COMMUNITIES OF PRACTICE AS PROFESSIONAL DEVELOPMENT FOR

REMOTE ADJUNCT INSTRUCTORS:

IMPROVING THE QUALITY OF THE ONLINE STUDENT EXPERIENCE

A Dissertation

Presented in Partial Fulfillment of the Requirements for the

Degree of Doctorate of Education

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by

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Authorization to Submit Dissertation

This dissertation of A. Heather Carter, submitted for the degree of Doctorate of Education with a Major in Education and titled: "Communities of Practice as Professional Development for Remote Adjunct Instructors: Improving the Quality of the Online Student Experience," has been reviewed in final form. Permission, as indicated by signatures and dates below, is now granted to submit final copies to the College of Graduate Studies for approval.

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Abstract

This dissertation followed a three-article format. Each article explored some aspect of improving the quality of online student learning experiences by investigating various professional development techniques for remote adjunct instructors. The first article (Chapter 2) investigated the relationship between online instructor self-efficacy and student satisfaction at a private university in the northwestern United States. Research was conducted by comparing student evaluations with an online instructor self-efficacy survey distributed to instructors and students within the same online program. The second article (Chapter 3) studied self-regulated professional development for remote instructors in mandatory Communities of Practice (CoP). It triangulated data from remote instructor artifacts, observations, and instructor focus groups to reach final conclusions. Finally, the third article (Chapter 4) explored the connection between organizational learning and professional development for remote instructors based on principles of adult learning and mandatory CoPs. By following naturalistic inquiry and analyzing observations and focus groups with remote leadership at the university, the study created an overall story of professional development within the online learning organization. Chapter Five tied the three research articles together, concluding that a student's class standing significantly affected their perception of online courses, and that mandatory online CoPs provided effective professional development for remote adjuncts through self-regulated learning environments. Fostering better communication channels between adjunct instructors and online administrators through the CoP environment would allow the university to better align individual and institutional goals in order to improve the quality of online student learning.

Keywords: Communities of Practice, online learning, professional development, student satisfaction

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Dedication

To my father, T.L. McRae, who has influenced countless lives by advocating the power,

influence, and eternal significance of education. Your support and encouragement have

been unwavering over the years.

Table of Contents

List of Figures

List of Tables

CHAPTER 1: THE PROFESSIONAL PRACTICES DOCTORATE

This study was designed to fulfill the purpose of the University of Idaho Professional Practices Doctorate in Education (PPD), resulting in a Doctorate of Education (Ed.D.) degree, meaning it focused on understanding, developing, and implementing solutions to local problems. PPD programs are distinguished from traditional doctorates in that they incorporate "practice-rooted research, work-based learning, employment-related skills and cohort-driven pedagogies" (Willis, Inman, & Valenti, 2010, p. 99). The characteristics of PPD programs are thus included in PPD dissertations. This introduction compared the purposes and outcomes of PPD programs with traditional Ph.D. programs. Specifically, it focused on the Ed.D. degree as a type of PPD, examined PPD dissertation options, and explored the collaborative nature of this research study.

PPD programs are usually characterized by building content and skills that are broader and more interdisciplinary than traditional Ph.D. programs. Since the students in these programs are often older and working in their chosen professions, the PPD allows students to focus on problems within their professional workplace, rather than on academic philosophies and theories (Green & Powell, 2005). The PPD prioritizes professional knowledge over academic knowledge, its goal being to address real and often localized problems, rather than developing academic theories (Willis et al., 2010). While some scholars have debated the validity of PPD programs (Le Belle, 2004; Willis et al., 2010, p. 29-32), founders of the Carnegie Project on the Education Doctorate endorse the PPD doctorate program in Education, and uphold the idea that this "new degree can help restore respect for the excellent work of education practitioners and leaders" (Shulman, Golde, Bueschel, & Garabedian, 2006, p. 28).

Historically, educators have debated the purposes and outcomes of Ph.D. programs in Education compared to Ed.D. objectives and outcomes. The first doctorate of education (Ed.D.) was offered from the University of Toronto in 1881, and later in the United States at Harvard in 1920 (Green & Powell, 2005, p. 87). The purpose of the Ed.D. is to prepare practitioners, as opposed to scholars and researchers in traditional Ph.D. programs.

Institutions such as the University of Illinois and the University of Idaho focus the Ed.D. dissertation around solving problems rather than discovering universal knowledge. The University of Illinois characterizes their Ed.D. dissertation as a "synthesis of experiences that is the hallmark of a highly qualified professional. The demonstration of these qualities may take a variety of forms such as: (a) a field study; (b) a scholarly, original paper; . . .or (c) an analytic report" (College of Education at Illinois, 2013, par. 1). In addition, Clark University, Harvard Graduate School of Arts and Sciences, Louisiana State University, and the University of Alabama support the three-article dissertation format used by the University of Idaho PPD program (University of Idaho, 2011; Willis et al., 2010, p. 47).

The three-article dissertation format incorporates five elements in the dissertation, including an introduction that explains the three articles contained in the dissertation, followed by three publishable articles, and a conclusion that ties together findings from the articles and proposes both solutions to problems of practice and implications for future scholarship (Willis et al., 2010, p. 46). Overall, the purpose of the PPD dissertation is to prepare leaders who have the requisite skills to identify an authentic, researchable issue or problem related to their practice and to conduct disciplined inquiry that can identify promising solutions (T. Brown-Ferrigno, personal communication, September 5, 2012).

Table 1.1 summarizes the similarities and differences between the three types of

dissertations.

Table 1.1

Types of Dissertations

Chapter	Traditional	3 Article (TAD)	PPD
1	Introduction	Introduction	Problem
2	Literature Review	Article 1	Context of Research
3	Methodology	Article 2	Action Research
4	Results	Article 3	Results
5	Discussion	Conclusion	Reflective Analysis

Finally, it must be noted, "PPD dissertations tend to be done collaboratively rather

than by a lone researcher, because most of the significant issues of professional practice call

for collaboration" (Willis et al., 2010, p. 39). The research in this study was cohort-based.

The first article presented in this dissertation was collaborative, and as such, some overlap

between articles is expected. Individual articles may share the same theoretical framework,

methodologies, or method of gathering data (Willis et al., 2010, p. 25). In this dissertation,

each researcher's individual study, as well as the group study, focused on a current problem

with technology in education. The research informs online learning at private institutions

such as Brigham Young University-Idaho (BYU-I), a private university located in the

northwestern United States.

While traditional research seeks to generalize findings, action research focuses on

specific situations and localized solutions (Stringer, 2007). Therefore, the foci of the

researchers' various studies identified problems of practice that were worthy, marketable,

and original (Willis et al., 2010). Participatory Action Research (PAR) is suited to

developing and implementing solutions to local problems, and fulfills the purpose of the

PPD program in its objective of practice-driven research. In a similar manner, some of the

individual qualitative studies utilized the Rapid Assessment Process (RAP) and used cohort members as co-researchers and analysts (Beebe, 2001). The PPD's focus on work-related learning and employment-driven skills were inherent in both the group and individual studies.

The research team for the group study included Jeffrey Hochstrasser, an instructor at BYU-I; Heather Carter, an online instructor and administrator at BYU-I; Rachel Huber, a BYU-I online instructor and former online student; and Brett Yadon, an online administrator at BYU-I. The cohort focused their research on current technology issues in the classroom and university organization. The study's stakeholders included both online students and students in traditional face-to-face classrooms at BYU-I, online and campus faculty at the same university, BYU-I online learning departments and administration, online servant leadership programs, and the University of Idaho.

In addition to the collaborative research, each member of the research team conducted individual research to complete two of the three articles for the three-article dissertation. The individual studies employed various types of research, and all focused on understanding and improving online learning or technology used in higher education.

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CHAPTER 2: SELF-EFFICACY IN ONLINE TEACHING

HOW INSTRUCTOR CONFIDENCE AFFECTS STUDENT SATISFACTION

Abstract

Online learning is the most rapidly growing area in higher education. This study explored the correlation between instructor self-efficacy (n = 265) and student satisfaction (n = 9,179) with online courses. Instructor self-efficacy in online teaching was examined in terms of the instructors' confidence in online teaching pedagogy, use of technology, and subject matter expertise (as measured by the Online Instructor Self-efficacy Survey). Student satisfaction levels with the course, instructor, and perceived learning were measured by end-of-semester student evaluations. Statistical analysis revealed that instructors with over three semesters of teaching experience at BYU-I were found to have significantly higher self-efficacy but lower student satisfaction levels than instructors who had been teaching less than three semesters. In addition, a significant difference was found in terms of student satisfaction and class standing, with more advanced students being less satisfied with their instructors, their perceived learning, and their online course. Analysis of data from pre-college (Pathway) students revealed significant differences from the traditional students in this study. In addition, the more confident an instructor was in their technological skills, the lower the student satisfaction was with the online course for the non-matriculated students. Suggestions for future research were discussed.

Keywords: higher education, online learning, self-efficacy, student satisfaction, technology

Introduction

Online learning is an increasing part of the landscape of higher education in the United States. Enrollments in online courses have increased steadily since 2005 (Wasilik & Bolliger, 2009). A recent survey indicated 50% of college presidents believe that ten years from now a majority of students will be taking classes online (Parker, Lenhart, & Moore, 2011). In 2012, almost seven million students in the United States, or 32% of all higher education students, were taking courses online (Allen & Seaman, 2013).

Despite this high rate of growth in online enrollments, in 2012 over two-thirds of faculty members at American universities reported that they did not accept the value and legitimacy of online learning (Allen & Seaman, 2013). This same rate of acceptance, or non-acceptance, has been relatively consistent for the last ten years, and shows no sign of changing (Allen & Seaman, 2011, 2013). Even acceptance of online education by students is in question. In a study consisting of counseling and school psychology graduate students found a significant preference toward face-to-face teaching when compared with hybrid and strictly online courses (Taylor & Huang, 2010). These findings could be explained by personality types that prefer face-to-face learning over the online environment (Harrington & Loffredo, 2010). Students who preferred online classes based their preferences on convenience, enjoyment of computer technology, and interest in innovation (Harrington & Loffredo, 2010).

Online programs are less expensive and offer more flexibility for students. Even without considering student preferences, online courses are being offered at a rate that exceeds the growth of traditional courses in higher education (Allen & Seaman, 2013; Harrington & Loffredo, 2010). Increasing enrollments, accompanied by a consistent

questioning of the value of online education, justify a need to examine ways the quality of the online student experience might be improved while maintaining escalating growth rates.

Problem Statement

Brigham Young University-Idaho (BYU-I), located in the northwestern United States, is among those institutions of higher education experiencing exponential growth in online learning (see Figure 2.1). In Fall Semester 2009, when BYU-I first developed a separate online program, 67 remote adjunct instructors were hired to teach 35 different online courses. By Fall Semester 2013, four years later, the number of online instructors had increased by 683% (Routson, 2013). The university hired 525 instructors to teach 142 different online courses, spread across 732 sections. In Fall 2013, on the first day of registration, the number of enrollments reached 30,742 (Routson, 2013).
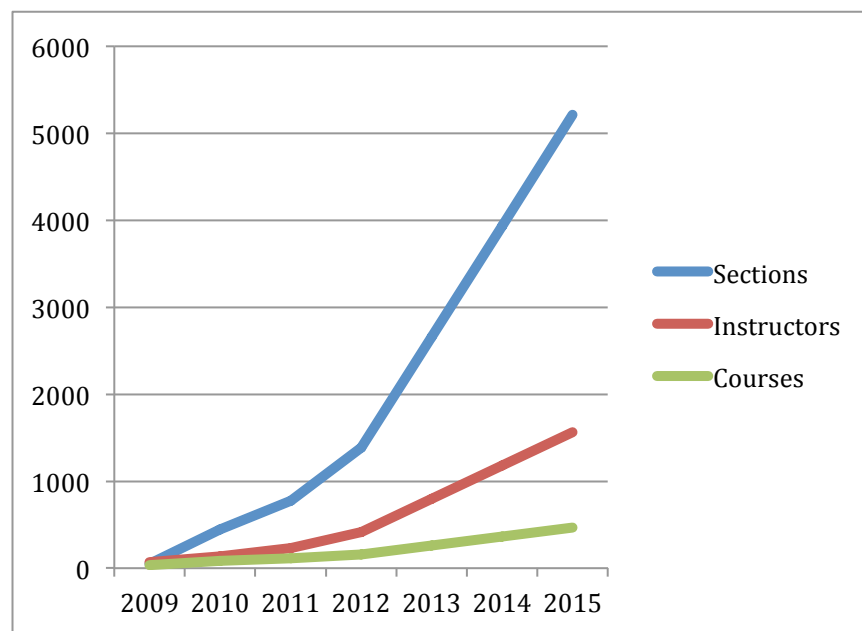
Figure 2.1. Current and projected growth in Online Learning at BYU-Idaho

From Fall 2013 to Winter 2014, the online program increased its number of instructors yet again, by 29%. Since the online courses at BYU-I are staffed almost

exclusively by remote instructors, escalating online enrollments meant more remote adjunct faculty to hire, train, and develop each year.

The rapid growth in online students and online instructors necessitated increased training. Not only were new instructors trained on the technicalities of teaching, they also learned a new online teaching pedagogy. In addition, the growth forced the online department to continually adapt their management procedures as data was gathered comparing online student satisfaction levels to student satisfaction in the same on-campus courses. The university continues to face challenges of improving the quality of online education and increasing student satisfaction ratings, while supporting high levels of accelerated growth.

