually."
	"Online you are going to get a constant change of people."
	"It [private practice] creates a gap and people become

	more passive when they are in a closed practice."
Camaraderie • Fellowship	"The camaraderie that a lot of us have formed over the years is important."
	"My colleagues online get it. I can tell them something that happened and they feel the same way."
	"As an online adjunct faculty we have to find people who know what it's like.
	It's just nice to know that there are other people out there who have the same issues that you have and the same problems.
	"Many people have misperceptions about the virtual learning and it's nice to talk with others who understand those misconceptions."
	"It builds up morale and built a consciousness about a problem."
	"The ability to obtain a greater avenue of shared information. I use it with different individuals within different disciplines to increase the knowledge of shared information amongst a larger group of disciplines."
	"The good thing is that when you are working with other people they bring strengths that help complement my weaknesses. Were all in the same boat and we all want to learn more."
Trust	"I try to be so careful on the sites that when I write it, I reread it twice to make sure I craft my message so that it is not derogatory, condescending, or negative."

"You have to have the trust that there's not going to be backlash from your questions or replies." "There are topics I may not bring up in the faculty forums" "I trust all of them but you have to be realistic." "I think that people who are working together are more trustworthy than the ones who are not willing to be involved" "Trust has to be there that people have your back. When you are working together you have to have trust." "Without trust, there is no understanding." "You have to trust that people are willing to help through collaboration." "I would say that I have a greater sense of trust with the connections that I've made during virtual collaboration opposed to face-to-face. I think the trust increases [in virtual collaboration] because for example most of my peers and I have built greater relationships because we are more inclined to share information." **Social Connections** "Virtual collaboration is the way that I connect with my colleagues. I get to bounce ideas off people who are in similar situations. Without it, I would feel very isolated." "I am in a comfortable spot for myself, so I tend to be more social then if I actually had to go to a physical location. It enables me to be more involved than faceto-face."

	"It's pretty much the main form of connection I have with the University and certainly the main form of connection that I have with my peers." "It [virtual collaboration] is my lifeline." "Sometimes I feel like I know people better than I would face-to-face because I get used to how they write."
	"I have made some strong connections online in the virtual world. They are my virtual friends."
Scholarship • Research	"Virtual collaboration can help with job security by fulfilling the obligation to do research."
	"I wanted to be involved in research and I did not want to take on the research project on my own because I have absolutely no experience with it. Being part of a research group, we are all kind of new and thrown in together, so the responsibility for all of the research and all the tasks don't fall on just me, the workload is shared." "I am trying to do more collaboration with people for
	things like conferences and presentations."
Self-Reflection	"I do not feel like I'm the only idiot out there. I think other people are having moments of confusion that I can identify with. I don't feel quite so alone in my confusion."
	"You need to hear how other faculty handle it"
	"I see it as it has built my confidence. The collaboration is paramount. I am sitting in state all by myself and there's not another person near me that teaches for the University."

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	"It keeps my perspective focused."
	"You can bounce ideas off of people otherwise you're left to your own discretion and left wondering is this normal? Is this appropriate? Is this really benefiting the student? Am I being too harsh? Am I being too lenient? You start to self-doubt."
	"You have to find out what other people are doing and how they're doing it."
	"Teachers have to see what other teachers do."
	"When you a attend training and you hear what some of the other faculty are doing in terms of best practices it makes you want to do it because you realize that what they're doing is good and you want to be the best as possible."
	"I have never felt that I'm competing with people that I'm collaborating with because most of them are far superior to me and I'm just happy to be included."
Pride	"If I helped one of my peers, it is satisfying."
	"You do not want to lose credibility with your peers."
	"I want whoever is listening or reading to understand where I'm coming from."
	"Collaboration gives me the feeling that I can reciprocate by helping others."
	"I have been a mentor to new faculty and this makes me proud to help someone new to online teaching."
Lack of Time	"The only thing that holds me back is the time."
	"Different time zones especially if somebody's in a

	different country."
	"You have to have time. It is a misperception that online collaboration takes less time." "Collaboration may not succeed because of time. Collaborators have to be dependable and responsible to meet the time deadlines or online meetings."
Pressure to collaborate	"It also seems to be the way the organization is doing it and if you want to be part of the organization, then you have to learn it so you might as well recognize that it is one of the prerequisites to serving as a faculty."
	"I have to prepare to make sure that I do not appear unprepared." "We really have no choice you either change or you're not going to be teaching. If you want to stay working there you have to take the time to update
	yourself." "You hinder your peers if you do not collaborate."

The nine themes emerged from the data reduction and elimination. The next step in the data analysis process was to add the textural description. The textural and structural descriptions were created from the demographic forms that participants completed prior to the phone interviews. The following section provides a summary of those findings.

Textural Description

Creswell (2007) recommended writing a description of what the participants experience in terms of the phenomenon. Table 6 summarizes the frequency and reasons for virtual collaboration among the participants. From Table 6 and participant interviews, textural

descriptions identified adjuncts' experiences in virtual collaboration. Additional meanings tried to find different perspectives, roles, and functions of virtual collaboration (Moustakas, 1994). This process of imaginative variation leads to the structural textures resulting in essential structures of the phenomenon of virtual collaboration.

Table 6. Summary of Virtual Collaboration Experiences

I have participated in the following	Once	Two to	More than	Never
virtual collaborative experiences:		three times	three times	
Sharing Best Practices		S10	S1,S2, S3,	
			S4,S5,S6,S7,	
			S8, S9, S10	
Professional Development			S1,S2,S3,	
			S4,S5,S6,S7,	
			S8, S9, S10	
Research	S3	S2,S4,S6,	S1, S5,S7,S8,	
		S9	S10	
Curriculum for my courses		S2,S5	S3,S4,S6,S7,	S1
			S8, S9, S10	
Assessment for my courses		S2,S5	S3,S4,S6,S7,	S1
			S8, S9, S10	
Asking questions to my peers	S10		S1,S2,S3, S4,	
			S5,S6,S8, S9	
General discussions about online			S1,S2,S3,	
teaching			S4,S5,S6,S7,	
			S8, S9, S10	
Other		S7, S10	S1,S2,S5,S8,	S3,S4,
			S9	S6

Structural Description

Creswell (2007) endorsed the practice of providing a description of how the experiences materialized. For this study, all participants' experiences transpired in the online environment.

The demographic questionnaire and interview questions provide the context of the virtual

collaboration experiences of the participants. Table 7 illustrates the online platforms used for virtual collaboration.

Table 7 Structural Description of Virtual Collaboration Experiences

I have used the following for virtual collaboration	Daily	Weekly	Monthly	Less than once a month	Never
Twitter	S6	S7	S3	S5,S10	S1, S2, S4,S8,S9
LinkedIn		S4,S5,S7	S2, S3, S6, S9,S10	S1	S8
FaceBook	S3,S5,S7	S4, S6,S10		S1,S9	S2,S8
Blogs		S3,S4,S6,S 10	S1, S9	S7	S2,S8
Wikis		S3,S5		S1,S7,S9	S2, S4,S6,S8,S 10
Faculty Forums	S1, S3, S4,S5,S7, S8, S9,S10	S2, S6			
Other Social Media Sites	S9	S5,S8	S2	S1,S3, S4,S7,S10	S6
Other Online Learning Communities	S7, S9	S5,S6	S2,S10	S1, S4,S8	S3

The two summaries offer the textural and structural descriptions. Following the creation of these descriptions, a composite description was formed from the findings.

