

THE BENEFITS AND BARRIERS OF VIRTUAL COLLABORATION AMONG ONLINE ADJUNCTS

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Online education is a current trend in higher education. 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 online adjuncts engaged in collaborative work. 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, opportunities to participate in scholarship, opportunities for self-reflection, and the chance to develop a sense of pride through virtual collaboration. Barriers that must be overcome for virtual collaboration included trust, lack of time and feelings of pressure to participate.

INTRODUCTION

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). 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, Dubins, & Zilberman, 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).

LITERATURE REVIEW

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

ONLINE FACULTY TRAINING AS A MEANS OF COLLABORATION

Researchers suggested that both remote online adjuncts and tenured faculty have concerns about training, professional development and support for online teaching (Kim & Bonk, 2006). Rice and Dawley (2007) surveyed 178 online faculty members and found that 93% had five or fewer years of experience teaching online. The lack of experience may require more training to meet the demands required of online instructors. 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 due to fear of losing the newly acquired position (Kim & Bonk, 2006). The desire to collaborate as a means for professional development may derive from the adjuncts. Kim and Bonk (2006) surveyed 562 college adjuncts and found they had several needs including managing the online classroom, developing online courses and evolving as subject matter experts. Collaboration may help fill these gaps or needs.

COLLABORATION

Collaboration is an integral part of education (Vallance, Towndrow, & Wiz, 2010). Defining collaboration and the role it plays in higher education bears importance. 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 initiated 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. 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). One option for collaboration comes in the form of virtual collaboration.

VIRTUAL COLLABORATION

Definitions of virtual collaboration differ throughout the literature. Coughlin and Kadjer (2009) offered one definition referring to 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 the purposes of this study, a simpler definition of virtual collaboration will be used. Virtual collaboration occurs when faculty learn from each other by sharing knowledge and reflecting on common experiences using technology (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.

TYPES OF VIRTUAL COLLABORATION

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 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 of seeking and providing advice, and finally, reflections on teaching and learning (Hu et al., 2011). The participants in these online learning communities used a virtual professional learning community (PLC) for collaboration.

Virtual professional learning communities. One form of virtual collaboration occurs through online PLCs. As professionals collaborate virtually and construct knowledge, they develop communities that support learning and development (Alderton et al., 2011). The PLC 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 PLC for faculty. Participants consisted of 98

faculty members 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 PLC (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 PLCs. 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 in online communities provided faculty a meaningful way to train and support their development (Duncan-Howell, 2010). From this study, PLCs 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. Collaboration provides the online instructor an opportunity to learn from other online instructors and share ideas. The goal of the PLC 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 PLCs provide a connection to other peers. Online PLCs offer a chance for faculty to engage with their peers and gain insight into others' experiences.

Online PLCs offer other advantages. Roberts, Thomas, McFadden & Jacobs (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 predicted graduation rates found that the most important difference among these schools was an intentional focus on faculty improvement 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). Finally, as Duncan-Howell (2010) mentioned, online PLCs provide a cooperative medium to collaborate

around effective teaching strategies. Each form of PLCs and virtual collaboration also comes with barriers.

BARRIERS TO VIRTUAL COLLABORATION

The culture of higher education does not always welcome collaboration (Donnison et al., 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. As the barriers for virtual collaboration are considered, it is important to note that time may be a barrier for some adjuncts because the position is part-time only. The adjunct simply may not have the time needed for collaboration. Donnison et al. (2009) added that the autonomous practices in higher education promote isolation. 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. In addition, not all faculty are ready for collaboration experiences.

READINESS FOR VIRTUAL COLLABORATION

Readiness to collaborate requires knowledge about best practices for virtual collaboration. Even when faculty decide to join a PLC, 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)

According to Brooks and Gibson (2012), many online collaboration communities are vacant because 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). Compounding 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. 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 an 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). If the collaborators share the same practices, they may not benefit from the consideration of diverse practices. By seeking faculty who have different philosophies and practices, the collaborators may learn new approaches to teaching online. Although faculty might seek collaboration with others who have similar characteristics, the comfort of collaborating with like-minded peers may interfere with successful collaboration. Finding collaborators may also be difficult because of the variances in

experience using different virtual platforms.