Purpose Statement

This study explored the correlation between instructor self-efficacy in teaching online and student satisfaction levels from end-of-semester evaluations. Specifically, online teaching self-efficacy was examined in terms of instructors' confidence in online teaching pedagogy, use of technology, and knowledge of the subject matter. This study identified correlations between self-efficacy and student satisfaction in order to enable the university to improve satisfaction, develop better hiring strategies, and improve instructor training and professional development.

Significance of the Study

BYU-Idaho has three main imperatives from Kim B. Clark, its current President: lower the cost of education, serve more students, and improve students' learning experience (Clark, 2005). The university's online program has helped fulfill two of these missions, by lowering the cost of education and serving more students than ever before. Still, the

university continues to explore ways to improve student satisfaction, especially in the online learning program. Examining instructor self-efficacy as it correlates with student satisfaction is significant because of the potential impact an instructor's self-efficacy may have on students' experience and satisfaction (Bandura, 2005).

In addition, this study may provide additional guidelines for hiring and training online faculty members who, in the end, will help improve the online learning experience for students. Finally, students' experience with the online platform at this particular university can be generalized and found applicable to other online institutions throughout the United States.

Literature Review

Students are considered the main stakeholders in the educational process. One way to measure quality in online education is to look at student satisfaction with courses and instructors (Astin, 1993; Donald & Denison, 1996; Katiliute & Kazlauskiene, 2010; Schuh & Upcraft, 2002). Self-efficacy theory has its roots in social cognitive theory, and is built on a constructivist framework, which has implications for online learning. This review of the literature examined research concerning domains of online instructor self-efficacy and how they relate to student experiences in online learning.

Student Satisfaction

Student satisfaction in higher education is often used as a key indicator of institutional effectiveness and success (Donald & Denison, 1996; Katiliute & Kazlauskiene, 2010; Schuh & Upcraft, 2002). Satisfaction has been found to have a larger impact on grades than grades have on student satisfaction (Bean & Bradley, 1986). In addition, student

satisfaction has been related to increased retention and enrollment, along with improved academic performance (Beil & Shope, 1990; Beltyukova & Fox, 2002; Tinto, 1993).

One of the factors linked to increased student satisfaction with online learning is interaction with instructors. Students connect to instructors in online courses through the presence of quality, plentiful interaction in the use of technology, online-specific pedagogy, and course competency. In general, the more frequent and instructive the interaction with faculty, the more satisfied students are with their experience in online classes (Ali & Ahmad, 2011; Astin, 1993; Jackson, Jones, & Rodriguez, 2010; Kuh, 2003; NSSE, 2005).

A quantitative study of 917 undergraduate students identified several predictors of student satisfaction in online learning (Sahin, 2007). Personal relevance was found to be the strongest predictor of student satisfaction. This involves linking course content with personal experiences of the students and creating courses that are learner-centered, and involve students' out-of-school knowledge and skills. Instructor support was identified as the second most significant predictor of student satisfaction in the online learning environment. This includes timely help, useful feedback, and easy communication. Active learning, which allowed students to involve their own learning strategies, problems, and solutions to the course, was the third strongest variable in predicting student satisfaction. Addressing these predictors of student satisfaction when developing online courses increases "student motivation, participation, and ultimately, learning" (Sahin, 2007, p. 6).

Mixed results were found in studies researching the relationship between gender and student satisfaction. Using a survey that employed a data set of 1185 students from 27 online courses, one study found female students significantly more positive about e-learning than male students (Gonzalez-Gomez, Guardiola, Rodriguez, & Alonso, 2012). This contradicted

previous studies, which revealed greater e-learning valuation and satisfaction and a more positive perception of online learning among male students (Lu & Chiou, 2010; Ong & Lai, 2006). Still other studies indicate no gender effect on attitudes towards online learning (Cuadrado-Garcia, Ruiz-Molina, & Montoro-Pons, 2010; Hung, Chou, Chen, & Own, 2010). All of these studies used similar quantitative data-gathering methodologies, involving participant surveys gathered from a significant number of university students. Ong and Lai (2006) is the exception, which utilized participants employed at six international companies that implement their own e-learning programs. Though the results from these studies show mixed results concerning gender as a variable influencing student satisfaction with online learning, one may still conclude that gender is a variable that should continue to be monitored in future research.

Theoretical Framework

Self-Efficacy Theory is a component of Social Cognitive Theory, which is founded in Constructivism. Having at its foundation the concept of constructing knowledge through experience and social interaction, Constructivism provides a framework for understanding, predicting, and changing human behavior (Crotty, 1998; Paul, 2005). As it relates to education:

> Constructivist principles…help designers and teachers create learner-centered, collaborative environments that support reflective and experimental processes. Students and instructors can then build meaning, understanding, and relevant practice together and go far beyond the mere movement of information from instructors' minds to students' notebooks. (Jonassen, Davidson, Collins, Campbell, & Haag, 1995, p.1)

Since online learning is also founded on the principle of constructivism, many research studies of online instruction are associated with constructivist theory (Jonassen et al., 1995; LeNoue, Hall, & Eighmy, 2011).

Self-efficacy Theory

Self-efficacy theory describes an individual's belief about his or her perceived ability to accomplish certain tasks and/or succeed in a particular situation (Bandura, 2005). It can also be viewed as an individual's self-judgment of personal capabilities, and is often required to begin and successfully complete various tasks at a certain level (Shazadi, Khatoon, Aziz, & Hassan, 2011). For example, an individual with high self-efficacy in angling would feel comfortable handling a fishing rod and confident about his or her ability to land a catch during a fishing trip. However, when fishing in a new situation or with different equipment, this same individual may have lower self-efficacy, especially if initial attempts were not successful. Likewise, teacher efficacy is context-specific and a teacher's level of self-efficacy may change from one class period to another (Goddard et al., 2000). Therefore, a teacher may have high self-efficacy teaching geography in a traditional classroom setting. However, when teaching a different subject, or in an online environment or with new technology, the teacher's self-efficacy may be lower.

Self-efficacy and outcome expectations can be described in terms of their relationship with motivation to learn (Bandura, 1977). Individuals will engage in learning if they believe in their ability to learn (efficacy expectations) and they also believe their efforts at learning will be rewarded (outcome expectations). Figure 2.2 depicts Bandura's theory of self-efficacy.
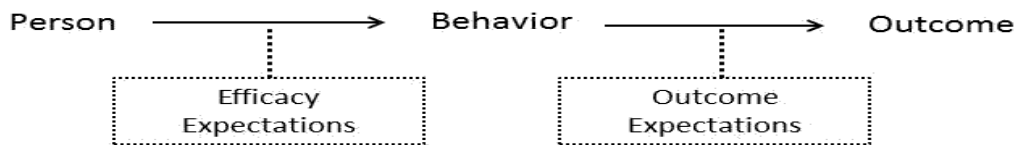
Figure 2.2. Efficacy and Outcome Expectations (Bandura, 1997, p. 193).

Self-efficacy theory has implications for andragogy, the theory of adult learning developed by Malcolm Knowles. Some of the elements influencing adult learners are their tendency to draw from past experiences, self-directed learning, internal motivation, and a readiness to learn (Chan, 2010). Adults tend to learn what they believe they need to know, and to learn for immediate action rather than for future use (Chan, 2010; Knowles, Holton, & Swanson, 2012).

Domains of Online Teacher Self-Efficacy

Goddard, Hoy, and Hoy (2000) suggested that one way for school administrators to improve student achievement "is by working to raise the collective efficacy beliefs of their faculty" (p. 502). They concluded, "it is not enough to hire and retain the brightest teachers—they must also believe they can successfully meet the challenges of the task at hand" (Goddard et al., 2000, p. 503). High teacher self-efficacy has been found to correlate with increased student learning, student test scores, student motivation, and student achievement (Goddard et al., 2000; Henson, 2001). These findings are consistent across a broad range of demographics, but are limited to the face-to-face classroom. This review of the literature focused on research in terms of self-efficacy in online learning pedagogical skills, technological skills (Hung & Blomeyer, 2012), and course subject matter knowledge (Tschannen-Moran & Woolfolk-Hoy, 2001; Wright, 2010). These three domains were selected for two reasons. First, they correlated to the areas that have been shown to influence

student satisfaction (Jackson et al., 2010). Secondly, the relationship between content, pedagogy, and technology had been examined for several years.

The knowledge base teachers need to effectively teach with technology has previously been conceptualized in terms of Technological Pedagogical Content Knowledge (TPACK) (Koehler & Mishra, 2005; Schmidt et al., 2009). According to this framework, technology knowledge refers to knowledge about various technologies such as the Internet, interactive whiteboards, and software programs. Content knowledge refers to knowledge about course subject matter. Pedagogical knowledge is knowledge of the "methods and processes of teaching," including assessment, student learning, and classroom management (Schmidt et al., 2009). It is important to note that while TPACK examines knowledge in these three domains, it does not measure self-efficacy.

Research has found that instructors' self-efficacy in online teaching influences and is influenced by their confidence in online pedagogies, technology, and subject matter. Self-efficacy is context-specific, and may be high in one area and low in another (Bandura, 2005; Tschannen-Moran & Woolfolk-Hoy, 2001). For example, an online learning instructor may have high self-efficacy in terms of skills with technology and in terms of subject matter, but low self-efficacy in terms of online teaching pedagogy.

The importance for teachers to develop unique pedagogical knowledge and skills to teach in the online environment has been established in primary and secondary education (Deubal, 2008), as well as in higher education (Baran, Correia, & Thompson, 2013). A correlation has also been found between high teacher technological self-efficacy and years of experience in teaching online, as well as pedagogical training in the use of technology (Lee & Tsai, 2010). In relation to content, a teacher's self-efficacy is neither consistent

across activities nor across subject matter (Bandura, 1997; Tschannen-Moran & Woolfolk-Hoy, 2001).

Figure 2.3 depicts the relationship of self-efficacy with the three domains of the online instructor (Carter, Hochstrasser, Huber, & Yadon, 2013). It should be noted that although Online Instruction Pedagogy is found at the top of the circle, this does not suggest that one aspect of self-efficacy is more important than another.
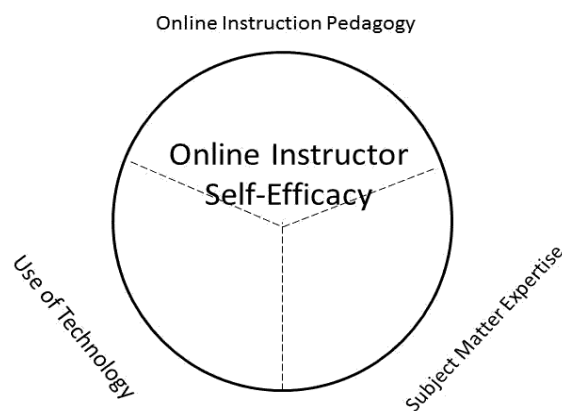
Figure 2.3. Constructs of Online Instructor Self-Efficacy

If instructors believe they have subject matter expertise, as well as competence in the use of technology and in online instruction pedagogy, they will provide a better learning environment for students to build their understanding and knowledge of the course material. Research indicates that when this occurs, the results are reflected in increased student satisfaction (Sahin, 2007).

Research Question and Hypotheses

This descriptive study explored the relationship between instructor self-efficacy and student satisfaction for online courses using a quantitative analysis of survey responses.

Research Question: What is the relationship between self-efficacy in online teaching and the level of student satisfaction with their online class? Because self-efficacy is always described as being specific to a certain area, this study examined which aspects of instructor self-efficacy are most significant in impacting online student satisfaction—technology, pedagogy, or content.

H_1 – There is a correlation between instructor self-efficacy *overall* and student satisfaction.

H_2 – There is a correlation between instructor self-efficacy in their *use of technology* and student satisfaction.

H_3 – There is a correlation between instructor self-efficacy in their *pedagogical skill* and student satisfaction.

H_4 – There is a correlation between instructor self-efficacy in their *subject matter expertise* and student satisfaction.

Methodology

This was a descriptive study, measuring the correlation of instructor self-efficacy with student satisfaction. This study was conducted with remote instructors currently teaching online for BYU-I. Demographic data in terms of age, gender, teaching experience and subjects taught was gathered from the Demographic Information Form, which each survey participant was asked to complete (see Appendix A for the complete form). In addition, this study used two survey instruments: one for instructors measuring online instructor self-efficacy, entitled Online Instructor Self-efficacy Survey (see Appendix B); and the other for students indicating satisfaction with course and instructor, as measured by

the BYU-Idaho Course Evaluation administered at the end of each semester (see Appendix C).

Research was conducted following approval of the Institutional Review Board (IRB) from both BYU-I and the University of Idaho. IRB approvals can be found in Appendix D and E. Researchers were trained in and followed the general ethical principles and code of conduct of the American Psychological Foundation (APA, 2010, p. 5-7) and completed certification from the National Institutes of Health (NIH). The nature of the surveys did not require identifying students or instructors individually. The data was analyzed in aggregate. To help protect the identity of instructors and enhance their comfort with taking the survey, all instructors were assigned a participant number by the researchers. This participant number was used to link instructors to the course satisfaction results. The researchers did not share individual self-efficacy scores with BYU-I; rather, all data was presented in aggregate.

Assessments

The researchers adapted the Online Educator Self-Efficacy Scale (Hung & Blomeyer, 2012), the Online Technologies Self-Efficacy Scale (Miltiadou & Yu, 2000), Lee's Self-efficacy Instrument (Lee, 2003), and the Teacher Efficacy Construct (Tschannen-Moran & Woolfolk-Hoy, 2001) in order to create the Online Instructor Self-efficacy Survey (OISS). The OISS contained 38 questions designed to assess the self-efficacy of online teachers' pedagogical skills, technological skills, and subject matter expertise. It used a semantic differential scale, ranging from 1 (very confident) to 4 (not confident at all). It also included two open-ended questions for each of the three categories, allowing instructors to elaborate on what added to or diminished their confidence. See Appendix B for the complete instrument. It should be noted that while elements of the OISS were identified in TPACK,

the OISS was not designed to mirror TPACK. The focus of the OISS was to assess self-efficacy, and therefore the questions in the survey separate application of technology skills from other pedagogical techniques, whereas in the TPACK, all pedagogy is in one category. OISS design allowed researchers to combine understanding and application of technology into one category, and separate application of technological knowledge from other elements of pedagogy.