Composite Description

Creswell (2007) provided a means for summarizing the findings with a composite description, which includes the textural and structural descriptions. Moustakas (1994) described the final stage of data analysis as creating a combination description that represents the "essence" of the whole groups' experience (p. 120). The composite description incorporates the textural and structural description in order to depict the themes emerging from the general study and reveal the participants' experience of virtual collaboration (Moustakas, 1994). The final essence

or description of virtual collaboration encompasses the textural and structural descriptions of each participant's virtual collaboration experiences and answers the central question:

What virtual collaboration practices are remote online adjuncts using to influence their teaching strategies and to develop as professionals?

The nine meaning-themes presented below represent the essence of the lived experiences of virtual collaboration among online adjuncts teaching remotely:

- 1. Need for leadership
 - a. Clear roles
 - b. Create opportunities for collaboration
 - c. Connect collaborators
- 2. Camaraderie (fellowship)
- 3. Trust
- 4. Social Connections
- 5. Scholarship (research)
- 6. Self-Reflection (How do I measure-up. What is my performance compared to others)
- 7. Pride
- 8. Lack of time
- 9. Pressure to collaborate

Meaning Theme 1- Need for leadership

The need for leadership in virtual collaboration among remote online adjuncts was apparent. First, a lack of norms, undefined roles, and the absence of social cues leaves participants unsure of what their responsibility is in virtual collaboration. There is a need for clear roles and a structure of consistency in virtual collaboration experiences. In many instances,

the participants noted that collaboration happens haphazardly without leadership. Chen et al (2011) found that assorted participation without organization can cause "chaotic and ineffective learning" (p. 216). Two participants specifically noted that virtual collaboration required a shift in roles. Often they found themselves adjusting to be the learner or listener. Second, participants seemed to need a direction for their collaboration. For example, participants mentioned reasons for working on curriculum, creating rubrics, or sharing best practices, but felt that a faculty forum dedicated to collaboration would make the process easier. Last, participants expressed difficulty connecting with other collaborators. The participants were unaware of how to obtain contact information of other people working in their departments. Participants shared a desire to collaborate with others teaching the same courses, but did not know how to reach out to their peers. Some participants saw a disparity in how to begin collaborating because they did not know how to find collaborators or where to collaborate.

Meaning Theme 2- Camaraderie (fellowship)

Many participants found themselves positively transformed by their connection to their peers and colleges because of virtual collaboration. A number of remote online adjuncts responded that virtual collaboration unites them with others who share similar experiences.

Virtual collaboration exposes remote online adjuncts to others who share a common language, have mutual problems, and understand the diverse issues of teaching online. Speaking the same language and sharing the same experiences was a source of comfort. Communication with others who share similar experiences is important to remote online adjuncts. Faculty members find it reassuring to hear what their peers are experiencing and interacting with peers helped the participants have a more positive experience while teaching remotely.

Meaning Theme 3- Trust

Trust appeared to be offered freely by the participants in this study. Several remote online faculty emphasized an unspoken level of trust with online collaborators that is not existent in face-to-face situations. Several noted the need to focus on clear messages that were well-crafted and maintained positive tone to ensure the manifestation of trust. Importantly, several mentioned granting more trust to online collaborators because they felt their relationships were greater. Trust was highly valued by the participants.

Meaning Theme 4- Social Connections

One of the most frequently voiced benefits of virtual collaboration was a social connection. Remote online adjuncts often feel alone and isolated. Many talked about the satisfaction that they have from socializing with peers. Several participants noted that virtual collaboration was their only connection to the university. One participant called it her "lifeline." Another participant referred to the strong connections made in virtual collaboration as "virtual friends." Social connections provided a link to their peers and different colleges represented by the participants.

Meaning Theme 5- Scholarship- (research)

Participation in scholarship is an iterative process required by some of the participants' colleges. The pressure to publish seemed to be a catalyst for virtual collaboration. Ann shared the feeling of being pressured to publish in order to keep working in higher education. In addition, a need for acknowledgement by their employees thrusts remote online adjuncts into virtual collaboration. Remote online adjuncts see virtual collaboration as a means to publish articles, present at conferences, and participate in research through collaborative efforts.

Meaning Theme 6- Self-Reflection- (How do I measure-up? What is my performance compared to others?)

Virtual collaboration provides impetus for self-reflection. Comparing oneself to others becomes an opportunity for remote online adjuncts to evaluate use of their own best practices. For several instructors, they recalled feeling anxious about teaching online. The lack of interaction with peers left them feeling unsure of their performance. Paralleling with their peers' practices helps some participants solidify what constitutes good practices in online teaching. In a sense, discovering what other faculty members do in their online courses did more than just help the participants affirm their own practices, it also expanded their definitions of quality teaching. All of the participants' shared that in some manner their virtual collaboration experiences helped enlighten their remote teaching practices. Moreover, the context for needing to know what others are doing seemed to correspond to their own self-actualization. Remote online adjuncts were more confident with the knowledge that peers use the same, or similar, protocols, practices, and procedures.

Meaning Theme 7- Pride

The remote online adjuncts expressed pleasure when contributing to the learning community. Actively participating in a group enabled some to feel that they had given back or reciprocated to their peers. Supporting peers through mentorship and modeling created a sense of fulfillment to the remote online adjuncts. For many, the opportunity to engage in professional dialogue with their peers helps them to feel a sense of accomplishment. The participants viewed helping their peers as way to build pride.

Meaning Theme 8- Lack of time

The lack of time appeared to create frustration for remote online adjuncts. Two of the participants noted that a misperception exists about virtual collaboration taking less time than face-to-face collaboration. Some remote online adjuncts had an opposing view of time and found that virtual collaboration saved them time because they did not have to drive to a specific destination. Some faculty noted that time adversely affected their ability to collaborate virtually because of living in different time zones. All of the participants acknowledged that without given adequate time, virtual collaboration would not succeed.

Meaning Theme 9- Pressure to collaborate

Central to the theme of virtual collaboration was a sense of pressure to improve or to publish. The particular contexts and colleges in which the participants taught influenced their views on the pressure associated with collaboration. The participants that worked for colleges that require publication felt pressured to collaborate. Others felt that they needed to be "seen" in collaboration with their peers by administrators. For some, the pressure to publish or conduct research changed the way they virtually collaborated by seeking out others who also shared the same goal. Two participants specifically mentioned that the colleges are expecting remote online adjuncts to engage in virtual collaboration. One participant mentioned that virtual collaboration is a prerequisite to serving as a faculty member. Several participants felt a sense of obligation to contribute to virtual collaboration.

Summary of Results

All of the nine meaning themes could be construed as barriers or benefits of virtual collaboration. Nine units of meaning evolved from the collection of data: (1) Need for leadership (which was broken into 3 key parts: (a) clear roles (b) create opportunities for collaboration (c)

connect collaborators); (2) Camaraderie (fellowship); (3) Trust; (4) Social Connections; (5) Scholarship (research); (6) Self-Reflection (How do I measure-up. What is my performance compared to others); (7) Pride; (8) Lack of time; (9) Pressure to collaborate.