COMMUNICATION OBSTACLES

Virtual platforms may pose communication obstacles because of the distance and differences in technology between collaborators (DeRosa 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 which can be perceived as mistrust.

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 also influences how much a participant shares and the attitude toward accepting others' criticisms (Hu et al., 2011).

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 (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 reasons for collaboration, communication frequently fails. 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 will last over time (Dolan, 2011).

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). The adjuncts simply may not have the time to add collaboration to their schedule. Valle and Fuchs (2015) reported in a recent study that 49% of their participants who were part-time adjuncts already had a full time position elsewhere. 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; 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. 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 and exposes the collaborators to new Internet tools.

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. The first examples of virtual collaboration tools included e-mail, chat and file-sharing. Specifically, e-mail is still a major communication tool for virtual collaboration (Fichter, 2005). Hu et al. (2011) saw the variety of social media tools as a benefit for online collaborators. However, Fichter (2005) 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.

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). 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). This study also showed some of the possible benefits to virtual collaboration.

BENEFITS

The benefits of virtual collaboration are similar to face-to-face collaboration benefits. 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. Researchers found that virtual collaboration is an effective means for professional development among higher education faculty (Dolan, 2011; Puzziferro-Schnitzer, 2005). Virtual collaboration, like face-to-face collaboration, may help decrease isolation.

OVERCOME ISOLATION

In a brick and mortar building, faculty can meet in a lounge or by the water cooler to socialize. 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 opportunity for communication with peers appears 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 from 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 because of the sense of isolation.

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.

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 (2011) 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, especially in the areas of social learning.

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: Lev Vygotsky and Albert 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).

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). Social learning theorists Bandura (1991) and Vygotsky (1978) found that learning is highly social and naturally collaborative. Alderton et al. (2011) suggested that faculty needed to collaborate with others for guidance to reflect upon and change their practice. Participation in a virtual collaborative mentorship may fill a social need for remote virtual adjuncts. The same benefits that derive from mentorship may also serve as a means for improving professionally.

PROFESSIONAL DEVELOPMENT

Quality instructors yearn to learn new skills and pedagogy through professional development (Puzziferro-Schnitzer, 2005). 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.

SUMMARY

Although many institutions of higher education employ adjuncts to teach online as telecommuters, higher education administrators have struggled to find ways to support professional development of adjuncts (Dolan, 2011). The study was conducted to determine virtual collaboration benefits and barriers for online adjuncts. By revealing the common practices, benefits and barriers, the study provides a means for administrators and adjuncts to better understand virtual collaboration and overcome the barriers.

THE STUDY

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.

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 a listserv asking for volunteers to participate in the study, specifically faculty who had experience with virtual collaboration and were remote online adjuncts. The inclusion criteria were as follows:

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 three years' experience as a remote online adjunct.
6. Participants must also have experience with virtual collaboration.

Possible participants received an e-mail affirming that they 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 of the selected participants received an e-mail with a consent form to participate in the study, including permission to participate in a semi-structured interview. 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 worked 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. The purposeful sample intentionally sampled a

group of people who can best inform the researcher about the situation (Creswell, 2007). The final step of data collection resulted in phone interviews of the participants. The phone interviews took place separately, within two weeks of each other. The calls were recorded and later transcribed. The interviews lasted between 48 and 125 minutes.

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 Microeconomic 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	3 Universities

There were 10 total participants, 8 of which were women and 2 men. Each participant works within a for-profit institution. Some of the participants also work for non-profit institutions, which may provide relevancy for both profit and non-profit institutions. 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 5 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.
S7	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 were 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.

The participants' summaries reflected their beliefs regarding how online education has changed over time. One common theme was the change in the available technology over time. Newer adjuncts to online teaching did not notice as many changes as more veteran teachers. The participants found that new technology has made it easier to access grading, be more efficient, and maintain organization.

CENTRAL QUESTION

What effective 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?