The second instrument used was the BYU-Idaho Course Evaluation, administered to students at the end of each semester for all courses at BYU-I. This survey contained 43 questions about each student's performance and expectations in the class, as well as perceptions of the course and instructor. It used a five point rating scale about student satisfaction for the course in relation to other college courses the student had taken. The course evaluation used in this study has been administered at BYU-Idaho since 2008.

Data Collection

Researchers used the Qualtrics survey software to collect data. Prior to this research, data collection was in place for the student satisfaction measures, since each semester BYU-I administers a student survey for every course. The two quality measures of course and instructor ratings were already part of the survey. The correlation for these two quality measures was calculated for each self-efficacy question and for the three general categories of technological skill, knowledge of subject matter, and skill in online teaching pedagogy, as well as overall teaching self-efficacy.

Data Analysis

A Spearman rho correlation was conducted for all hypotheses. Analysis looked for a correlation between student satisfaction and instructor self-efficacy in terms of technological

skill, pedagogical skill, subject matter knowledge, and overall online teaching self-efficacy.

It must be noted that 44% of the instructors taught classes in a Pathway program, a year-long

program of general study skills and academic start courses designed to help non-

matriculated students become college-ready. Because these are not traditional courses or

traditional students, an analysis was conducted both with and without their data.

Phase I: Instrument Validation

The study had two phases. The goal of the first phase was to improve the content

validity of the OISS. Ten Caucasian professionals (male = 8; female = 2) between the ages

of 28 and 43 were asked to review and critique the OISS. Eight (80%) agreed to critique the

OISS. Two of the professional reviewers held Ph.Ds in Instructional Design and six held

Masters Degrees. All were either directors in research and development (n = 3) or managers

of online instructors at BYU-I (n = 5). All reviewers were either from BYU-Idaho's

Research and Development team or Online Course Improvement Department, and routinely

develop and administer BYU-I assessments. In addition, they were all stakeholders in this

research project.

The eight participants were asked for specific feedback on improving the instrument

from a research and development perspective, as well as from the viewpoint of stakeholders.

Four participants gave detailed and comprehensive feedback through email, and two

participants shared their feedback in person. The other two participants said they wouldn't

change anything.

As a result of stakeholder feedback, the two open-ended questions that were at the

end of each category of the OISS were reduced to just one open-ended question asking about

the biggest impact on the instructor's feelings of confidence in the specific topic of the

section. In addition, the demographic survey was changed to require instructors to select one primary course and teaching area, rather than allowing them to check multiple boxes. The survey then reminded instructors of their initial teaching area choice as they began the subject matter area of the survey. The revised survey also requested instructors to reflect on their own confidence levels, regardless of course design, class size, and other variable factors. Other minor changes to wording, punctuation, and grammar improved overall clarity.

Phase II: Study

Using the revised survey instrument, the final study was conducted in Fall 2013. Due to the relative ease of surveying all members of the populations, the survey was sent to all online instructors and all students in online courses. Therefore, all 486 instructors teaching online at BYU-I in the 2013 Fall Semester were invited to participate in the study by completing the OISS. The student population included all students enrolled in online courses at BYU-I during the same semester (n = 18,336). Instructors were invited to respond to the OISS prior to students completing the end-of-semester surveys. Because the data collection procedures were already in place for students, researchers were able to obtain survey results for all online students who completed the end-of-semester survey.

Results

Participants

Instructors. All remote adjunct instructors (n = 486) from the Fall 2013 semester were invited to participate in the OISS. Of the remote instructor population who identified their ethnicity, the majority were Caucasian (54%), with 2.7% identifying themselves as Hispanic, 1.4% Asian and .02% African American and the same percentage (.02%)

identified as East Indian (H. Hall, personal communication, January 31, 2014). From the

total online instructor population, 265 instructors (54.5%) completed the survey. Of those

responding, 50.6% were female and 49.4% were male.

Because the population of Pathway students was markedly different than traditional

college students, the analysis was split into three datasets: one including all responses (All

Instructors), another with only Pathway students (Pathway), and the last with non-Pathway

students (Non-Pathway). Pathway courses were separate from other online courses at BYU-

Idaho and therefore the datasets were easily categorized. The majority of instructors

(n = 168) taught non-Pathway courses (63.4%), followed by 117 instructors (44.2%) who

taught Pathway courses. Some overlap existed, since 20 instructors taught both Pathway and

non-Pathway courses. Female respondents (n = 134; 50.6%) were only slightly higher than

male respondents (n = 131; 49.4%).

When asked about experience teaching online at BYU-Idaho, 65 were in their first

semester teaching (24.5%), 23 had previously taught one to two semesters (8.7%), 84 had

three to five semester's experience (31.7%), and 93 had over five semesters of online

experience at BYU-Idaho (35.1%). Seventy-two instructors (27.2%) taught online for other

universities. Of those, 13.9% had one or two semesters of experience teaching online at

other universities, ten (13.9%) had three to five semesters of experience, and the remaining

72.2% had over five semesters (n = 52) of experience teaching online at other universities.

Students. Survey responses were collected from 18,336 online students. The

majority of U.S. students in Fall 2013 were Caucasian (89.5%) with 6.02% identifying

themselves as Hispanic, 1.4% Asian, and 3.1% identifying themselves as "other" (BYU-

Idaho, 2014). However, since only 54.5% of instructors responded to the OISS, only 9,179

student responses could be utilized in this analysis. To clarify, only the responses from students who had classes from instructors responding to the OISS were used to test the hypotheses presented in this study. Females accounted for 66.5% of the population (n = 6,102), and 33.5% were male (n = 3,077).

Freshmen constituted 16.3% of the student participants (n = 1,492); 17.8% of the students were sophomores (n = 1,637); 15.5% were juniors (n = 1,419); and 17.3% were seniors (n = 1,592). The remaining third of the students, 33.1%, were not matriculated into BYU-Idaho (n = 3,039). These were students enrolled in the Pathway program.

Students who completed the survey were taking courses in a variety of areas, with the largest category of students (42.4%) taking General Education courses (n = 3,890). Students who were taking courses in their major accounted for 30.2% of the students (n = 2,774), while 4.4% of the students were enrolled in online courses for their minor (n = 403), and 5.6% of the students completed the survey as part of an elective online course (n = 510). The remaining students either categorized their course as "other" (16.2%; n = 1,490) or did not identify a category for their course (1.2%; n = 112).

Measurements

Student Evaluations. Annual student evaluations asked questions about student performance (including their level of commitment and expected grade), instructor, course, and course core values. The evaluation also asked for students' perceived learning and satisfaction in comparison to other courses they had taken, along with overall ratings of the course and instructor. Students were asked to rate their level of satisfaction in the course compared to other courses completed on a scale from -2 (meaning much less satisfied as compared to other courses) to +2 (meaning a great deal more satisfied as compared to other

courses). When students felt their satisfaction was the same as other college courses they had taken, it was rated as zero.

Student Satisfaction. The majority of students (97.2%) rated their level of satisfaction in the course compared to other courses (n = 8,918), with a mean of 0.97 (SD = 1.13); median of one; and a mode of two, which is a positive response. It must be noted that a chi square test of independence between students' year in school and satisfaction with their online course in comparison to other courses they had taken was significant, X^2(16, $N =$ 17931) = 2493.513, $p < .001$, Cramer's V = .186. Freshmen responded in the neutral range (-1 to 1); the sophomores and juniors responded more negatively (-2 to 1); and seniors were the most negative (responding -2 to 0), meaning at the most negative response they were "a great deal less" satisfied with their online courses than other college courses they had taken. Significantly more (.01 level) juniors and seniors than one might expect by chance responded with a -2 rating (a great deal less satisfied). In addition, significantly fewer (.01 level) students than one might expect by chance, rated their learning as a 2 (a great deal more satisfied). This was true for freshmen, sophomores, juniors, and seniors. This means that fewer freshmen, sophomores, juniors, and seniors, (than one might expect by chance) were a great deal more satisfied with their online course as compared to other courses.

The opposite was true for the Pathway students. Significantly fewer (.01 level) Pathway students than one might expect by chance rated their satisfaction with the online course as compared to other courses between -2 to 1 (-2 = 0.2%; -1 = 0.9%; 0 = 3.0%; 1 = 6.1%). In addition, significantly more Pathway students than one would expect by chance, indicated they were a great deal more satisfied with their online course compared to

other courses (2) they had taken (21.9%). Overall, Pathway students were more satisfied with their online courses than traditional university students.

Perceived learning. Students were also asked how much they had learned in the course compared to other courses completed. They were given a scale from -2 (much less satisfied as compared to other courses) to +2 (a great deal more satisfied as compared to other courses). When students compared how much they learned in relation to other college courses they had taken, 98.1% responded (n = 9,009). The mean was 1.07 (SD = 1.04); median was one; and mode was two. This represents an overall positive response.

With respect to students' perceived learning, a chi square test of independence between students' year in school and perceived learning compared to other courses was significant, X^2(16, N = 18120) = 1859.416, p < .001, Cramer's V = .160. Freshman and sophomore students responded in the neutral range (-1 to 1), meaning most felt they learned as much in their online course as they had learned in other university courses they had taken. Juniors responded more negatively (-2 to 1), indicating that they learned anywhere from a "great deal less" to only a little more in their online course than in other classes they had taken. Finally, seniors responded the most negatively (responding -2 to 0). The most positive rating from any senior (a zero score) indicated that he or she learned about the same in his or her online course as in other courses he or she had taken. Significantly more juniors and seniors (.01 level) than one might expect by chance responded with a -2 rating, meaning they felt they had learned 'a great deal less' in their online course than from their other courses.

Data indicated the more schooling students received, the less learning they felt they acquired from their online courses compared to others they had taken. In addition,

significantly fewer students (.01 level) than one might expect by chance rated their learning

as a two. This was true for freshmen, sophomores, juniors, and seniors. In other words, no

class of students indicated that they had learned 'a great deal more' in their online class than

in other classes they had taken.

Once again, the opposite was true for Pathway students. Significantly fewer Pathway

students (.01 level) than one might expect by chance rated their perceived learning

compared to other courses between -2 to 1 (-2 = 0.4%; -1 = 0.6%; 0 = 3.2%; 1 = 7.0%). In

addition, significantly more Pathway students than one would expect by chance indicated

they were a great deal more satisfied with the amount of information learned in their online

course compared to other courses (2) they had taken (21%). Overall, Pathway students felt

they learned more in their online courses than traditional university students.

Course rating. Students were asked to rate their instructor and how much they

believed they had learned from the course. They were given a seven-point scale ranging

from very poor (1) to exceptional (7). Ninety-eight percent of the students (n = 8,994) rated

their perception of how much they had learned in the online course, with a mean of 5.55 (SD

= 1.43); median of six; and mode of seven. This represented a very positive response.

Moreover, when students were asked to give their overall rating of their instructor using the

same scale, the mean was 5.94 (SD = 1.27)—also a very strong rating, with 98.6% (n =

9,046) of students responding.

Online Instructor Self-efficacy Survey (OISS). The OISS measured the self-

efficacy of online instructors in terms of online pedagogy, subject matter expertise, and

technological skills (Carter et al., 2013). It used a semantic differential scale, ranging from 1

(very confident) to 4 (not confident at all). Ninety-five percent of the instructors (n = 251)

completed the assessment. Inter-item reliability was measured by Cronbach's alpha and found to be high (.87).

Overall, instructors' self-efficacy (n = 251) as measured by the OISS ranged from 1.0 to 2.11, and had a mean of 1.34 (*sd* = .21), indicating confidence in their online teaching ability. Instructors' self-efficacy in their pedagogical skills (n = 259) ranged from 1.0 to 2.58, with a mean of 1.57 (*sd* =.316). Though instructors were less confident in their ability with online teaching pedagogy, they still generally reported confidence. Instructors' self-efficacy in their technological skills (n = 259) ranged from 1.0 to 2.17 and had a mean of 1.195 (*sd* = .228), showing that instructors felt more confident about their technological skills in teaching online than with their online pedagogy. Finally, instructors' self-efficacy in the subject matter ranged from 1.0 to 2.38 with the mean score of 1.34 (*sd* = .33). The mean for subject matter self-efficacy was interestingly the same as instructor self-efficacy for online pedagogical skills. Taken altogether, these results show that remote instructors at the university felt confident about their online pedagogy, technological skills, knowledge of subject matter, and overall online teaching, with their highest self-efficacy in their technological skills, as rated by the OISS.

Experience and self-efficacy. With respect to self-efficacy and experience teaching online, a significant difference was found in instructors' self-efficacy depending on how long they had been teaching at BYU-Idaho. An ANOVA revealed that teachers who had taught for BYU-Idaho for over three semesters were significantly higher in self-efficacy for online pedagogy than teachers who were in their first semester teaching (as identified by the Games-Howell post hoc test), $F(3, 255) = 3.364$, $p = .019$, $eta^2 = .038$ (medium-small). This was also true for instructors' self-efficacy with online teaching technology, $F(3, 255) =$

5.359, $p = .001$, *eta*^{2} = .059 (medium), and overall self-efficacy, $F(3, 247) = 6.052$, $p = .001$,

eta^2 = .073 (medium). However, there was no significant difference in the instructors' self-

efficacy of their subject matter knowledge with respect to the amount of time they had

taught at BYU-Idaho, $F(3, 255) = 1.819$, $p = .144$, *eta*^{2} = .021 (small). Analysis of the data

in Table 2.1 identified that experience teaching at BYU-Idaho increased instructors' self-

efficacy with both online teaching technology and online pedagogy, but knowledge of

subject matter was something instructors brought to their teaching with little influence from

university experience or professional development programs.