For some, a more explicit framework constructed by higher education leaders may improve collaboration. Specifically, guidance from leadership may provide clarity in the roles of collaborators, create opportunities, and connect adjuncts to peers in similar positions.

Camaraderie and connection with peers may supply empathy for the difficulties faced by remote online adjuncts. Trust emerged as key element to virtual collaboration. The social connection that remote online adjuncts have through virtual collaboration is a lifeline to their colleges.

Virtual collaboration creates essential opportunities for co-authoring and conducting research.

Having a means to measure ones practices with peers provides an stimulus for self-reflection.

Several participants felt a sense of pride when virtually collaborating with others. Time was noted as a barrier to successful virtual collaboration and some of the remote online adjuncts felt obligated or pressured to collaborate in order to maintain their positions with the colleges.

All of the themes have the potential to influence the remote online adjuncts' virtual collaboration practices. The meaning themes could be viewed as opportunities or constraints based on each individual's circumstances. For some participants, themes such as a lack of time or a feeling of pressure to collaborate are frustrating barriers. On the benefit side, virtual collaboration offers a sense of fellowship and camaraderie, an opportunity for social connections, and a means for self-reflection.

Conclusion

Each of the themes was presented, along with the demographic forms and interview summaries. Each theme was analyzed and the researcher provided a description of "what" was

experienced in textural descriptions, and "how" it was experienced in structural descriptions (Moerer-Urdahl & Creswell, 2004). The description of virtual collaboration among online remote adjuncts was captured, creating an essence of the experience (Moerer-Urdahl & Creswell, 2004). Finally, a summary of the results was provided.

In the next section, Chapter Five, a summary will be provided of the phenomenological study. Chapter Five also contains a section for findings, conclusions, implications, and recommendations. The findings are beneficial to remote online adjuncts, leaders of higher education, and other faculty teaching remotely.

CHAPTER 5 FINDINGS, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS

The purpose of this phenomenological study was to examine the lived experiences of remote online adjuncts' virtual collaboration practices. A phenomenological approach was used to understand virtual collaboration experiences of 10 remote online adjuncts. Phenomenological themes of meaning emerged as a result of the analysis of data from the interview and demographic forms (see Table 8).

Findings

The review of the literature provided the context to support the central question: What virtual collaboration practices are remote online adjuncts using to develop as professionals? From this question, the review of the literature categorized the benefits and barriers to virtual collaboration. The two categories helped establish the specific areas for exploration of the study. The interview questions and demographic forms were used to gather data to answer the central question. Nine themes evolved as follows:

Table 8. Virtual Collaboration Themes

Barriers	Benefits
Need for leadership	Camaraderie (fellowship)
Set clear roles	
Create opportunities for collaboration	
Connect collaborators	
Trust	Social Connections
Lack of time	Scholarship -research
Pressure to collaborate	Self-Reflection
	How do I measure-up?
	• What is my performance compared to others?
	Pride

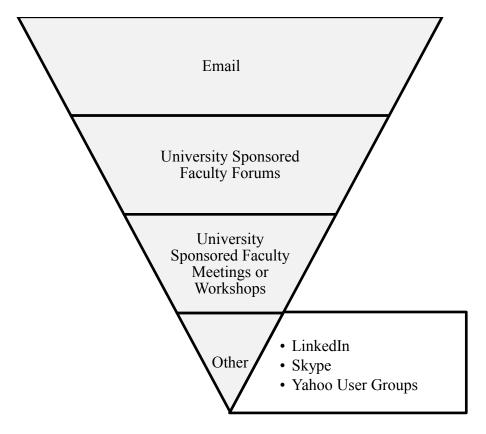
In the following section, each sub-question is offered along with the findings. Six sub-questions helped answer the central question.

Sub-questions answered from the results of the analyses in Chapter Four.

Sub-question #1. What methods or approaches are remote online adjuncts using for virtual collaboration?

Remote online adjuncts use a variety of methods to collaborate virtually. Figure 1 outlines the most preferred methods used for virtual collaboration among the participants.

Figure 1. Model of Preferred Methods of Virtual Collaboration



The most popular approach found through this study was email. Collaborators frequently mentioned the faculty forums as the preferred tool for virtual collaboration. Many of the adjuncts participating in the study indicated that their universities offer faculty forums for collaboration.

Other Internet tools used included Skype, LinkedIn, other social media sites, and professional

learning communities. It was clear that Facebook was not used as a means for collaboration, and, in fact, several of the remote online adjuncts mentioned not using Facebook because they did not "trust" it. A few participants use outside sources for collaboration, such as Yahoo or LinkedIn to find others who share common research interests. The majority preferred what their university offered in terms of virtual collaboration. The in-house university forums or environments were viewed as a safer venue, and shared the additional benefit of collaboration with peers who teach the same courses.

Many of the participants expressed the importance of different types of workshops and meetings. Participants had varying accounts of workshops or virtual meetings based on the specific universities that employ them. Some explained that the opportunities offered by the colleges are a chance to learn what others are doing while engaging in professional development. These types of activities seem to provide access to finding other collaborators.

Sub-question #2. What are the reasons for virtual collaboration among remote online adjuncts?

Several reasons for virtual collaboration were discovered in the study. Four are listed below, each with a description. Differentiating the reasons for virtual collaboration from the benefits is difficult, as the two areas shared many commonalities. Three benefits that were offered through the literature included overcoming isolation, providing a social context, and creating professional development opportunities (Greene, 2008; Scribner-MacLean & Miller, 2011). The same benefits can also be seen as motivators for virtual collaboration. Although there were other reasons for virtual collaboration, such as self-reflection and pride, they will be discussed in the benefit section.

Connecting socially with peers is a reason for virtual collaboration (Roberts et al., 2006). One of the most significant reasons that remote online adjuncts collaborate is to overcome the feeling of being alone and isolated. Faculty appreciate the opportunity to see that they are not alone in the online world. According to Bingham and Conner (2010) people need to socialize, communicate, and share information with each other. The communication with peers also creates a connection to the university. Bingham and Conner (2010) stated that people desire the ability to learn from one another both "hard facts and in-context wisdom" (p. 5). Connecting with others turned out to be just the beginning of more developed relationships.

Connecting socially turned into camaraderie. Having a common bond, speaking the same technical language, and learning from others equates to a sense of fellowship for the online remote adjunct. The responses from the participants in this study exemplified the idea that although the main goal of their collaboration is to learn, it can also have a light-hearted side. One participant discussed a friendship that evolved in a online discussion about a shared favorite book. Bingham and Conner (2010) described that the connection to peers fills a yearning for socialization while at the same time offering a platform for learning from each other. Socialization was mentioned by several adjuncts for creating an increased connection to the university. Virtual collaboration provides a method for socializing which seems to improve morale (Dolan, 2011).

Another reason for virtual collaboration is to staying informed and updated on the newest changes at the university. The remote online adjunct works from home and it can be a challenge to maintain current knowledge of policies, procedures, and changes. Specifically, several participants mentioned changes that had taken place in their teaching platforms, new participation policies for students, and other procedural information that influenced their

teaching. Most felt that the faculty forums or meeting areas were a place to talk to their colleagues about the changes taking place in their universities.