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 next step was described by Moustakas (1994) using 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, eighty-two pages of interview transcripts were reviewed many times in an attempt to find the significant statements of the participants. Early stages began with listing and preliminary grouping. Significant statements chosen from the transcript

were used to develop nine themes which evolved as follows:

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. One participant said, "The roles need to be clear for the relationship to last." In many instances, the participants noted that collaboration happens haphazardly without leadership. One participant said, "It is hard to know how to invite people to collaborate." 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. Lastly, participants expressed difficulty connecting with other collaborators. The participants were unaware of how to obtain contact information of other people working in their departments. 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. One participant stated, "Many people have misperceptions about virtual learning and it's nice to talk with others who understand the misconceptions." 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 members emphasized an unspoken level

of trust with online collaborators that is not existent in face-to-face situations. One participant commented, “I would say that I have a greater sense of trust with the connections that I’ve made during virtual collaboration as opposed to face-to-face.” 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 (Feeling Alone or Isolated)

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. One participant shared the feeling of being pressured to publish in order to keep working in higher education. In addition, a need for acknowledgement by their employers 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. 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. One participant stated, “I have been a mentor to new faculty and this makes me proud to help someone new to online teaching.” 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 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.

RECOMMENDATIONS FOR ONLINE ADJUNCTS

Trust is the core of effective virtual collaboration as found in this study. Several participants made comments about the need to trust their virtual collaborators. 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. Adjuncts who may be concerned about trust during collaborative sharing can build trust overtime by meeting with collaborators on a regular basis. 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). The study provided that adjuncts can begin to build trust by being accountable to collaborative partners or groups. Collaborators should make deadlines and attend meetings to begin building trust.

IMPLICATIONS FOR 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 feelings 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 from considering collaborating virtually. In fact, the findings of this study showed that peers give a high level of trust 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 may offer adjuncts a means to publish articles, present at conferences and participate in research through collaborative efforts.

RECOMMENDATIONS FOR EDUCATIONAL LEADERS OF HIGHER EDUCATION

According to this study, 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. Some faculty depend on the tools offered by the college for virtual collaboration. For this reason, 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 of 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 an 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 organization such as the International Society for Technology in Education (ISTE) or American Association of University Professors (AAUP). Organizations such as ISTE and AAUP provide opportunities for adjuncts to find similar or diverse collaborators within a platform that was designed for collaboration and professional development.

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).

IMPLICATIONS FOR EDUCATIONAL LEADERS OF HIGHER EDUCATION

Remote online adjuncts are willing and sometimes pressured to virtually collaborate as found in this study. 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. 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 of how to do so. Higher education leaders should give consideration to connecting aspiring collaborators with their peers. 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.

A sense of pressure to collaborate is felt by remote online adjuncts. Ideally, higher education

leaders should search for ways to encourage virtual collaboration. If publishing is required, colleges and universities should search for ways to aid faculty through collaboration. 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.

CONCLUSIONS

Remote online adjuncts can benefit from virtual collaboration as evidenced in this study. 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.

Furthermore, while this study confirmed themes presented in the literature review section, 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, offers means for professional development and is a highly valuable experience for the remote online adjunct.