Table 2.1

*ANOVA: OISS * Experience Teaching at BYUI*

	SS	*df*	*MS*	*F*	*p*	eta^2	**Effect size**
Pedagogy SE							
Between groups	.983	3	.328	3.364	.019	.038	Medium-small
Within groups	24.839	255	.097				
Total	25.822	258					
Technology SE							
Between groups	.797	3	.266	5.359	.001	.059	Medium
Within groups	12.643	255	.05				
Total	13.441	258					
Subject SE							
Between groups	.605	3	.202	1.819	.144	.021	Small
Within groups	28.2877	255	.111				
Total	28.892	258					
Overall SE							
Between groups	.745	3	.248	6.052	.001	.073	Medium
Within groups	10.13	247	.041				
Total	10.1874	250					

Analysis

H$_1$ – There is a correlation between instructor self-efficacy *overall* and student

satisfaction.

H_2 – There is a correlation between instructor self-efficacy in their *use of technology* and student satisfaction.

H_3 – There is a correlation between instructor self-efficacy in their *pedagogical skill* and student satisfaction.

H_4 – There is a correlation between instructor self-efficacy in their *subject matter expertise* and student satisfaction.

A Spearman rho correlation was conducted for all four hypotheses to identify if there was a correlation between instructor self-efficacy in online instruction and student satisfaction in their online courses. The effect size for correlational studies most commonly used is the correlation coefficient itself (Kotrlik & Williams, 2003). Hopkins (1997) suggests using the following criteria to interpret the correlation coefficients: less than .10 as trivial, .10 to .30 as small, .30 to .50 as moderate, .50 to .70 as large, and .70 as very large. See Table 2.2 for complete statistical analysis of the correlations.

Table 2.2

Spearman Rho Correlation of Self-efficacy with Student Satisfaction

	Pedagogy		**Technology**		**Subject**		**Overall**	
	r	*p*	*r*	*p*	*r*	*p*	*r*	*p*
All Students	0.021	.740	0.130	.035	0.092	.137	0.085	.167
Pathway	0.041	.663	0.185	.046	0.055	.558	0.110	.239
Non-Pathway	-0.128	.099	0.056	.470	-0.084	.277	-0.080	.305

A significant correlation was found (All Students: $p = .035$; Pathway: $p = .046$) between high instructor self-efficacy with technology and decreased student satisfaction with the class. This indicated the more confident an instructor was in their technological skills, the lower the student satisfaction was with the course. These findings were significant, primarily for the Pathway student population. However, it must be noted that the

effect size was small. The correlation was so slight that any relationship between the two
data sets should be more rigorously studied before drawing any conclusions or
recommending action.

Additional Analysis

In addition to the original hypotheses examined in this study, data was also available
to run correlations between instructors' self-efficacy and students' perceived learning, along
with an overall rating of the instructor and course. With respect to students' rating of the
course, the only significant correlation ($p = .02$) was between the Pathway students and the
instructors' self-efficacy in technology. Pathway students rated courses where the instructor
had high self-efficacy with technology lower than those where the instructor had a lower
self-efficacy with technology. However, it must be noted that the effect size shown was
small ($r = .216$). The correlation was so slight that any relationship between the two data
sets should be more rigorously studied before drawing any conclusions or recommending
action. Complete statistical analysis can be found in Table 2.3.

Table 2.3

Spearman Rho Correlation of Self-efficacy with Course Rating

	Pedagogy		Technology		Subject		Overall	
	r	p	r	p	r	p	r	p
All Students	-0.013	.834	0.115	.061	0.046	.454	0.041	.511
Pathway	-0.019	.841	0.216	.020	0.007	.944	0.063	.502
Non-Pathway	-0.133	.086	0.011	.892	-0.111	.152	-0.125	.107

No significant correlation was found between instructors' self–efficacy in online
instruction and students' rating of the instructor. See Table 2.4 for the complete statistical
analysis.

Table 2.4

Spearman Rho Correlation of Self-efficacy with Instructor Rating

	Pedagogy		Technology		Subject		Overall	
	r	p	r	p	r	p	r	p
All Students	0.002	.980	0.072	.245	0.107	.084	0.022	.725
Pathway	-0.048	.608	0.146	.116	0.071	.445	0.012	.901
Non-Pathway	-0.076	.325	-0.022	.774	0.006	.943	-0.086	.270

In analyzing instructors' self-efficacy and students' perception of how much they learned compared to other courses, the only significant correlation found (p = .021) was between all students in respect to the instructors' self-efficacy with technology. The more confident the instructor felt with his or her technological skills, the less the students perceived they learned from the course compared with other courses. Again, the correlation was so slight (r = .141) that any relationship between the two data sets should be more rigorously studied before drawing any conclusions or recommending action. See Table 2.5 for complete statistical analysis.

Table 2.5

Spearman Rho Correlation of Self-efficacy with Student Perceived Learning

	Pedagogy		Technology		Subject		Overall	
	r	p	r	p	r	p	r	p
All Students	-0.010	.871	0.141	.021	0.076	.218	0.072	.241
Pathway	-0.047	.614	0.169	.069	0.025	.786	0.043	.648
Non-Pathway	-0.135	.081	0.090	.248	-0.113	.146	-0.071	.365

Satisfaction and instructor experience. Student evaluations were also analyzed with respect to amount and location of instructors' teaching experience. Small but significant correlations were found. The more experience an instructor had teaching for BYU-Idaho, the less satisfied (Satisfaction) students were with his or her course as

compared to other courses they had taken ($p = .029$, $r = -.134$). Analysis revealed similar

results for student perceived learning (Learning) and course rating (Course), with a

significance of .009 and .027 respectively. In contrast, the rating of BYU-I experience to

instructor rating (Instructor) did not reach a significant threshold ($p = .093$). Table 2.6

depicts the complete correlational results between teaching experience and the student

evaluations. Again, the correlations were so slight that any relationship between the two data

sets should be more rigorously studied before drawing any conclusions or recommending

action.

Due to the significant relationship between BYU-I teaching experience and student

satisfaction, additional analysis was conducted by separating instructors who had experience

only at BYU-Idaho ($n = 206$) and those with experience at other universities ($n = 79$). Note

that when these populations were combined, they were slightly higher than the 265

instructors used for self-efficacy analysis. This is because there were 20 instructors who

completed the demographic information, who did not complete the remainder of the survey.

Correlations were conducted for each of these groups, and a significant correlation was

found between student satisfaction and semesters of experience for instructors with only

BYU-Idaho experience ($p = .001$, $r = -.231$). The more experience teaching at BYU-I (only)

the less satisfied the students were in the online course. In comparison, no significant

correlation was found for those who had taught at other universities ($p = .192$, $r = .148$). As

with course satisfaction, analysis revealed a significant correlation between teaching

experience and student ratings for the instructor, course, and student perceived learning in

courses taught by instructors whose only teaching experience was at BYU-Idaho. The same

correlation with experience did not exist for those who had taught at other universities. The

more experience teaching at BYU-I (only), the lower students rated the online course and instructor. In addition, the more experience teaching at BYU-I (only), the less satisfied students were with the online course and how much they had learned compared to other courses. See Table 2.6 for complete statistical analysis.

Table 2.6

Teaching Experience Correlations to Student Evaluations

	All BYU-I Instructors		Other Universities		BYU-Idaho Only	
	r	*p*	*r*	*p*	*r*	*p*
Course	-0.161	.009	0.160	.159	-0.177	.011
Instructor	-0.104	.093	0.207	.067	-0.173	.013
Learning	-0.136	.027	0.132	.246	-0.262	<.001
Satisfaction	-0.134	.029	0.148	.192	-0.231	.001

Analysis of the descriptive data with respect to teaching experience reveals a slightly different story for student satisfaction in online courses compared to other courses taken.

All Instructors

A one-way analysis of variance test was calculated to identify if there was a significant difference between instructors (All BYU-I Instructors) based on the amount of teaching experience at BYU-I. The analysis found significance. The courses of instructors with over five semesters of experience at BYU-I were rated significantly lower than the courses of instructors teaching their first semester at BYU-I. The more teaching experience at BYU-I, the less satisfied the students were with the course in comparison to other courses they had taken, $F(3, 281) = 3.742$, $p = .012$, $eta^2 = .038$ (medium-small). Table 2.7 presents the source table from this analysis.

Table 2.7

ANOVA: Course Rating by Experience (all BYU-I Instructors)

	SS	df	MS	F	p	eta²	Effect size
Between groups	4.698	3	1.566	3.742	.012	.038	Medium-small
Within groups	117.581	281	.418				
Total	122.279	284					

In addition, instructors with over three semesters of teaching experience at BYU-I were rated significantly lower than instructors teaching their first semester at BYU-I. The more teaching experience at BYU-I, the lower the students rated the instructor, $F(3, 281) =$ 4.907, $p = .002$, eta^2 = .05 (medium). See Table 2.8 for the source table of this analysis.

Table 2.8

ANOVA: Student Instructor Ranking by Instructor Experience (all BYU-I Instructors)

	SS	df	MS	F	p	eta²	Effect size
Between groups	4.262	3	1.421	4.907	.002	.05	Medium-small
Within groups	81.342	281	.289				
Total	85.603	284					

With respect to how much the students perceived they learned compared to other courses taken, the same pattern was found. Students perceived learning significantly less from courses taught by instructors with over three semesters of experience at BYU-I than from courses taught by instructors teaching their first semester at BYU-I. The more teaching experience at BYU-I, the lower the students rated the amount they learned in the online class compared to other courses, $F(3, 281) = 7.128$, $p < .001$, eta^2 = .071 (medium-large). Table 2.9 presents the source table from this analysis.

Table 2.9

ANOVA: Student Perceived Learning by Instructor Experience (all BYU-I Instructors)

	SS	*df*	*MS*	*F*	*p*	eta^2	**Effect size**
Between groups	4.338	3	1.446	7.182	<.001	.071	Medium-large
Within groups	56.578	281	.201				
Total	60.916	284					

Accordingly, students were significantly less satisfied with their online course compared to other courses from instructors with over three semesters of experience at BYU-I and rated the amount of their satisfaction (compared to other courses) from instructors teaching their first semester at BYU-I significantly higher. The more teaching experience at BYU-I, the lower the students rated their satisfaction as compared to other courses, $F(3, 281) = 6.445$, $p < .001$, eta$^2 = .064$ (medium). See Table 2.10 for the source table from this analysis.

Table 2.10

ANOVA: Student Course Satisfaction by Instructor Experience (all BYU-I Instructors)

	SS	*df*	*MS*	*F*	*p*	eta^2	**Effect size**
Between groups	6.067	3	2.022	6.445	<.001	.064	Medium
Within groups	88.18	281	.314				
Total	94.247	284					

BYU-I Only Teaching Experience

An independent samples t-test was conducted to identify if there was a significant difference between course rating for instructors who only taught at BYU-I (only) and those with teaching experience at other universities and found significance. Effect size was measured by Cohen's d with the following analysis: small (.20); medium (.50); large (.80). Courses taught by instructors who had only taught at BYU-I were rated significantly higher than courses taught by instructors with experience at other universities, $t(283) = -2.103$, $p =$

.036, $d = .28$ (small). In addition, instructor ratings for those who had only taught at BYU-I were significantly higher than instructor ratings with experience at other universities, $t(283) = -1.911$, $p = .036$, $d = .26$ (small).

With respect to how much the students perceived they learned compared to other courses taken, the same pattern was found. Students perceived they learned significantly less from courses taught by instructors with teaching experience at other universities. The students rated the amount they learned (compared to other courses) from instructors who had only taught at BYU-Idaho significantly higher than the instructors with experience at other universities, $t(283) = -2.643$, $p = .009$, $d = .359$ (medium-small).

Accordingly, students were significantly less satisfied with their online course with instructors with teaching experience at other universities compared to other courses taught by instructors who had only taught at BYU-I. The students rated their satisfaction with the online class compared to other courses they had taken significantly higher when the teacher had taught only at BYU-I compared to instructors who had experience teaching at other colleges, $t(283) = -2.103$, $p = .036$, $d = .34$ (medium-small).

Teaching Experience at Other Universities

A one-way analysis of variance test was calculated to identify if there was a significant difference in course ratings between courses taught by instructors who had teaching experience at other universities (Other Universities) based on the amount of teaching experience. There was no significant difference in how students rated courses taught by instructors with teaching experience at other institutions based on their level of experience, $F(2, 76) = 2.386$, $p = .099$, $eta^2 = .06$ (medium). Table 2.11 presents the source table from this analysis.

Table 2.11

ANOVA: Course Rating by Instructor Experience (Other Universities)

	SS	df	MS	F	p	eta^2	Effect size
Between groups	1.731	2	.865	2.386	.099	.06	Medium
Within groups	27.563	76	.363				
Total	29.294	78					

In contrast, instructors with over five semesters of experience teaching were rated significantly higher than instructors with less than two semesters of teaching experience at other universities. The more teaching experience at other universities, the higher the students rated the instructor, $F(2, 76) = 3.598$, $p = .032$, eta$^2 = .087$ (medium). Table 2.12 presents the source table from this analysis.