Finally, scholarship emerged as a benefit of virtual collaboration. Finding a group to conduct research with was important. One of the discoveries in this research study was the concept of using virtual collaboration to conduct research. Participants had a variety of reasons for engaging in research. One participant shared several ways they use virtual collaboration to scaffold their learning for scholarship. Another participant discussed her unfamiliarity with research and found that by connecting with other adjuncts, they could share their strengths and weaknesses to participate in research. Another participant shared that with the help of a peer, she had learned to how to write a grant. For some, the desire to publish or present at a conference was the stimulus for participation in virtual collaboration. Participating in scholarship of different forms is a significant reason for virtual collaboration.

Sub-question #3. What are the barriers keeping remote online adjuncts from virtually collaborating?

Time consistently appeared as a barrier, and is noted as a barrier in the literature. One faculty noted that there is a misperception that virtual collaboration requires less time than face-to-face collaboration. Moreover, not only can time can prevent virtual collaboration, but a difference in time zones among collaborators can cause further issues (DeRosa et al., 2011). There also seems to be a varying set of viewpoints about the importance of being on time to meetings. Collaborators felt discouraged when others were not punctual to meetings. Unreliable or tardy participants in virtual collaboration impede successful collaboration.

A lack of leadership also prevents virtual collaboration. Several examples illustrate how a lack of leadership from administration impedes virtual collaboration. Remote online faculty do

not always know where to go online or how to connect with other faculty members.

Departmentalization may perpetuate the inability to connect with other collaborators, further isolating collaborators from learning about other disciplines. The absence of clear roles for virtual collaborators may lead to a lack of consistency. Dittman et al. (2010) noted that many virtual teams fail because they lack a common goal and accompanying set of plans to accomplish the goal are missing.

The pressure to collaborate was a barrier to virtual collaboration. Participants believed that their universities kept track of who attended meetings, communicated in the forums, or engaged in collaboration. One participant specifically mentioned that an administrator sent an email stating, "attendance would be counted" towards future course offerings. Some participants disclosed feeling pressure to collaborate from administration. These participants explained that the pressure originated from a need for administration to see them as highly visible participants in the discussion forums. The pressure then turned into a fear that the participants were being "watched," which equated for some as being afraid to contribute an inferior post. The pressure to be recognized actually stood in the way of effective virtual collaboration for some participants,

A variety of other barriers exist for the participants in this study. It was apparent that participants felt apprehensive about possible negative judgment by their peers. One felt insecure about posting the first message and spent the first few months reading but never responding to forums. Another was unsure about new technologies implemented in their college. Yet another participant shared frustration about inconsistencies in group formation caused by attrition.

Sub-question #4. What are the benefits for remote online adjuncts that virtually collaborate?

The benefits easily overlap with the reasons that remote online adjuncts virtually collaborate. Sub-question two included several further inquiries, including creating social connections, developing camaraderie, and engaging in research.

For some, the opportunity to self-reflect was the incentive to participate in virtual collaboration. The act of self-reflection not only provided an opportunity to make decisions about teaching online, but to expand knowledge. The participants used self-evaluations as a precursory instrument to measure their skills, indicating a baseline for improvement. Bingham and Conner (2010) stated, "Learning is what makes people vibrant participants in a world seeking fresh perspectives, novel insights, and first-hand experiences" (p. 4). Virtual collaboration aids remote online faculty in self-appraisal.

Finally, an unforeseen benefit of virtual collaboration was the sense of pride that faculty reported feeling during virtual collaboration. Several participants noted that working with their peers made them feel important. Bingham and Conner (2010) compared face-to-face conferences where audiences sit quietly to online collaboration where "both speakers and attendees have something valuable to share" (p. 9). The participants in this study felt important when their peers listened to their ideas and suggestions. In addition, one participant mentioned that she feels proud when helping new faculty acclimate to online teaching.

Sub-question #5 What are the perceptions of remote online adjuncts about virtual collaboration?

The participants of the study found that although virtual collaboration had its barriers, they all find it to be a requisite for teaching online. All participants also shared negative

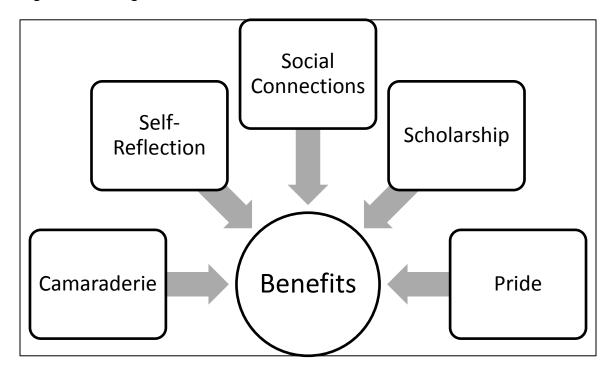
experiences with virtual collaboration. A lack of group commitment was mentioned, which lead to a destruction of the group, while others noted a deficiency of social norms. In all cases, the participants disclosed that the barriers did not stop them from seeking other virtual collaboration experiences.

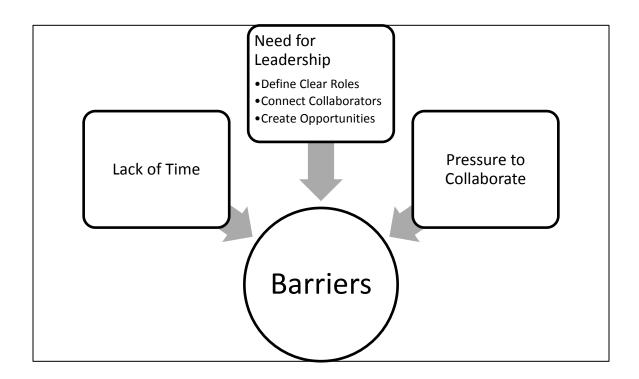
The majority of the participants found themselves ready and willing to collaborate virtually. Even the two participants who acknowledged that they do not like to share their ideas still regularly participate. Some actually felt that non-participants hinder their peers. In addition, almost all said private practice has a negative connotation.

Sub-question #6. What underlying themes, if any, emerge from remote online adjuncts experiences of virtual collaboration?

As described in the sections above, the study revealed nine themes. Four of the underlying themes have been categorized as barriers to virtual collaboration. Barriers prevent virtual collaborators from participating or diminish the quality of the experience. Five of the emerging themes have been labeled as benefits to virtual collaboration. The benefits establish a reason or motive for remote online adjuncts to participate in virtual collaboration. Figure 2 depicts the barriers and benefits of virtual collaboration.

Figure 2. Meaning Themes- Benefits and Barriers of Virtual Collaboration





Central Question answered from the analyses of the sub-questions

What virtual collaboration practices are remote online adjuncts using to influence their teaching strategies and to develop as professionals?

The remote online adjuncts in this study had a variety of experiences with virtual collaboration. This was not surprising considering their varying degrees of experience and degrees. The most effective practices included self-reflection and scholarship.