References

- Alderton, E., Brunzell, E., & Bariexca, D. (2011). The end of isolation. *MERLOT Journal of Online Learning and Teaching*, 7(3). Retrieved from http://jolt.merlot.org/vol7no3/alderton_0911.htm
- Ali, N., Hodson-Carlton, K., Ryan, M., Flowers, J., Rose, M., & Wayda, V. (2005). Online education: Needs assessment for faculty development. *The Journal of Continuing Education in Nursing*, 36(1), 32-38. Retrieved from <http://www.westga.edu/~distance/ojdla/fall103/mcquiggan103.htm>
- Allen, I. E., & Seaman, J. (2010). Class differences: Online education in the United States, 2010. *The Babson Surveying Research Group, the Sloan Consortium*. Retrieved from http://sloanconsortium.org/publications/survey/class_differences
- Austin, A.E. and Baldwin, R.G. (1991). Faculty collaboration: Enhancing the quality of scholarship and teaching. (ASHE-ERIC Higher Education Report No. 7). Washington, DC: The George Washington University.
- Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J.L. Gewirtz (Eds.), *Handbook of moral behavior and development* (Vol. 1, pp. 45-103). Hillsdale, NJ: Erlbaum.
- Bandura, A. (2006). On integrating social cognitive and social diffusion theories. In A Singhal & J. Dearing (Eds.). *Communication of innovations: A journey with Ev Rogers*. Beverley Hills: Sage Publications. Retrieved from <http://www.uky.edu/~eushe2/Bandura/Bandura2006SinghalDearing.pdf>
- Betts, K. S. (2009). Online human touch (OHT) training and support: A conceptual framework to increase faculty and adjunct faculty engagement, connectivity, and retention in online education, Part 2. *Journal of Online Learning and Teaching*, 5(1), 29-48. Retrieved from http://jolt.merlot.org/vol5no1/betts_0309.htm
- Bingham, T., & Conner, M. (2010). *The new social learning*. SF: BK Publish.
- Brabazon, T. (2002). *Digital hemlock: Internet education and the poisoning of teaching*. Sydney, Australia: UNSW.
- Brooks, C., & Gibson, S. (2012). Professional learning in a digital age. *Canadian Journal of Learning and Technology*, 38(2), 1-16.

- Coughlin, E., & Kadjer, S. (2009). *The impact of online collaborative learning on educators and classroom practices*. Los Angeles, CA: Cisco Systems.
- DeRosa, D., Hantula, D., Kock, N., & D'Arcy, J. (2004). Trust and leadership in virtual teamwork: A media naturalness perspective. *Wiley Periodicals*, 43, 219-232. doi:10.1002/hrm.20016
- Dittman, D. R., Hawkes, M., Deokar, A. V., & Sarnikar, S. (2010). Improving virtual team collaboration outcomes through collaboration process structuring. *The Quarterly Review*, 17(4), 195-209. Retrieved from <http://www.eric.ed.gov/ERICWebPortal/detail?accno=EJ947301>
- Dolan, V. (2011). The isolation of online adjunct faculty and its impact on their performance. *International Review of Research in Open and Distance Learning*, 12(2), 62-77. doi:10.1016/j.iheduc.2009.05.001
- Donnison, S., Edwards, D., Itter, D., Martin, D., & Yager, Z. (2009). Reflecting on improving our practice: Using collaboration as an approach to enhance first year transition in higher education. *Australian Journal of Teacher Education* 34(3), 18-29. Retrieved from <http://ro.ecu.edu.au/ajte/vol34/iss3/2/>
- Duncan-Howell, J. (2010). Faculty making connections: Online communities as a source of professional learning. *British Journal of Educational Technology*, 41, 324-340. doi:10.1111/j.1467-8535.2009.00953.x
- Fichter, D. (2005). The many forms of e-collaboration: Blogs, wikis, portals, groupware, discussion boards, and instant messaging. *Online*, 29(4), 48-50. Retrieved from <http://pm440.pbworks.com/f/many+forms+of+e-collaboration+blogs+wikis+portals.pdf>
- Fullan, M. (2006). *Change theory: A force for school improvement*. Seminar series no. 157. Centre for Strategic Education. Retrieved from http://www.catalyst-chicago.org/sites/catalyst-chicago.org/files/michael_fullen_change_theory.pdf
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105. doi:10.1016/S1096-7516(00)00016-6
- Hu, R., Caron, T., Deters, F., Moret, L., & Swaggerty, E. (2011, March). Teacher educators teaching and learning together: A collaborative self-study of support within an online literacy learning community. *MERLOT Journal of Online Learning and Teaching*, 7(1), 57-67. Retrieved from jolt.merlot.org/vol7no1/hu_0311.pdf
- Hughes, S. C., Wickersham, L., Ryan-Jones, D. L., & Smith, S. A. (2002). Overcoming social and psychological barriers to effective on-line collaboration. *Educational Technology & Society*, 5(1), 86-92
- Jarvenpaa, S. J., & Leidner, D. E. (1999). Communication and trust in global virtual teams. *Organization Science*, 10, 791-815. doi: 10.1111/j.1083-6101.1998.tb00080.x
- Kabilan, M., Adlina, W., & Embi, M. (2011). Online collaboration of English language faculty for meaningful professional development experiences. *English Teaching: Practice and Critique*, 10(4), 94 – 115. Retrieved from <http://education.waikato.ac.nz/research/files/etpc/files/2011v10n4art6.pdf>
- Kim, K., & Bonk, C. J. (2006). The future of online teaching and learning in higher education: The survey says. *EQ Educause Quarterly*, 29(4). Retrieved from <http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolume/TheFutureofOnlineTeachingandLe/157426>
- LinkedIn. (n.d). LinkedIn facts page. Retrieved from <http://www.linkedin.com/>
- McLean, J. (2006). Forgotten faculty: Stress and job satisfaction among distance educators. *Online Journal of Distance Learning Administration*, 9(2). Retrieved from: <http://www.westga.edu/~distance/ojdla/summer92/mclean92.htm>
- Moore, J. C. (2006). Collaboration online: Sloan-C Resources. *Journal of Asynchronous Learning Networks*, 10(1), 81-89. Retrieved from <http://sloanconsortium.org/jaln/v10n1/collaboration-online-sloan-c-resources>
- Puzziferro-Schnitzer, M. (2005). Managing virtual adjunct faculty: Applying the seven principles of good practice. *Online Journal of Distance Learning Administration*, 8(2). Retrieved from <http://www.westga.edu/%7Edistance/ojdla/summer82/schnitzer82.htm>
- Rice, K., & Dawley, L. (2007). Going virtual: The status of professional development for K-12 online faculty. Boise, ID: Boise State University. Retrieved from <http://edtech.boisestate.edu/goingvirtual/goingvirtual1.pdf>
- Roberts, C., Thomas, M., McFadden, A., & Jacobs, J. (2006). Leading online learning through collaboration. *MERLOT Journal of Online Learning and Teaching*, 217-225. Retrieved from <http://jolt.merlot.org/vol2no3/roberts.htm>
- Schunk, D. H. (2008). *Learning theories. An educational perspective* (5th ed.). Upper Saddle River, NJ: Pearson.
- Scribner-MacLean, M., & Miller, H. (2011). Strategies for success for online co-teaching. *MERLOT Journal of Online Learning and Teaching*, 7(3). Retrieved from http://jolt.merlot.org/vol7no3/scribner-maclean_0911.htm