Table 2.12

ANOVA: Student Rating of Instructor by Instructor Experience (Other Universities)

	SS	df	MS	F	p	eta^2	Effect size
Between groups	1.638	2	.819	3.598	.032	.087	Medium-large
Within groups	17.299	76	.228				
Total	18.937	78					

With respect to how much the students perceived they learned compared to other courses taken, there was no significant difference in relation to the amount of experience the instructor had teaching at other universities, $F(2, 76) = 2.216$, $p = .116$, eta$^2 = .055$ (medium). Table 2.13 presents the source table from this analysis.

Table 2.13

ANOVA: Perceived Learning by Instructor Experience (Other Universities)

	SS	df	MS	F	p	eta^2	Effect size
Between groups	.752	2	.376	2.216	.116	.055	Medium
Within groups	12.901	76	.170				
Total	13.653	78					

Accordingly, there was no significant difference in students' satisfaction with their online course compared to other courses with respect to the amount of experience the instructor had teaching at other universities, $F(2, 76) = 2.611$, $p = .080$, $eta^2 = .055$ (medium). Table 2.14 presents the source table from this analysis.

Table 2.14

ANOVA: Student Course Satisfaction by Instructor Experience (Other Universities)

	SS	*df*	*MS*	*F*	*p*	eta^2	**Effect size**
Between groups	1.430	2	.715	2.611	.08	.06	Medium
Within groups	20.817	76	.274				
Total	22.247	78					

Table 2.15 includes the complete descriptive statistics of teaching experience with respect to student satisfaction.

Table 2.15

Teaching Experience and Student Evaluation: Descriptive Statistics

	All Instructors		**BYU-I Only**		**Other Universities**	
	M	*SD*	*M*	*SD*	*M*	*SD*
Course	5.628	0.656	5.678	0.667	5.496	0.613
Instructor	5.999	0.549	6.038	0.566	5.899	0.493
Learning	1.153	0.463	1.197	0.473	1.037	0.418
Satisfaction	1.062	0.576	1.115	0.584	0.923	0.534

Self-efficacy and experience. Correlation results between instructor self-efficacy in online pedagogy and experience teaching online revealed that the more experience an instructor had teaching for BYU-I, the more confident he or she felt about his or her online pedagogical abilities ($p = .010$). Even stronger correlations were found between instructors' confidence in using online teaching technologies (email, discussion boards, attaching images, creating hyperlinks, sharing video files, etc.) and instructor experience at BYU-I ($p < .001$). As Table 2.16 shows, the longer an instructor had taught for BYU-I, the higher

self-efficacy he or she reported in these areas. In contrast, there was no significant correlation found between instructor self-efficacy with subject knowledge and teaching experience at BYU-I ($p = .089$).

However, the correlation was significantly different if the remote instructor had experience teaching at other universities. The more experience an instructor had teaching at another university, the lower his or her self-efficacy in their online pedagogy ($p < .001$, $r = .213$). Still, this correlation is small enough that any relationship between the two data sets should be more rigorously studied before drawing any conclusions or recommending action.

Table 2.16

Teaching Experience Correlations to Instructor Self-efficacy

	BYU-I Experience		Other Universities	
	r	*p*	*r*	*p*
Pedagogy	-0.159	.010	0.213	<.001
Technology	-0.224	<.001	0.015	.802
Subject	-0.105	.089	0.120	.051
Overall	-0.198	.001	0.153	.013

Summary

This study explored the relationship between instructor self-efficacy and student satisfaction levels from end-of-semester student evaluations. Specifically, instructor self-efficacy in online teaching was examined in terms of the instructor's confidence in online teaching pedagogy, use of technology, and subject matter expertise. A significant correlation was found with the Pathway students ($p = .046$), identifying that the more confident an instructor was in his or her technological skills, the lower the Pathway student's satisfaction was with the course. However, it must be noted that the effect size was small.

In addition, Pathway students had a significantly positive response pattern (.01 level). Pathways students, significantly more than one might expect by chance, reported

feeling they had learned more from their online course than other courses they had taken (21.1%) and were more satisfied with their online course than other courses they had taken (21.9%). It must be noted that Pathway is a special BYU-I program targeted toward individuals who are not traditional students and who have an opportunity they would not otherwise have expected. It is possible that because they have been excluded from the traditional college path, they value it more highly than traditional students. Overall, the scores of Pathway students for satisfaction have historically been higher than traditional university students (Routson, 2013). Higher satisfaction ratings might also be attributed to the fact that Online Operations purposefully assigned higher-rated instructors to Pathway courses in the past. Finally, Pathway courses are the first experiences many Pathway individuals have with university courses. Pathway students typically do not have as much experience with university courses, and might have lower expectations and hence higher satisfaction with their instructors and courses.

Statistical analysis also revealed a unique response pattern in terms of student satisfaction with respect to class standing. The less higher education experienced, the higher the course satisfaction rating. The more education a student experienced (senior-standing), the less satisfaction with online courses. This is an important piece of information for BYU-I to address.

The analysis also found relatively few satisfaction ratings at either extreme (a great deal less satisfied or a great deal more satisfied) with traditional students (non-Pathway students). This confirmed previous findings by the university noting that in comparison to on-campus course offerings, online courses experienced fewer extremely high and extremely low satisfaction ratings (Young, 2014).

Correlation results between instructor self-efficacy in online pedagogy and experience teaching online revealed a correlation between the amount of experience an instructor had teaching for BYU-Idaho and his or her confidence in his or her online pedagogical abilities. The longer the instructor had taught for BYU-I, the higher his or her self-efficacy in online pedagogy.

Even stronger correlations were found between instructors' confidence in using online teaching technologies (email, discussion boards, attaching images, creating hyperlinks, sharing video files, etc.) and instructor experience at BYU-Idaho. The longer instructors had taught for BYU-Idaho, the more self-efficacy they reported in these areas.

However, a significant difference was found regarding student satisfaction and instructors' experience teaching at other universities. Remote instructors who only taught at BYU-I had significantly higher student course ratings ($p = .036$) along with perceived learning ($p = .009$) and satisfaction ($p = .012$), with their online course (compared to other courses) than instructors who had experience teaching at other universities.

Statistical analysis of all of the remote instructors teaching at BYU-I for over five semesters were rated significantly lower in their course evaluations than instructors teaching their first semester at BYU-I. ($p = .012$). Moreover, instructors with over three semesters of teaching experience at BYU-I were rated significantly lower than instructors teaching their first semester at BYU-I ($p = .002$). Students perceived they learned significantly less than other courses from instructors with over three semesters of experience at BYU-I and rated the amount they learned (compared to other courses) from instructors teaching their first semester at BYU-I significantly higher ($p < .001$).

Discussion and Conclusion

Online education is the most rapidly growing area in higher education (Wasilik & Bolliger, 2009). Among these institutions, BYU-Idaho has experienced rapid and continual growth in their online program in recent years. This study explored the relationship between instructor self-efficacy and student satisfaction levels as determined from end-of-semester evaluations. Self-efficacy in online teaching was examined in terms of an instructor's confidence in online teaching pedagogy, use of technology, and subject-matter expertise.

This study revealed that no significant correlations exist at BYU-Idaho between student satisfaction and online instructors' self-efficacy with online pedagogy. Neither were any correlations found between satisfaction and instructors' subject-matter expertise or overall online self-efficacy. Only very small, reverse correlations were identified between instructors' efficacy in teaching technology and student satisfaction ratings. Therefore, this research was unable to support any of the four original hypotheses. This is discrepant to the literature indicating that high teacher self-efficacy correlates with increased student learning and satisfaction (Goddard et al., 2000; Henson, 2001). However, this study did reveal positive correlations between instructor self-efficacy and length of experience teaching online.

Interestingly, this study also indicated that students were less satisfied with their learning experience in courses taught by instructors with experience teaching online at other universities in comparison to instructors who only had experience teaching online for BYU-Idaho. In general, the more experience instructors had teaching, the less satisfied students were with their learning experience. Accordingly, the longer BYU-I instructors taught for the university, the higher their self-efficacy, but also the lower their students' satisfaction

levels. Student satisfaction and perceived learning appeared highest in those courses where instructors had taught only for BYU-Idaho and were in their first semester teaching. A possible explanation for this dynamic could be that training for new instructors has improved. Another explanation could be burnout of some kind among veteran instructors, as well as more enthusiasm and involvement from new instructors. More research is needed in order to uncover the meaning of these relationships and to discover strategies for improving student satisfaction ratings while retaining BYU-I instructor experience.

Another interesting finding revealed that student satisfaction in online courses diminished as students progressed in their education. A possible explanation for this dynamic is that the more classes students have experienced, as in the case of seniors, the higher the satisfaction expectation level becomes for future courses. It could also be due to the maturity of the online program at BYU-I as indicated by the online course list (http://www.byui.edu/online/courses/course-list), indicating that upper division online courses are newer to the program. Seniors and juniors in Fall 2013 might have been the first to encounter new online courses that may yet require In addition, senior-level courses and students might need or prefer a different format than what online courses traditionally offer (i.e. hybrid).

Finally, a significant correlation was found with Pathway students ($p = .046$), identifying that the more confident an instructor was in his or her technological skills, the lower Pathway students' satisfaction was with the course. These findings were significant, primarily for the Pathway student population. This data could represent a dislike for the course content or the course instruction. It could also represent the possible use of technology by Pathway instructors beyond the comfort level of non-matriculated students,

since Pathway students represent a population of non-traditional students taking college-preparation courses, rather than traditional university courses. The students may also be surprised at the amount of extra work college courses require compared to high school courses. This study did not corroborate Sahin's studies, which indicated that the higher an online instructor's competence with technology, the better the learning environment they will provide to their students (Sahin, 2007). However, it must be noted that the effect size was small. The correlation was so slight that any relationship between the two data sets should be more rigorously studied before drawing any conclusions or recommending action.

Limitations

This study was conducted at a private, religious, undergraduate, four-year university in the Northwest. The results of this study are limited to this demographic, and can neither be generalized to graduate students and instructors, nor to other institutions. In addition, because 45.5% of instructors did not take the self-efficacy survey, the researchers' ability to correlate with all students was limited. Instructors who chose to respond to the survey might be a more involved population and naturally more self-confident about their online teaching abilities. Limitations could be greatly reduced in a future study by being more sensitive to instructor needs, and taking extra measures to be certain instructors knew their confidentiality would be maintained. For instance, an independent contractor could conduct the self-efficacy survey, rather than an administrator from the online program.

Gender, though noted and reported for students, was not treated as a variable in this study. The gender of remote online instructors was also not treated as a variable, but could possibly affect the satisfaction ratings of students.

Pathway students represented another limitation, due to the unique nature of the program and the students' lack of educational experiences. Pathway students are non-traditional university students, which make results less relatable to other institutions. In addition, the newness of the Pathway program makes Pathway results less reliable. It is difficult to determine whether results relate to the newness of the program or are a realistic expression of Pathway participants. This study attempted to address the Pathway limitation by separating the data into all-student groups, non-Pathway groups, and Pathway-only groups.

Finally, this study was limited to the duration of one semester. Results would prove more reliable over longer periods of time and across a greater sample of online instructors. During Fall 2013, the Pathway program welcomed more new students than in any other semester. These students in particular would have little to no experience with college or college courses.

Perhaps significant factors other than teacher self-efficacy presented the largest threat to validity in the study. To address this concern, additional variables were also measured and tested using statistical analysis. The following variables were tested:

- Demographics of instructors and students

- Overall teaching experience of the instructor

- Instructor teaching experience online

- Instructor teaching experience online at BYU-I

- Department/subject area of instruction

- Instructor preference for teaching online or face-to-face courses

Another potential threat to validity was the applicability to student populations outside of BYU-I. While the nature of action research is concerned more with solutions to local problems, researchers were careful to structure the survey instruments in a way that other institutions using asynchronous online instruction, could repeat the study in order to increase the validity of the results.

Implications for Practice

The findings of this study indicate online teaching self-efficacy may not be a significant consideration when hiring online instructors. In fact, high self-efficacy, especially in terms of technology, may actually be a negative factor in facilitating online courses. Online learning programs may benefit from looking more at other factors, such as personality, training, and mentoring as indicators of future instructor success.

Another finding that merits consideration is lack of student satisfaction with online courses as students' year in school increases. If higher level courses are newer and therefore of lower quality, then more time needs to be invested in course development, or newer courses should receive more improvement focus than current practice. If students increasingly experience lower satisfaction because they have more courses for comparison, perhaps more experienced students should be engaged to find ways to improve online courses.

The finding that a decrease in student satisfaction also appears to correlate with an increase in instructor experience seems to be the result with the most promise for practice implications. This finding needs to be confirmed and more deeply understood through additional analysis over multiple semesters. If it is confirmed, it could lead to significant changes in practice. For example, teacher experience may need to be eliminated or even

considered as a contra indicator when selecting remote leadership for adjunct instructors. Perhaps more recent training and mentoring offered to less experienced instructors needs to be encouraged or required for more experienced instructors.

Recommendations for Future Research

Though gender was noted and reported, it was not treated as a variable in this study with regard to students or instructors. Future studies should include this variable as part of the analysis to see if gender is a factor relating to student satisfaction with online courses at BYU-Idaho. The gender of the online instructor should also be treated as a possible variable in future studies.

Results of this study suggest further exploration into student perceived learning and student satisfaction levels. A needs assessment to see how the university might obtain improved satisfaction ratings, particularly among more experienced, traditional students may provide helpful information to increase student satisfaction of online courses. In addition, research results merit an examination comparing the variable of online courses and hybrid courses to student satisfaction and learning among senior-level students.

An analysis of Technological Pedagogical Content Knowledge (TPACK) in online courses could also reveal significant differences between instructor knowledge and instructor self-efficacy with regard to student satisfaction and learning. Stronger relationships, for instance, might be found between student satisfaction and instructor knowledge, rather than with instructor self-efficacy.