Self-reflection was an unexpected theme to emerge. Virtual collaboration provides a means to combine social learning with the remote online adjuncts need for self-reflection. The research on social learning discussed the need for learning appropriate behavior through imitation of others (Bingham & Conner, 2010). The participants in the study measured their own effectiveness by comparing themselves to what their colleagues are doing in the classroom. Because most adjuncts cannot visit their peers' online classrooms, virtual collaboration offers a means by which adjuncts can evaluate their performance against peers.

One virtual collaboration practice is engaging remote online adjuncts in scholarship.

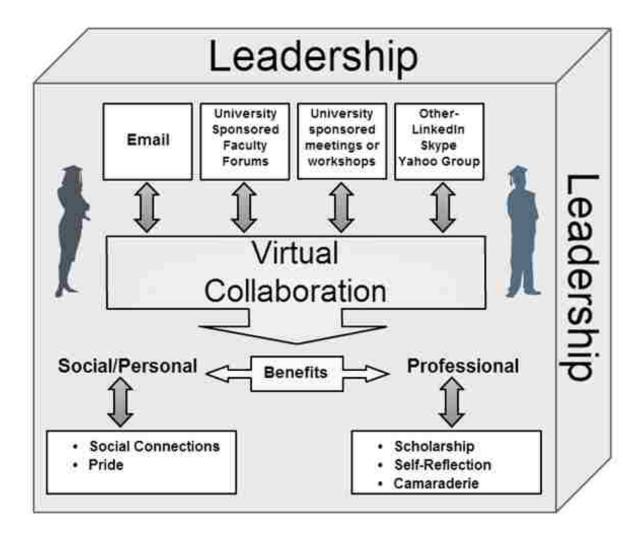
Faculty have an eagerness to participate in research for a variety of reasons. One motive included the desire to create curriculum. Another reason was the need to publish. Finally, for some, the idea of being scholarly is important in teaching. Despite the variety of reasons, a common concept emerged: not only did adjuncts feel more comfortable engaging in scholarship with others, but also some felt incompetent attempting to conduct research alone.

Virtual Collaboration Model

One goal of the study was to create a virtual collaboration model of the lived experiences of remote online adjuncts. Figure 3 illustrates the methods or entryways of virtual collaboration. The model centers around the need for leadership. The model displays the social, personal and

professional benefits of virtual collaboration. The model is also a pictorial representation of the 6 sub questions of this study. The model is intended to increase the knowledge of virtual collaboration practices for both remote online adjuncts and administrators of higher education. The model serves as a visual representation of the written implications and recommendations of Chapter 5.

Figure 3. Virtual Collaboration Model for Remote Online Adjuncts



Conclusions

Remote online adjuncts benefit from virtual collaboration. This study adds to the depth of knowledge about how and why remote online adjuncts collaborate virtually. The study revealed

the benefits and barriers to virtual collaboration. The benefits included: social connections to the colleges and peers, a means for self-reflect on practices, and developing camaraderie and a sense of pride while helping others. The barriers for virtual collaboration included a lack of leadership that is needed from institutions of higher education to provide collaborators with clear roles, opportunities for collaboration, and the means for finding other collaborators. Time is also a barrier that should be addressed by both adjuncts and administration.

Implications

The following section provides the implications from this study. The implications for online education, remote online adjuncts, and educational leaders of higher education will be offered. The implications derive from the nine meaning themes discovered during the study. Table 9 lists the meaning themes and their associated implications. Finally, the implications for future research provide closure to the section.

Table 9. Meaning Themes and Implications

	Meaning Theme	Implications for
1	Need for Leadership	Higher Education Leaders
2	Camaraderie	Remote Online Adjuncts
3	Trust	Remote Online Adjuncts
4	Social Connections (Social learning Theory)	The Discipline
5	Scholarship	Remote Online Adjuncts
6	Self-Reflection	Remote Online Adjuncts
7	Pride	Remote Online Adjuncts
8	Time	Remote Online Adjuncts
9	Pressure to Collaborate	Higher Education Leaders

Implications for the Discipline

Implications for the discipline include applying the use of social learning theories when considering the needs of remote online adjuncts. Specifically, Bingham and Conner (2010) offered the power behind using social learning coupled with virtual collaboration:

The new social learning leverages online communities, media sharing, Microsharing, content collaboration, and immersive environments to introduce people to ideas in quick bursts, when it suits their workflow, and in a way that more closely mirrors how groups interact in person. (p. 3)

The literature review supported the importance of social interactions for maintaining morale, thereby influencing the quality of instruction (Dolan, 2011). Both Vygotsky and Bandura view's on social learning offer the discipline a beginning place for online professional learning communities (PLCs). Although the goal of a professional learning community is to learn from peers (Kabilan et al., 2011), an additional benefit is that social needs are taken into consideration. The implications for the discipline include the motivation of remote adjuncts to meet their social needs while also learning from their peers.

Implications for Remote Online Adjuncts

The study revealed five implications from the meaning themes that are noteworthy to remote online adjuncts. The implications include time, pride, camaraderie, trust, and scholarship.

The investment of time is important to virtual collaboration. Remote online adjuncts need to consider their own reasons and motivations for virtual collaboration. Chen et al. (2011) recommended that sharing common goals is necessary for a successful team experience. Before entering into an official or unofficial agreement to collaborate, faculty need to consider how

much time they are willing to commit. The results of the study showed that even though time is an important consideration, when peers are willing to dedicate time, the adjunct feels rewarded.

Another feeling remote online adjuncts develop from collaborating is a sense of pride.

Remote online adjuncts felt proud when they could help others with content or research through virtual collaboration. Remote online adjuncts who want to help their peers might find virtual collaboration satisfying. Another example of feeling pride in one's work may come from mentoring a new remote online adjunct. Helping others not only creates a sense of pride, it also builds camaraderie.

Remote online adjuncts benefit from camaraderie developed through virtual collaboration. By developing relationships with others, remote online adjuncts may feel a stronger connection to the university. The connection develops through shared experiences and feeling a sense of belonging to a group. Interacting with their peers helped the participants build trust and have a more positive experience teaching remotely.

An initial lack of trust should not dissuade remote online adjuncts considering collaborating virtually. In fact, the findings of this study showed that peers give a high level of respect to their peer collaborators. Collaborators seemed to have a higher sense of trust with their online peers because adjuncts in the study seemed more willing to share in the virtual world. Another way that remote online adjuncts are sharing is through scholarship and research.

Opportunities for scholarship are available through virtual collaboration. Remote online adjuncts can increase their knowledge base of best practices, learn how others facilitate their classrooms, hone their craft, or evolve as a professional. This is an important consideration for faculty who are looking for research partners. In addition, virtual collaboration offers adjuncts

with a means to publish articles, present at conferences, and participate in research through collaborative efforts.

Implications for Educational Leaders of Higher Education

Remote online adjuncts are willing to virtually collaborate. Higher education leaders who are interested in providing virtual collaboration can create opportunities, define roles, and connect collaborators. The study also revealed ways that higher education leaders can continue to facilitate ongoing collaboration through workshops, faculty forums, and scholarship opportunities.