- Shattuck, J., Dubins, B., & Zilberman, D. (2011). Maryland Online's Inter-Institutional Project to Train Higher Education Adjunct Faculty to Teach Online. *International Review of Research In Open & Distance Learning*, 12(2), 40-61. Retrieved from <http://www.irrod.org/index.php/irrod/article/view/933>
- Shea, P. (2007). Bridges and barriers to teaching online college courses: A study of experienced online faculty in thirty-six colleges. *Journal of Asynchronous Learning Networks*, 11(2), 73-128. Retrieved from <http://faculty.weber.edu/eamsel/Research%20Groups/On-line%20Learning/BridgesandBarriersTeachingOnline.pdf>
- Stevenson, C. B., Duran, R. L., Barrett, K. A., & Colarulli, G. C. (2005). Fostering faculty collaboration in learning communities: A developmental approach. *Innovative Higher Education*, 30(1), 23-36. Retrieved from <http://link.springer.com/article/10.1007/s10755-005-3293-3#page-1>
- Vallance, M., Towndrow, P., & Wiz, C. (2010, January/February). Conditions for successful online document collaboration. *TechTrends*, 54(1), 20-24. doi: 10.1007/s11528-009-0359-6
- Valle, M., & Fuchs, T. (2015). Teaching and Learning Communities: Empowering Adjuncts and Ensuring Quality. *Journal of Education and Human Development*, 4(1), 1-6.
- Vygotsky, L. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Wolf, P.D. (2006). Best Practices in the training of faculty to teach online. *Journal of Computing in Higher Education*, 17(2), 47-48. doi:10.1007/BF03032698
- Yin, R. K. (2008, October). *Case study research: Design and methods*: [Kindle PC Version]. Sage Publications. Retrieved from Amazon.com

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