Finally, future studies exploring the effectiveness of professional development for instructors with respect to student satisfaction would be informative. Since no significant correlations were identified between satisfaction levels and instructor self-efficacy, similar

correlations could be done with instructors who received professional development in specific online teaching skills, such as increasing instructor presence and contact with students. Future research may also garner different results if an independent party conducted the self-efficacy surveys rather than an administrator from the online program.

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CHAPTER 3: IDENTIFYING COMMUNITY

AS PROFESSIONAL DEVELOPMENT FOR ONLINE INSTRUCTORS

Abstract

This rapid ethnographic study explored how well a private university in the northwestern United States met the professional development and adult learning needs of 525 online adjunct instructors in Fall 2013 through online Communities of Practice (CoPs). Specifically, it addressed if mandatory CoPs were able to provide a climate of self-regulation and whether effective professional development was taking place naturally in the sociality of the CoP structure. The effectiveness of improving instructor morale and citizenship with the university through mandatory CoPs was explored, as well as the impact of leadership and clear feedback loops in the CoPs. Due to its focus on higher education, this study followed a qualitative research design and naturalistic inquiry in order to understand the lived experiences of remote instructors within online CoPs. The study used multiple data points to triangulate research and create an overall picture of online CoPs at the university. Data points included weekly reports from instructors, an analysis of interactions in the asynchronous CoP social networking site, as well as live focus groups with online instructors teaching during Fall 2013. Results revealed mandatory online CoPs were effective at building camaraderie and citizenship among remote instructors, as well as at providing applicable professional development through self-regulated learning opportunities. Instructors demonstrated high morale for the online CoPs, leadership, and students, but experienced low morale regarding opportunities to give feedback and contribute to the overall online organization.

Keywords: Communities of Practice, adult learning, online adjuncts, professional development, online learning

Introduction

Online learning has experienced heavy and constant growth from the time it was introduced to institutions of higher education. Moreover, since 2003, online enrollments have grown substantially faster than overall higher education enrollments (Allen & Seaman, 2010). In Fall 2009, "over 5.6 million students were taking at least one online course" (Allen & Seaman, 2010, p. 2), an increase of nearly one million students since Fall 2008. While the typical growth of students in higher educational institutions is near two percent, online enrollments average a 21% growth rate (Allen & Seaman, 2010, p. 2). These changing enrollment patterns, in addition to budget constraints and decreasing state support, cause many universities to hire adjunct faculty (Green, 2007). The National Center for Education Statistics reports that since 1970, higher educational institutions have experienced a steady decline in the number of full-time faculty at degree-seeking institutions, with a steady increase in part-time or adjunct faculty (U.S. Department of Education, 2012).

President Barack Obama added his support to these changes by introducing a plan in his 2012 State of the Union address to increase the number of college graduates and reduce the cost of education in the United States specifically by encouraging schools to move toward distance learning and online education, with online learning defined as classes where 80% of the course work is delivered online (Sturgis, 2012, p. 16). American universities such as the University of Maryland's University College, Hampton University, and University of Phoenix have played a large part in promoting distance learning, specifically for those individuals that may not have access or the ability to enroll in a traditional university education (Sturgis, 2012). Other examples of high-level increases in online enrollments can be found at small, private universities, such as one located in the western

United States that increased its sections of online courses from 50 to 732 in the past three years (Routson, 2013).

Problem Statement

Though higher education institutions list several reasons for offering online courses, such as "improved student access, increased rates of degree completion, and appeal of online education to nontraditional students" (Wasilik & Bolliger, 2009, p. 1), barriers still exist in adopting online courses, including faculty bias and non-acceptance of online methods of instruction. Many faculty members believe it takes more time and effort to teach an online course, and despite the energy and time expended, they do not accept the value of online learning (Allen & Seaman, 2007). A follow up study repeated three years later still found faculty acceptance of online learning as the most common barrier to distance learning programs (Allen & Seaman, 2010). Still, faculty perceptions, such as higher costs for online development and delivery, differed widely between those institutions that offered online programs and those who did not (Allen & Seaman, 2010). In general, institutions that offered online programs were more positive about the prospects and implementation of online courses than those who did not offer any type of online program.

From 2003 to 2010, academic leaders have slowly decreased their biases toward online learning by nearly ten percent (Allen & Seaman, 2010). Among those academic leaders surveyed, 66% indicated that learning outcomes in online courses were the same or superior to those in face-to-face courses (Allen & Seaman, 2010). The statistics do not reflect acceptance rates among faculty, however, who continue to represent various degrees of bias toward online learning (Wasilik & Bolliger, 2009). Full-time faculty partiality has

motivated many online programs to utilize faculty adjuncts, and specifically online faculty adjuncts, to meet the needs of growing online enrollments.

According to a 2009 U.S. Department of Education survey, 75% of all faculty members are adjunct (Flannery, 2012), and although the percentage of online adjuncts varies from state to state and program to program, adjunct faculty have an enormous impact on fulfilling institutional missions and on the university culture (Green, 2007; Townsend & Twombly, 2007). While enrollment growth is exciting for those involved in online programs, increased enrollments for many universities mean more remote adjuncts to hire, train, and manage. Within the past two years, from Fall 2011 to Fall 2013, the Online Learning Department at a private university in the northwestern U.S. experienced a 128% increase in online adjunct instructors alone (Routson, 2013). Many factors have influenced instructors to accept these positions.

While academic officers believe additional income is a major factor in online adjuncts' motivation to teach, adjuncts themselves report choosing to teach for several reasons, including a greater focus on students, flexibility in teaching, and increased opportunities to see students succeed (Allen & Seaman, 2008; Hoyle, 2010; Townsend & Trombly, 2007). Regardless of the drive toward increasing adjunct hires, faculty and administration at all institutions seem to equally recognize the demand for a consistent and effective way to manage the quality of teaching provided by online adjunct hires (Green, 2007; Hoyle, 2010; Lorenzetti, 2003; Vail, 2006). At times, part-time online instructors embody the rapid move to classroom technology feared and resisted by some traditional faculty (Gibson, Harris, & Colaric, 2008; Hoyle, 2010). Accreditation issues and the need to

ensure the quality of online instruction have led many institutions to adopt various ways of evaluating online instructors (Green, 2007; Hoyle, 2010; Lorenzetti, 2003).

Therefore, online adjunct instructors are often more highly scrutinized than their campus counterparts (Ader-Beeler & Varney, 2013; Carter & Galbraith, 2013; DeCristofaro & Trevisan, 2013). At one private university, remote instructors self-report on their classes weekly, experience a much higher level of regulation than campus faculty, and are evaluated by online managers throughout each term (Carter & Galbraith, 2013). Sources report that while many part-time faculty members enjoy their work, they often feel disconnected, underappreciated, and undervalued (Green, 2007, p. 31). Barriers of time and distance to remote instructors complicate matters. Online adjuncts need to be part of the intellectual life of the campus, but are disconnected geographically and across time (Gappa, Austin, & Trice, 2007). In addition, the general doubts felt by full-time faculty concerning the usefulness of online education feed a divide between remote, adjunct instructors teaching online courses and the higher educational institution as a whole. Full-time faculty perceptions of online learning affect both the implementation of online programs as well as remote instructors' feelings of stability and worth.

In the end, many online departments struggle with how to provide effective professional development as well as a sense of citizenship and community to quickly increasing numbers of remote adjunct instructors. Communities of Practice (CoPs) have been used for general faculty development at many educational institutions (Baran & Cagiltay, 2010; Brooks, 2010; Farooq, Schank, Harris, Fusco, & Schlager, 2007). Like face-to-face communities, online CoPs may be able to provide a strong environment for the professional development of adult learners such as online university faculty. They may also

connect instructors who are separated by time and distance to the same university objectives and mission. Still, little research has been done concerning how *online* CoPs might be used for the citizenship and professional development of remote adjuncts. The purpose of this study was to explore the effectiveness of mandatory online CoPs on social learning, citizenship, morale, and professional development for online instructors in higher education.

Significance of the Study

Findings from this study were significant in improving instructor satisfaction with the mandatory nature of teaching groups, as well as in improving overall online instructor morale at a private university in the northwestern United States. In addition, this study adds to the academic discussion of best practice in online CoPs, most specifically to CoPs used in mandatory professional development systems. This research adds new information for best practices in online teaching pedagogy to improve teaching and learning in online classes through effective professional development systems and by utilizing strategies to increase overall remote adjunct morale.

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Literature Review

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Theoretical Framework

Communities of Practice (CoPs) are founded on aspects of Constructivist and Constructionist thought because they foster learning through personal experience and the communal sharing of ideas (Wenger, 2006). They provide a compelling structure for professional development situations because adult learners thrive in social environments where they regulate their own learning (Webster-Wright, 2009).

Constructivism in its most basic sense is "an interpretive stance that attends to the meaning-making activities of active agents and cognizing human beings" (Lincoln, 2005, p.

60). It postulates that individuals learn through experience, challenges encountered, and creative and innovative analysis (Paul, 2005; Lincoln, 2005). Constructivism allows learners to incorporate new knowledge with existing knowledge. It is lauded "for its ability to see human complexity in its fullness; for its ability to understand unseen human meaning-making forces at work; for its relentless insistence that there is no such thing, in the natural social world, as a 'controlled variable' (Lincoln, 2005, p. 61). Essentially, constructivists learn from the boundless world around them.

In contrast to constructivists, constructionists argue, "There is no isolated self or fully private experience," and "virtually all intelligible action is born, sustained, and/or extinguished within the ongoing process of relationship" (Gergen, 2009, p. xv). Though constructionists tend to deny the importance of individualism, there are positives to glean from the group mindset as seen in working communities. CoPs, as hypothesized by pioneer Etienne Wenger, allow both individual and group learning to occur simultaneously. The type of situated learning that transpires in CoPs employs both Constructivist and Constructionist ideology (Barab & Duffy, 2000; Wenger, 1998).

Communities of practice, as envisioned by Jean Lave and Etienne Wenger (1991), are social learning communities that favor many of the principles of Constructivism, including allowing learners control over their learning environment—an environment that addresses immediate professional needs, allowing them to be internally motivated through work-applicable problem solving. Classic CoPs also embrace principles of Constructionism by following Etienne Wenger's model of domain, community, and practice (Gunawardena, Hermans, Sanchez, Richmond, Bohley, & Tuttle, 2009, p. 6). The domain refers to a community's knowledge base, which creates shared interest between community

participants, while the practice references the actions, work, and ways in which knowledge is shared, developed, and maintained in a community (Wenger, McDermont, & Snyder, 2002). Essentially, learning in a CoP is a social act (Wenger, 1998).

In Wenger's view, knowledge cannot occur independently from the social context, including people, culture, and situations surrounding the learning. This type of knowing is very different, then, from empiricism, which suggests "something could only be accorded the status of knowledge if it could be shown to be fully or absolutely justified in terms of a foundation in either reason or experience" (Phillips, 2005, p. 52). The type of knowledge gained under Wenger's CoP framework is subjective, rather than absolutely secure, and dependent upon the people, situations, and continued experiences they undergo. People learn as they interact; people learn from one another.

A CoP is a "community that acts as a living curriculum" (Wenger, 2006, par. 14). Scholars have used Wenger's primary foundation in CoPs to reinforce an ideology of social learning. Communities contain people with shared interests. The relationships built in CoPs produce mutual affiliations, camaraderie, and commitment to fellow group members and the community as a whole (Gunawardena et al., 2009, p. 7). Some Wenger-influenced studies have found that "group-mediated cognition" is acquired when "the thinking of each individual is inevitably influenced by the thinking of the other members taking part in the activity, even if it is only to disagree" (Gunawardena et al., 2009, p. 10). As knowledge is created, shared, reshaped and influenced by the community as a whole, each member comes away with a different worldview. Through this shared worldview, previous constructions of knowledge are altered. Each member's previously separated worldview converges as metacognition is attained. To reach this metacognition, members must first work through a

process of discourse, action, reflection, and reorganization (Gunawardena et al., 2009).

These dynamic ways of gaining knowledge fit well with the type of theoretical framework

embodied in Constructionism and Constructivism. All in all, CoPs as described by Wenger,

function from both a Constructivist and Constructionist domain.

Professional Development in Communities of Practice

Initially, CoPs provided both individual learning and professional development to

companies and other human resource organizations (Lave & Wenger, 1991). Many

educators, however, have blindly adopted the community of practice perspective in

classroom settings (Lea, 2005; Morton, 2012). Further analysis reveals that while a class

may be seen as one of many overlapping formal or less formal communities for students, it

does not function effectively as a traditionally defined CoP due to the inequality of the

instructor-student relationship (Morton, 2012). A CoP following best practice allows

members to self-select their involvement rather than impose the community on others

(Shreeve, 2007; Wenger, 1998; Wenger & Snyder, 2000).

In contrast to pedagogical environments, such as the traditional classroom, CoPs

function according to principles of adult learning and andragogy. The learning that takes

place in a CoP is best suited to the domain of professional development (Garet, Porter,

Desimone, Birman, & Yoon, 2001; Wenger & Snyder, 2000). CoPs foster professional

learning where learners share similar needs, internal motivations, and collaborate to solve

immediate professional problems of practice. Communities where individuals share,

develop, and create repositories of knowledge address knowledge issues in some of the most

effective and sustainable ways (Wenger & Snyder, 2000). When CoPs are instituted

successfully in educational platforms, they are used within the context of professional

development among instructors and as a tool through which teachers and administrators can connect, rather than between the teacher and a classroom of students (Wenger, 2006).