Remote online adjuncts want guidelines and methods for collaboration. Although it was unclear to what extent the adjuncts desire a rigid program, it was apparent that those colleges offering faculty forums should continue to look for ways to improve their use. A common misconception is that individuals within a group have the natural ability and skills to assemble and develop methods towards goal completion (Dittman et al., 2010). Shattuck et al. (2011), established that not all adjunct faculty are prepared for online training. Educational leaders should aspire to create a space that brings together the diverse talents of people and connects them in meaningful ways (Bingham & Conner, 2010).

Adjuncts want to connect to others and are unsure how to do so. For higher education leaders, consideration needs to be given to connecting aspiring collaborators with their peers. Shattuck et al. (2010), found that institutions that provide online training and collaboration for adjuncts do not always do so in a convenient manner. Workshops and content meetings seemed to be a useful method for remote online adjuncts to find others who teach the same courses. Although this study encompassed a large variety of fields such as business, education, nursing, economics, and liberal arts, all fields benefit from the implications of the study. Dittman et al.

(2010) discovered that virtual teams require proven training which will prepare them for a variety of collaboration conditions.

A sense of pressure to collaborate is felt by remote online adjuncts. Ideally, higher education leaders should search for ways to encourage virtual collaboration without creating a negative climate. Creating a system that empowers remote online adjuncts to enjoy the benefits of virtual collaboration without feeling pressured by the administration. In addition, Bingham and Conner (2010) found that a common way to increase employee satisfaction is to help employees understand "what is going on in the company" through communication (p. 5). An advisory or focus group may help educational leaders develop an approach to serve remote adjuncts in a positive environment.

Implications for Future Research

Virtual collaboration has both barriers and benefits. Future research needs to focus on how to maintain the current benefits while seeking out additional ones. For example, future research needs to consider the implications of PLCs and the role of virtual collaboration in fostering faculty development. Equally as important is exploring barriers while searching for solutions. The more people feel immersed in an organization, the more they are engaged (Bingham & Conner, 2010). Future research may find other benefits and barriers by using other methodologies.

Recommendations

The following section presents the recommendations for remote online adjuncts and educational leaders. The recommendations emerge from the themes found during the study coupled with the literature review. The purpose of the recommendations is to serve as real-world applications of the findings.

Recommendations for Remote Online Adjuncts

Trust is the core of effective virtual collaboration. Consistent communication and attendance create trust. Understanding the social norms, such as expected response time, can build trust. In addition, participants acknowledged that a high level of trust is automatically given to their peers during virtual collaboration. Bingham and Conner (2010) described this "instinctive trust" as developing from "media sharing that conveys a human voice, rich with emotion and expression" (p. 6).

Recommendations for Educational Leaders of Higher Education

Higher education administration should know the technology competencies and equipment necessary for successful virtual collaboration. Bingham and Conner (2010) recommend that organizations create a place where employees can practice different forms of social media to become comfortable with technology. Faculty depend on the tools offered by the college for virtual collaboration and a greater emphasis should be placed on training remote online adjuncts to use the collaboration tools offered by the university. Educational leaders can explore the tools and convenience offered in the forums. A quantitative research study conducted by the administration may provide insights into which tools are most effective for virtual collaboration among faculty. Simple surveys may also provide evidence on the methods that a university's adjuncts find the most helpful for communication with others.

Leaders of higher education institutions should be responsive to the needs of remote online faculty. Promoting a system of collaboration that fosters professional development is one approach leaders can take. Within the faculty forums, faculty can give and receive support.

Dittman et al., (2010) found that the ability to collaborate in a virtual team is a essential skill set. Purposeful design is needed to establish a system where faculty are given direction for

collaboration opportunities. Dittman et al., (2010) noted that successful collaboration requires a set of structured procedures preparing collaborators to develop strong personal associations to teammates.

Thoughtful planning also provides a means for faculty to connect with others who have the same needs and goals. Bingham and Conner (2010) illustrated the importance of connecting faculty when they stated, "...people plant seeds that might lead to a connection with someone who could reveal new insights, point to new resources, help with a project, or maximize a learning experience" (p. 7). Another opportunity for virtual collaboration comes from the connection to a national level organization such as the International Society for Technology in Education or American Association of University Professors.

Educational leaders need to model collaboration practices. The requisite skill set for successful virtual collaboration is not an innate ability to most individuals, but development of these skills can create successful collaboration (Dittman et al., 2010). Educational leaders who participate in virtual collaboration not only show support but can also obtain firsthand knowledge of the benefits and barriers. One way to accomplish hands-on experience with virtual collaboration is to actively structure such experiences.

Leadership in higher education institutes should organize collaborative experiences for remote online adjuncts. Remote online adjuncts typically have full-time day jobs or teach for multiple colleges. Given the limited time for virtual collaboration, faculty are selective and look for programs that address their needs (Brooks & Gibson, 2012). Educational leaders can provide organized collaboration forums that guide collaborators to find peers with similar goals or needs.

A final recommendation is to provide opportunities for reflection. Because the participants found reflection to be an important by-product of virtual collaboration, leaders of

higher education should consider how to facilitate this practice. Reflecting on practices is a deep introspective process that allows individuals to "look inward at their own motivations, beliefs and biases and how these personal markings influence practice" (Brooks & Gibson, 2012, p. 4).

Recommendations for Future Research

The analysis and the results of the study indicate several recommendations for future research. Suggestions for future research include considering the role of leadership, the effect of social learning, collecting collaborative artifacts, considering the impacts on students, investigating the role of Internet tools, and changing the research design. The proposed recommendations offer another means to explore virtual collaboration practices among remote online adjuncts.

The intense need for leadership provides another lens for studying virtual collaboration. Consideration of how higher education leaders can support the virtual collaboration needs of remote online adjuncts needs measured. Currently, many remote online adjuncts depend on faculty forums to find fellow collaborators. Other studies might consider other approaches for connecting collaborators.

Another potential gap in the literature is the lack of study on social learning's impact on employee retention, specifically to the target audience of remote online adjuncts. Because self-confidence and job satisfaction were common threads in this study, future studies should consider how virtual collaboration influences morale.

Future research would benefit from a thorough analysis of collaboration artifacts. The participants were unable or unwilling to offer a bank of artifacts that would have allowed for a deeper analysis to occur. Artifacts would add to the body of knowledge about how remote online adjuncts are virtually collaborating.

In general, more research needs to measure how virtual collaboration practices of remote online adjuncts influences student success in online classrooms. The focus of this study was to consider how remote online adjuncts are experiencing virtual collaboration along with the benefits and barriers. One possible benefit that deserves exploration is the impact that virtual collaboration has on student retention, success, or engagement in the online classroom.

The findings also highlight the potential for exploration of various tools. Although many of the participants use the faculty forums within their college, several also use LinkedIn and outside learning community forums. A deeper investigation into these communities would provide data on how the tools are being used. Many of these forums are open to the public and the threaded discussions would be available for study. As technology advances, more exploration of tools will be important to institutions of higher education wanting to promote virtual collaboration among remote online adjuncts.

Finally, by modifying the research design, a study may expand the understanding of virtual collaboration methods. A validated survey instrument would allow a quantitative study to incorporate a variety of the recommendations above. A quantitative study or mixed method would offer a unique prospective that is not offered in the current literature.