Communities of Practice have become a tool for the professional development of teachers in many different studies. The CoP framework has been shown to have a direct impact on professional development through the informal collegial interactions that take place (Barab & Duffy, 2000). Some educators theorize that adding an online component to the face-to-face professional development program of full-time faculty would allow instructors to use online forums for collegial interaction and sensitive topics (Brooks, 2010). The forums would provide an aid to community socializing. While some online forum users suggest that asynchronous discussion tools have a positive effect on professional development efforts, in-depth analyses on fully online CoPs have not taken place (Brooks, 2010).

Educators from Providence College and the University of Massachusetts Dartmouth developed an online portal for faculty development using CoP principles. They created the portal to assist faculty who had previously been meeting face-to-face (and sometimes through email) to share syllabi, learn new software, share resources, and discuss teaching challenges (Sherer, Shea, & Kristensen, 2003). The online faculty portal helped facilitate faculty connections with their profession. It also sustained teacher involvement with a community of professionals through listserves, chat rooms, and webcasts (Sherer, Shea, & Kristensen, 2003). Still, the online portal was used only as a voluntary enhancement to face-to-face interactions. Some faculty experienced difficulties with using new technologies and learning new software, suggesting that online components to professional development systems should be simple to use and encourage awareness of faculty reflections on the

system. Experiments with online CoP efforts also suggest a need to increase faculty collaboration across disciplines and to nurture the learning process for new users (Sherer, Shea, & Kristensen, 2003).

A few innovators have explored the creation of fully online CoPs for faculty development. Baran and Cagiltay (2010) created an online CoP called "The Professional Development Circle" as part of their study. In the Professional Development Circle, pre-service teachers from three different universities watched digital videos of real classroom environments and discussed them online (Baran & Cagiltay, 2010). Following mandatory involvement in the community, 86% of participants indicated their professional knowledge improved as a result of the CoP (Baran & Cagiltay, 2010, p. 159); however, the entire professional development program focused around digital videos and did not incorporate principles of self-regulation, as adult learning theory recommends.

Perhaps the most extensive research on a fully online CoP centers around an online CoP called Tapped In. Tapped In was a voluntary online community unaffiliated with any specific educational institution. It was designed as a means for any professional in education to interact with peers and improve their own knowledge in education and professional development. Tapped In first went online in 1997, and was studied and improved over the course of ten years (Farooq et al., 2007; Schaler & Fusco, 2003; Schlager, Fusco, & Schank, 2002). The majority of Tapped In users were K-12 teachers. Others included researchers, university faculty, and graduate students, but all participation was voluntary. Tapped In was originally built using such design principles as flexibility for users, designing for a range of roles, developing a leadership program, and creating and maintaining feedback loops (Farooq et al., 2007; Schaler & Fusco, 2003; Schlager, Fusco, & Schank, 2002). The

feedback loops suggested the importance of ownership and empowerment by Tapped In users, as well as the need for participation by a population of diverse interests, and maintenance of the community through leadership and clear management (Farooq et al., 2007).

The most significant struggle with Tapped In was its sustainability. Researchers looked to CoP users for suggestions on how to make the voluntary system more successful (Farooq et al., 2007). In the end, designers suggested four CoP interventions to help improve community sustainability. First, they created a form for users to contact Tapped In staff for support with technical issues. Designers then added an asynchronous Help Desk discussion board for veteran community members to address other users' concerns (Farooq et al, 2007). Next, a discussion area was created for users to give their feedback by recommending additional needed features, and finally a task list was made for members of the design team to track changes being made to the system (Farooq et al, 2007). Most of the improvements made to Tapped In over time support principles of adult learning, especially in allowing users to identify their own learning needs and help create their own learning environment.

Adult learning theories. Authentic professional learning is described as genuine, realistic, and professionally applicable (Webster-Wright, 2009). Both professional learning and CoPs shift focus off the teacher or facilitator and allow learners to invest in community scenarios that are most applicable to their professional practice. Beyond providing development with immediate work relevance, professional learning is also a social activity (Webster-Wright, 2009). Though mainly used in business and companies, the CoP model could be effective in the professional development of remote instructors, who are not

traditional classroom students, but professional adult learners within an online working environment.

Andragogy, a theory advanced by Malcolm Knowles in the 1960's, assumes adults learn best when they understand the reason for learning something, when they involve themselves in the planning and evaluation of their learning, and when their learning has immediate relevance to their work or personal lives (Knowles, Holton, & Swanson, 2012). This implies that adults learn better through internal rather than external motivations. In addition, adult learners bring their own experiences to their learning environments, and are typically more invested in problem-centered learning activities than those focused on theory (Knowles, Holton, & Swanson, 2012). In short, adult learners thrive in environments where they can exercise control over their learning situation. The attributes present in adult learning harmonize well with Webster-Wright's (2009) discussion of professional learning. Like andragogy, professional learning encourages adult learners to take an active role in their professional development through their professional practice.

Adult learning theories, such as experiential learning and transformational learning, emphasize that adults are internally motivated and self-directed (Cercone, 2008; Knowles, 1980). They bring life experiences and knowledge to learning encounters. According to increasing amounts of empirical research, the educational community has begun to recognize the most effective professional development programs hold characteristics of adult learning theories and emphasize professional learning over traditional development practices (Webster-Wright, 2009). Essentially, effective professional development focuses on programs that are active, social, continual, and related to practice (Webster-Wright, 2009). Individual choice and learning is emphasized over theory. Adult learning theories

focus less on development activities and more on how professional learning happens (Webster-Wright, 2009). Theories of adult learning and andragogy shape professional development and human resource management because they provide frameworks under which adults learn best.

Online adult learners. In today's world, many adult learners welcome the advantages of convenience and flexibility provided by online learning environments (Beeghly, 2005; Tweedell, 2000). Some characteristics of the online environment are, in fact, preferred by adult learners (Ausburn, 2004). For instance, adult learners need to be able to move through instruction at their own pace, review when necessary, have opportunities to interact with peers, and have a clear and simple navigation in and out of the system (Cercone, 2008). The most important characteristics of high-quality online learning for adults, include social interaction, the ability to immediately apply learning, opportunities to connect to past experiences, and an environment where individuals can regulate their own learning (Cercone, 2008, p. 151). Cyril Houle (1996), a mentor of adult learning theorist Malcolm Knowles, echoes the importance of self-regulation, contending that adults need to take part in determining the nature of their learning environment as well as the techniques used where learning occurs. Fully online CoPs may provide one such avenue for professional adult learners, especially online teachers, to interact with peers, connect to immediate problems of practice, and regulate their own learning environments. Online CoPs are still a relatively new idea, as shown by the issues of practice explored in the Tapped In CoP (Farooq et al., 2007). While the most effective way to create and manage online CoPs is still in question, they continue to increase in popularity (Baran & Cagiltay, 2010; Brooks, 2010; Farooq et al., 2007).

The most successful online CoPs are flexible, enable participants to have diverse roles, develop a strong leadership program, facilitate member subgroups, and create and maintain feedback loops (Farooq et al., 2007). Controversy still exists, however, about whether mandatory or voluntary online CoPs are more successful (Baran and Cagiltay, 2010). Pros and cons exist to both mandatory and voluntary CoP participation. Voluntary online CoPs continually struggle to get members to participate—and to keep them participating (Baran & Cagiltay, 2010; Farooq et al., 2007). Leadership, role management, and member subgroups may help keep community members involved when participation is voluntary. Mandatory participation is another way of addressing the sustainability of an online CoP; however, participants in mandatory CoPs are more critical of the community, while participants in voluntary communities express a greater sense of citizenship (Baran & Cagiltay, 2010). Current research studies lack information about the effectiveness of mandatory CoP participation (Baran & Cagiltay, 2010).

Mandatory CoPs have stronger ties to human resource development than they do to andragogy because the two systems have different "goals and purposes for which adult learning is employed—organizational versus individual control" (Knowles, Holton, & Swanson, 2012, p. 163). Often the ultimate purpose of mandatory CoPs focuses on achieving the goals of the university or institution, while voluntary CoPs focus on allowing users control over their own learning environment. The question is then raised whether genuine adult learning can take place in a mandatory CoP environment. Scholars believe both organizational and individual learning needs can be met when an organization concentrates on motivations and performance outcomes (Knowles, Holton, & Swanson, 2012). If an organization's mission and goals do not fit the needs of the individual, one or

the other must be aligned, with the general idea of successful adult learning in professional development frameworks being to align the system and goals of the university with the motivations of the individual learner within the institution (Knowles, Holton, & Swanson, 2012).

How, then, does a university design an online CoP to effectively address the professional development needs of remote, online instructors and align those needs with the goals of the university? Research suggests that the more opportunities instructors have to give feedback on the CoP and learning design, the more able they are to regulate their own learning environments, even if those environments require mandatory participation. Self-regulation and feedback loops may improve instructors' commitment to the CoP, enthusiasm for teaching, and overall morale. In the end, can mandatory online CoPs support remote faculty, address professional development needs, and build citizenship among online instructors?

Research Questions

This study explored how well a private university in the northwestern United States met the professional development and adult learning needs of their remote adjunct instructors through online Communities of Practice called teaching groups. This study investigated if mandatory teaching groups provided a climate of self-regulation and self-regulated learning—and whether effective professional learning was taking place naturally in the sociality of the teaching group structure. It addressed teaching groups' effectiveness in improving instructor morale and connections to the university through feedback loops.

1. How do teaching groups support remote faculty and build camaraderie and citizenship among online instructors?

2. How do teaching groups help meet the professional development needs of online adjuncts through self-regulated learning?

    a. Do teaching groups allow for instructor feedback and self-regulation of their own learning design?

3. How do teaching groups improve instructors' commitment to the university, enthusiasm for teaching, and overall morale?

    a. Does the CoP have built in opportunities for online faculty to provide feedback on their courses, technical issues, and other concerns (in order to increase instructors' enthusiasm and morale)?

Methodology

The online program at a private university in northwestern United States is comprised of adult learners who teach online part-time, and who live throughout the country, from California to Texas to New York; teaching subjects as varied as religion to anatomy to theater arts. The online department has increased remote adjunct instructors by an average of 57% per semester across the past four years (Routson, 2013). For those working in the online department during Fall 2013, managing such large numbers of new instructors provided unique challenges, especially in the eyes of campus departments who considered the remote instructors as representatives of their areas but did not have the time or resources to manage them. The instruction area of the online department tasked with the professional development of this diverse adult learning population, formed online communities of practice termed teaching groups, in order to provide professional development.

Groups of approximately ten instructors were formed into CoPs called teaching groups at the beginning of the semester, and each was assigned a Teaching Group Leader (TGL). Continuity frequently existed between teaching groups from the previous semester, with groups being formed according to similar courses and departments. Under contract, the TGL managed and mentored peers within the teaching group through individual interactions online along with asynchronous group forums and synchronous meetings. Individual instructors were encouraged to post teaching questions and problems in the teaching group forum. Similarly, TGLs recognized community needs and addressed issues with their groups asynchronously or synchronously. Individual instructors often presented examples of their own teaching practice in synchronous sessions, hosted and administered by TGLs. In large measure, the content of these community meetings and forums addressed immediate concerns of professional practice as recognized by the group members or the group leader. For instance, one meeting addressed methods for handling student plagiarism, while another explored ways to address course improvement concerns.

The goal of this study was to identify the ability of teaching groups to provide needed professional development and support to remote adjunct instructors. It explored how the professional learning factors of social interaction, immediacy in application, and self-regulation flourish or perish in the teaching group CoP (Cercone, 2008). Studying each of these factors helped identify the level to which professional learning—not just development activities—was taking place in the context of human resource development at the university. Of particular interest in the institution's professional development/teaching group program was the role of Cercone's final environmental learning characteristics. How well did teaching groups provide a climate of self-regulation and self-regulated learning?

In professional development programs, such as teaching groups, the institution shaped learning goals and expectations, although individual instructors had more leeway in determining the environment in which learning occurred. If TGLs and other online managers and directors held too much control over remote instructors' learning and professional development choices, they may have negated a necessary factor in adult learning, such as self-regulation. Some scholars view the "tension between human agency and social structures as the most potent influences on adult learning" (Pratt, 1993, p. 22). Can an adult really be involved in all aspects of their learning when an institution is determining both their goals and objectives?

Based on qualitative action research methodology, semi-structured focus groups were used to allow instructors to tell their own story of teaching groups and how they impacted their professional learning, as well as what purposes they saw fulfilled or unfulfilled in teaching group interactions.

Research Design

This study followed a qualitative research design, utilizing Action Research due to its connections with the educational environment (Stenhouse, 1975). The main focus of this research was to understand the lived experiences of remote instructors and TGLs within teaching groups through ethnographic inquiry. Most often, qualitative research builds its foundation on the lived experiences of people. Qualitative research is "intrigued by the complexity of social interactions expressed in daily life and by the meanings that the participants themselves attribute to these interactions" (Marshall & Rossman, 2011, p. 2). Since this study focused on ethnographic research, looking specifically at the

communication, learning, and human interactions that took place within mandatory online

CoPs in an action research framework, a qualitative approach was used.

Two methods of data collection were imposed, Rapid Assessment Process (RAP)

and Participatory Action Research (PAR). An action research framework best addresses

local problems of practice and is often used in the educational environment (Stringer, 2007;

Kelly & Gluck, 1979; Creswell, 2010). Ernest Stringer, viewed as an authority on the topic

of PAR, defined this form of research as "a systematic approach to investigation that enables

people to find effective solutions to problems they confront in everyday lives" (2007, p. 1).

PAR focuses specifically on looking for solutions to problems of immediate practice.