Summary

A certain level of ambivalence exists around virtual collaboration and the barriers and benefits to remote online adjuncts. As the reach of online learning expands, more institutions of higher education will need to consider how to meet the adjuncts' needs for socialization, professional development, and virtual collaboration. The aim of this study was to extract the lived experiences of remote online adjuncts and better understand their lived experiences.

One of the most surprising findings of this study was that although trust was a concern for the participants, many of them declared that they were more willing to share with their peers in a virtual setting than face-to-face. The remote adjuncts reported giving a high sense of trust to their virtual collaboration partners from the onset of the partnership or group formation.

The results of this phenomenological study contribute to the body of knowledge of virtual collaboration among remote online adjuncts. Online and brick and mortar universities greatly depend on remote adjuncts to teach online classes. Attention needs to be paid to this population because of the integral role they have on the large population of online students. Finding ways to optimize adjuncts' professional development and connection to the online university is imperative.

Furthermore, while this study confirmed themes presented in current research, it also revealed new considerations about virtual collaboration. Some of the new discoveries included the need for leadership to create clear roles, connect collaborators, and create opportunities for collaboration. Another discovery was the desire for remote online adjuncts to use virtual collaboration to share in the pursuits of academic research and fellowship. Other findings included the importance of virtual collaboration as a gateway for self-reflection and as a means of pride. Additionally, a new barrier revealed was the pressure remote online adjuncts feel to collaborate. Finally, the study's discoveries provide potential direction for future research, including how to optimize the social needs of remote online adjuncts.

The benefits of virtual collaboration make it crucial to find solutions to the barriers. This study has shown that virtual collaboration affords faculty with the ability to be learners while simultaneously improving their morale and providing the opportunity for self-reflection. Remote online adjuncts experience isolation and the benefits of virtual collaboration yield valuable

outcomes, including a social connection, a sense of pride, a feeling of camaraderie, and a chance to engage in scholarship. Virtual collaboration influences best practices, removes isolation, and offers a means for professional development, and is a highly valuable experience for the remote online adjunct.

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APPENDIX A

Letter to International Society for Technology in Education (ISTE)

Dear ISTE,

I am a doctoral candidate in Educational Leadership at University of Montana. My purpose in writing you is to determine whether you would send a letter to your listserv on my behalf to solicit participants for my qualitative research study. No research would involve students. My study investigates the virtual collaboration practices among remote online adjuncts.

With permission from you and the University of Montana IRB committee, I would ask for volunteers to participate in a two hour interview about their individual experiences with virtual collaboration. The study also requests that faculty complete demographic and questionnaire forms. No pressure will be placed on anyone to participate if he or she is not interested. I would like to invite participants via e-mail.

Interviews will be conducted via telephone and recorded. When preliminary analysis has been completed with the data collected, each participant will have the opportunity to review the researcher's conclusions to verify that the interpretations are consistent with the participant's intent. Access to the original tapes and interview transcripts will be limited to the researcher. The identities of the participants will be confidential and will not be published in the dissertation.

The participant's affiliation with any specific colleges will also not be disclosed in the results.

I can be reached at lori.schieffer@umontana.edu or lorisch@yahoo.com

Thank you for considering this request.

Sincerely yours,

Lori Schieffer

APPENDIX B

Screening letter to potential participants sent by ISTE

October 13, 2013

Dear Faculty:

My name is Lori Schieffer and I am a doctoral candidate in the Educational Leadership program at The University of Montana in Missoula, Montana. For my dissertation, I am conducting a qualitative case study analysis of remote online adjuncts virtual collaboration practices.

I am proposing to conduct research on the virtual collaboration practices of remote online adjuncts. I am looking for volunteers to participate in a case study who have experience with virtual collaboration and teach only as online remote adjuncts and not from a brick and mortar building. Once the participants are selected, they will be asked to complete a 1-2 hour telephone interview. The interviews will be held within the next two weeks. The questions will focus on your experiences with virtual collaboration. I am also requesting a demographic form and questionnaire to be filled out.

To participate, you must meet the following inclusion criteria:

- 1. Participants must only work online from their home computers and not attend a physical campus. Participants must be telecommuters who are isolated from their peers and do not attend a brick and mortar building.
- 2. Participants must not have any opportunities to collaborate face-to-face with their colleagues.
- 3. Participants must only work as adjuncts who are part-time employees.
- 4. The participant can work for more than one college, but all work must be done from the home computer. If the adjunct steps onto a physical campus, he /she is not eligible to participate in the study.
- 5. Participants need to have a minimum of 3 years' experience as a remote online adjunct.
- 6. Participants must also have experience with virtual collaboration.

Confidentiality of information can be a concern in any study such as this. Information from this study identifying the participants will be held confidential at all times. There are two governing bodies to ensure this confidentiality: my doctoral dissertation committee and the Institutional Review Board of The University of Montana. Before publishing the findings, I will provide you with the opportunity to review the conclusions to verify that the interpretations are consistent with your intent. At the conclusion of the study, I will be happy to provide you with a brief summary of my findings.

I would appreciate a response within five business days of your receipt of this e-mail. That response can be by e-mail. If I have not heard from you within five days, I will follow up with an e-mail to answer any questions you may have and to ask again about the possibility of conducting an interview with you and providing copies of your collaboration artifacts such as e-mails, copies of threaded discussions, or other materials that you feel comfortable sharing that show virtual collaboration.

Sincerely,

Lori Schieffer

Doctorate Candidate, Educational Leadership University of Montana Missoula, MT 59801 lori.schieffer@umontana.edu lorisch@yahoo.com

APPENDIX C

Letter to potential participant

October 13, 2013

Dear Participants:

My name is Lori Schieffer and I am a doctoral candidate in the Educational Leadership program at The University of Montana in Missoula, Montana. Recently, you replied to a e-mail query from ISTE that you would be willing to participate in a research study for my dissertation. This study is a qualitative study of remote online adjuncts virtual collaboration practices.

I am proposing to conduct 1-2 hour telephone interview with you. The interviews would be held within the next two weeks. I will call you at your desired time to minimize the inconvenience to you. The questions will focus on your experiences with virtual collaboration. I am also requesting a few written responses to some questions about your experiences. I will also ask that you fill out a demographic questionnaire.

Confidentiality of information can be a concern in any study such as this. Information from this study identifying the participants will be held confidential at all times. There are two governing bodies to ensure this confidentiality: my doctoral dissertation committee and the Institutional Review Board of Montana State University. Before publishing the findings, I will provide you with the opportunity to review the conclusions to verify that the interpretations are consistent with your intent. At the conclusion of the study, I will be happy to provide you with a brief summary of my findings.

I would appreciate a response within five business days of your receipt of this e-mail. That response can be by e-mail. If I have not heard from you within five days, I will follow up with an e-mail to answer any questions you may have and to ask again about the possibility of conducting an interview with you.

Sincerely,

Lori Schieffer

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APPENDIX D

Subject Information and Informed Consent

Study Title: VIRTUAL COLLABORATION OF REMOTE ONLINE ADJUNCTS

A Qualitative Study of Online Adjuncts Virtual Collaboration Practices

Investigator: Lori Schieffer lori.schieffer@umontana.edu

University of Montana Department of Educational Leadership (EDLD)

32 Campus Drive Missoula, MT 59812 Dissertation Chair- Dr. John Matt

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Special instructions: This consent form may contain words that are new to you. If you read any words that are not clear to you, please send me an e-mail at lori.schieffer@umontana.edu

Purpose: You are being asked to take part in a research study comparing virtual collaboration practices of remote online adjuncts. You have been chosen because you are a remote online adjunct and have experience with virtual collaboration. The purpose of this research study is to learn the lived experiences of virtual collaboration among remote online adjuncts.

Procedures: If you agree to take part in this research study, you will be asked for the following:

- Participate in a phone interview for one to two hours.
- Fill out a demographic questionnaire.

The study will take place via telephone interviews. It will take about fifteen to twenty minutes to fill out the demographic questionnaire.

Payment: You will not be compensated in any manner for your participation.

Risks/Discomforts: The risks and discomforts for this study include the time it takes for the phone interview, filling out the demographic form, and providing copies of e-mails collaborative sites, faculty forums, etc. in which you are willing to share. Although the risks and discomforts are minimal, they will be minimized by the researcher calling you at your convenience. Answering questions about your virtual collaboration experiences may cause feelings that make you mad or upset depending on your virtual collaboration experiences. You will be informed of any new findings that may affect your decision to remain in the study.

Benefits: You will not be paid or receive any benefits for participating in this study. Your help with this study may provide more information on the practices of virtual collaboration among remote online adjuncts.

Confidentiality: Your records will be kept confidential and will not be released without your consent except as required by law.

- Your identity will be kept private. If the results of this study are written in a scientific journal or presented at a scientific meeting, your name will not be used.
- The data will be stored in a locked file cabinet.
- Your signed consent form will be stored in a cabinet separate from the data.
- The audiotape will be transcribed without any information that could identify you and will then be erased.

In the event that you are injured as a result of this research you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University of Montana or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such injury, further information may be obtained from the University's Risk Manager or Office of Legal Counsel. (Reviewed by University Legal Counsel, March 23, 2012) Voluntary Participation/Withdrawal:

- Your decision to take part in this research study is entirely voluntary.
- You may refuse to take part in or you may withdraw from the study at any time without penalty or loss of benefits to which you are normally entitled. If you decide to withdraw, please notify me via e-mail: lori.schieffer@umontana.edu
- You may leave the study for any reason.

Questions: You may wish to discuss this with others before you agree to take part in this study.

- If you have any questions about the research now or during the study contact: Lori Schieffer at lori.schieffer@umontana.edu or Dissertation Chair- Dr. John Matt John.Matt@mso.umt.edu or (406) 243-5610.
- If you have any questions regarding your rights as a research subject, you may contact the Chair of the IRB through The University of Montana Research Office at 243-6670.

Statement of Consent: I have read the above description of this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will also be answered by the researcher. I voluntarily agree to take part in this study. I understand I will receive a copy of this consent form.

Printed (Typed) Name of Participant _	
Participant's Signature	Date

APPENDIX E

Consent to be Audiotaped

Statement of Consent to be audiotaped: I understand that audio recordings may be taken during the study.

- * I consent to having my interview recorded.
- * I understand that if audio recordings are used for presentations of any kind, names or other identifying information will not be associated with them.
- * I understand that audio recordings will be destroyed following transcription, and that no identifying information will be included in the transcription.

Printed (Typed) Name of Participant	
Participant's Signature	Date

Faculty Forums

Communities

Other Social Media Sites

Other Online Learning

APPENDIX F

Participant Demographic Questionnaire

1.	What is your age? ☐ 25 or under ☐ 26 to	36 🗖 3	37 to 47	□ 48 to 58	☐ 59 and old	er	
2.	What is your highest e ☐ Bachelor's Degree	•		ducation? ☐ Post Master	r's □ Do	ctorate Degree	
3.	How many years have □1 or under □2 to			e adjunct? 4 to 5	☐ 6 or more		
4.	Please describe your academic work in which you currently engage for compensation. Include the number and types of higher education organizations (public, private, virtual, etc.). Also, include specifics about the type of adjunct faculty work you do and courses you teach.						
5.	6. Reflect on how your remote online adjunct teaching experiences have changed over time.						
6.	Please fill in the follow	ving chart b	ased on you	ır virtual colla	boration pract	ices:	
		Daily	Weekly	Monthly	Less than once a month	Never	
Tv	vitter						
Liı	nkedIn						
Fa	ceBook						
Ble	ogs						
W	ikis						

7. Please fill in the following chart based on your virtual collaborative practices:

I have participated in the following	Once	Two to	More	Never
virtual collaborative experiences:		three	than three	
		times	times	
Sharing Best Practices				
Professional Development				
Research				
Curriculum for my courses				
Assessment for my courses				
Asking questions to my peers				
General discussions about online				
teaching				
Other				

APPENDIX G

Interview Protocol

Interview Information		
Interviewer Name_		
Interviewee Name		
Date	Time	

Opening Statements:

- Hello. How are you?
- Thank you for agreeing to participate in this study. I appreciate your time and participation.

 How is the weather in your area? In Montana, it is....
- There are a few things that I would like to make sure you understand before we get started. If at any time during the interview you feel uncomfortable and want to skip a question or stop the interview, please let me know. There is no penalty for stopping or skipping a question. I also want you to know that the questions I will be asking do not have correct or incorrect answers. The intent of this interview is to gather your thoughts, feelings, and experiences about virtual collaboration. It is not my intention to make judgments about your responses. My hope is that you will answer honestly and with as much detail as possible. Please remember that all of your replies are kept confidential. A pseudonym will be used to protect your identity.
- Are you ready to begin the interview?

Interview Questions:

- As an online adjunct, what have you experienced in terms of virtual collaboration?
- What collaborative tools do you use for virtual collaboration?
- How has socializing with your peers influenced your morale?

- Describe your readiness level to collaborate virtually.
- What communication obstacles have you encountered before or during virtual collaboration?
- How has trust with other collaborators played a role in your virtual collaboration experiences?
- What role does time play a in your virtual collaboration practices?
- What are your experiences with virtual collaboration groups or partnerships lasting over time?
- What social rules and norms have you experienced during virtual collaboration?
- What types of best practices have you shared during virtual collaboration?
- How has virtual collaboration influenced your connection to the university or your peers?
- What are some of the reasons for your participation in virtual collaboration?
- What impact has virtual collaboration had on your practices?
- How do you feel about the philosophy of private practice?
- As a remote online adjunct, what are your perceptions of virtual collaboration?
- How does departmentalization affect virtual collaboration?
- Does competition for recognition from the university influence virtual collaboration practices?
- As an online adjunct, what contexts or situations have influenced or affected your virtual collaboration experiences?

Ending Statements:

•	Before we conclude, is there anything you would like to add? Thank you for taking time out
	of your busy schedule to participate in this research study. As we conclude our interview, I
	would like to gain your permission to email you a copy of the interview transcript. I would
	like you to have the opportunity to check the transcript for accuracy and to see if the general
	meaning is what you intended to convey. If you agree, I will email you an interview
	transcript by