Traditional research looks to generalize findings, but action research focuses on specific

situations and localized solutions. Stringer (2007) described action research in one of its

most effective forms as interpretive and hermeneutic. Hermeneutics is a theory involving the

interpretation of language and texts, including speech. Hermeneutics is especially pertinent

to the lived practice of TGLs and teaching groups due to their frequent email, discussion

board, and other exchanges. In addition, these characteristics of teaching group

communication reflect the PAR framework. Instructors communicated teaching questions to

TGLs or to one another in the asynchronous social networking site. In addition, members of

the CoP sought knowledge about institutional expectations and expressed their feelings

about those expectations online. All these exchanges contributed to the lived experience of

instructors in teaching groups.

Like PAR, the second method of data collection used in this study, RAP, also

focuses on qualitative analysis. RAP is based on intensive "ethnographic inquiry using

triangulation, iterative data analysis, and additional data collection to quickly develop

preliminary understanding of a situation from the insider's perspective" (Beebe, 2001, p.1). RAP produces qualitative results in a shorter time period than prolonged fieldwork. Using this method, a team of two can incorporate RAP techniques, which closely mirror characteristics of ethnography. Results can be produced in one to six weeks (Beebe, 2001).

Conditions where RAP is especially appropriate include times and situations where qualitative results are needed immediately. Considering the time constraints involved in the University of Idaho PPD program, the need to collect information rapidly, and the study's appropriateness for qualitative research, RAP and focus groups were implemented in this study. As a rapid method of ethnographic research, this study also used observations and the collection of additional teaching group artifacts and documents (Creswell, 2013).

Participant Selection

This study specifically sought to involve stakeholders because PAR teaches that affected individuals must get involved in order for a prolonged investment in solutions to be realized (Stringer, 2007). Participants in the study were invited from the population of remote online instructors at the university. Participants were given an electronic consent form, explaining the purpose, procedure, risks, and benefits of the study. Both the IRB board from the University of Idaho and the Review Board from BYU-Idaho approved the study. Participants gave their voluntary electronic consent before they were able to access a brief demographic survey and indicate their willingness to participate further in focus groups.

Participants were selected from those instructors teaching for the university during Fall Semester 2013 and assigned to a teaching group. All full-time instructors were filtered out of the participant list. Each survey participant was given an identifying number. These

numbers were randomized following the initial survey, when groups of ten to fifteen instructors were invited for further focus group participation.

Data Collection

This study utilized both RAP and PAR as methods of data collection. The components of PAR can be summarized in three key words: look, think, and act (Stringer, 2007). The look phase consists of data collection of all kinds, including literature reviews, informal interviews, and observation. Thinking involves the interpretation of issues in greater depth. The final, action phase requires researchers to devise and implement a plan—and then evaluate the effectiveness of the results. This study implemented a variety of data sources, including demographic statistics, focus groups, cultural documents, artifacts, and observation to describe the cultural interactions of the group (Creswell, 2013, p. 95). Fieldwork was conducted by gathering information from the online environments inhabited by TGLs and teaching group members. Focus group participants provided demographic information through an online survey, and trained facilitators uninvolved in the online program conducted group interviews. In the end, to fit the ethnographic requirements of RAP, a cultural portrait was presented (Creswell, 2013, p. 96). By successfully interpreting the data, a plan of action was developed to improve the support and professional development of remote instructors.

Both RAP and PAR involve data collection and analysis with the intention of breaking down the barriers that exist between stakeholders, participants, researchers, and the research question, in order to develop a deeper, richer meaning of the experiences of all involved (Stringer, 2007; Beebe, 2001). In this study, stakeholders provided feedback on questions for both the demographic survey as well as focus group interview questions. This

study used observations, an analysis of artifacts, and focus group results, as suggested by Stringer (2007) for researchers to construct a picture that described the online CoP situation.

Observations. In keeping with the purpose of action research and the qualitative approach, this study first observed the communication between instructors and TGLs in teaching groups. Observations were made by exploring a random selection of activities in the asynchronous teaching group networking site, where teaching group leaders held mandatory discussions at least once a month. Various asynchronous mediums were used to promote community and adult learning in the social networking site, including tips and training boards, instructor-wide blogs, teaching group discussion boards, and instructor profiles and maps. The asynchronous networking site was also explored for instructor comments related to citizenship, community, and instructor morale. Field notes were taken.

Artifacts. Initial artifacts that were gathered included the online department's *Weekly Reflection Report* (a self-reflective journal submitted weekly by instructors to their TGL about their course, students, and teaching), *Group Status Reports* (Excel documents submitted by TGLs about the successes, difficulties, and trends observed in their teaching group), and Assistant Instructor Manager (AIM) summaries of Group Status Reports. AIM summaries provided an analysis of issues and trends among multiple teaching groups. Email from AIMs and TGLs to the Instructor Manager completed the list of artifacts collected.

Involvement and participation in a teaching group was mandatory for remote instructors as part of the university's online Instructor Standards. In weekly online reports, instructors rated themselves on their adherence to Instructor Standards based on a seven-point scale. The standards related both to the instructors' online pedagogy as well as to their involvement with the university through the teaching group community. The first three

standards focused on teaching and instructor involvement with students, while the final two standards focused on teaching group (CoP) participation (Instructor Standard 4 = Embrace University Citizenship) and meeting requirements for professional development (Instructor Standard 5 = Seek Development Opportunities).

Reports proved most relevant for the first two research questions. The first research question explored how teaching groups (TGs) facilitated a sense of camaraderie and citizenship with the university, while the second research question considered whether TGs promoted opportunities for professional development through self-regulated learning.

Focus Groups. In order to select participants for focus groups, a survey was sent to all actively teaching remote adjuncts, asking for voluntary participation in the study. Potential focus group participants were then randomized by participant ID, and a group of fifteen instructors were asked to indicate their availability by time and date. Based on the availability of potential participants, a focus group of five instructors was formed. Two group facilitators who did not have a stake in the study outcomes conducted the focus group discussions, rather than the chief researcher, who acted as instructors' administrative superior.

Open-ended questions were asked in order to allow flexibility for both instructors and interviewers to paint a full picture of the teaching group experience. The goal of RAP (Beebe, 2001) and PAR (Stringer, 2007) is "to have people tell their stories and not have them answer your questions" (p.4). Instructor focus groups began with a very general, grand tour question—"What has been your learning experience in teaching groups?" Facilitators then asked follow-up questions, as necessary, from the clarifying questions contained in

Appendix F. Since online instructors worked in remote locations, focus groups took place via online video conferencing software. Group interviews lasted approximately one hour.

Focus Group Questions. The focus group grand tour questions were more general in nature, but still designed to lead participants to paint a picture that would answer the study's main research questions. General questions included:

- What did being part of a teaching group mean to them?

- What kind of impact did a teaching group have on their teaching?

- How did the teaching group affect their overall professional learning, commitment to the organization, and morale?

Specific focus group questions can be found in Appendix F. These questions helped to create an overall cultural framework of learning in teaching groups.

Data Analysis

Once gathered, the data, including artifacts, notes, observations, and transcriptions, were organized by date and time. Recordings of focus groups were kept on a secured computer in a locked office with an unaffiliated media professional.

An official transcriber, unassociated with the study, generated the focus group transcription. The transcriber was NIH certified and followed the TypeWell Transcriber's Code of Ethics. The identity of instructors in the transcription was made anonymous to the researcher. In addition to the transcription, rich notes were written and utilized. Note takers added details about the setting and activity of the participants after the transcription.

Once data was organized, potential themes were identified by reading through the transcription and by memoing trends. Multiple coders reviewed artifacts, observations, and transcriptions to identify common themes.

Delimitations

Research was limited to remote adjunct participants teaching within the online department but who also lived outside the direct geographical location of the university. Instructors chosen for this study had not taught on campus and did not have any other professional affiliation with the university aside from teaching online.

Statement of Reflexivity

This study was conducted by an administrator within the online department of the same university at the core of the research study. Managing the performance and support of all the remote faculty within this study, the researcher personally observed both strengths and weaknesses of online administrative processes and teaching groups before entering into the study. As one who often hears more complaints than appreciation, the instructor manager turned researcher assumed instructors would express more resistance to the mandatory nature of teaching groups and CoP requirements than was found in the study. Greater instances of low morale about teaching groups were anticipated, while the high degree of comments pertaining to course improvement opportunities at the university was unexpected.

Results

This study investigated if mandatory teaching groups were meeting the professional development and citizenship needs of remote adjunct instructors by implementing a virtual Community of Practice (CoP) to increase instructors' knowledge, online teaching skills, and overall morale. It also investigated whether the mandatory requirement of community participation in teaching groups facilitated or impeded instructors' professional development.

Data was collected to answer the research questions via focus groups, discussion boards in an asynchronous social networking site, observation, and an analysis of group artifacts and reports. Research questions explored three main aspects of mandatory online CoPs (Teaching Groups):

(1) How do mandatory CoPs build camaraderie and a sense of citizenship?

(2) How do they address instructors' professional development needs?

(3) How do they affect instructors' overall commitment and morale?

Participants

There were 525 online instructors at the university during Fall 2013. Of the 92.2% who were willing to identify their ethnicity, 95.5% were Caucasian. Thirteen instructors were Hispanic (2.7%), seven were Asian (1.4%), one was African American (.2%), and one was East Indian (.2%) (H. Hall, personal communication, January 31, 2014). The ten instructors who agreed to participate in focus groups were all Caucasian. This sampling represented 1.9% of the instructor population. An initial focus group of five was formed, but only four instructors participated in the session, and due to technical difficulties, the initial focus group was not recorded. Seven instructors were then randomly selected and invited to a second focus group session. Six participated.

From the ten total focus group participants, 40% were male and 60% female. Participants' experience teaching at the university was nearly equally distributed among semesters teaching (30% at < one semester; 30% at three to five semesters; 40% at over five semesters). Of the 80% who reported their teaching department, 37.5% taught General Education, 25% Business, and 12.5% equally identified Education, Home and Family, and Religious Education as their primary teaching department.

From the second focus group session, which was recorded and transcribed, participants were equally distributed among male and female (50%). Ages of participants ranged from 25-34 (16.7%), 35-44 (50%), and 45-54 (33.3%). Focus group members represented 5 of the 53 teaching groups (9.4%) present during Fall Semester 2013. Finally, 50% of recorded focus group participants identified having previously taught for other universities online.

Data

Data was collected in multiple ways. Observations and notes were taken from various instructor reports, but information most relevant to the study's research questions was contained in *Weekly Reflections* and *Group Status Reports*. An analysis was also made of teaching groups' online social networking site where various asynchronous mediums were used to promote community and adult learning, including tips and training boards, instructor-wide blogs, teaching group discussion boards, and instructor profiles and maps.

Lastly, an analysis was made of instructor focus groups. The research design indicated that the study would facilitate, record, and transcribe one focus group. However, due to technology issues, the initial instructor focus group was not recorded. Therefore, two note takers documented observations, themes, and thoughts to provide richness to the data. It was determined to use the initial focus group as a type of pilot study, and the rich notes were used to identify major themes in the study.

Following the initial focus group, interview questions were revised based on feedback from focus group facilitators. See Appendix F for the original focus group questions, including grand tour questions. Recommendations were made to eliminate the first three grand tour questions:

1. How do teaching groups improve instructors' feelings of citizenship, enthusiasm for teaching, and overall morale?

2. How do teaching groups help meet the professional development needs of online adjuncts?

3. How do the institution's policies, rules, and procedures facilitate or impede instructors' learning process?

Eliminating grand tour questions allowed facilitators to focus on clearer and more detailed sub-questions (see Appendix F for a full list of sub-questions). In addition, the original sub-questions (identified as 2.g., 2.h., and 2.j.) were taken out of the second focus group in order to concentrate on the most important themes during the limited focus group interaction. The following questions were eliminated:

- (2.g.) What past experiences have you had that have changed the way you teach?

- (2.h.) What past experiences have you had that influence the way you understand or keep   online policies and procedures?

- (2.j.) How has that worked for you (positive/negative)? Lessons learned? Would you use it again?

An unaffiliated transcriber recorded the second focus group session. The transcription of the focus group, along with notes and observations made by group facilitators, were analyzed in an effort to look for recurring themes and/or metaphors, as suggested by Beebe (2001). This method of data collection and analysis allowed the study to identify emergent themes derived from the patterns and perspectives of instructors as they interacted in focus groups.

RQ1: Sense of Community

The first research question explored how TGs facilitate the development of camaraderie and citizenship with the university. First, instructor reports were analyzed with regards to Instructor Standard 4, which describes how instructors felt they demonstrated

citizenship and contributed to the mission of the online department through their participation in teaching groups. In addition, the online teaching group discussion boards were analyzed to capture general discussion trends as well as specific instructor comments on community and citizenship. Finally, focus groups were coded for confirmation of the instructors' sense of community in teaching groups, as well as their overall sense of citizenship with the university.

Reports. The university used five standards to measure online instructor performance during Fall 2013. The first three standards described expectations for teaching pedagogy and building relationships with students, while Standard 4 and 5 related to teaching group expectations and professional development, respectively. Instructors used *Weekly Reflection Reports* to regularly rank themselves on standards using a seven-point scale. Scores between 0.0 and 3.9 signified below standard performance, scores of 4.0 to 5.9 represented meeting standards, and 6.0 to 7.0 exceeded standards. Of the five percent of instructors who reported not meeting standards (below a score of 4.0) during Fall 2013, 32.3% did not meet Standard 4 (Embrace University Citizenship, or involvement in their teaching group), while 26.3% did not meet Standard 5 (Seek Development Opportunities). In other words, more instructors met the first three standards during Fall 2013 than met Standard 5 or Standard 4 (Standards 1-3 were represented to a lesser degree by those who dropped below standards). This indicates that instructors who did not meet standards felt they performed better in areas such as inspiring learning and building relationships with their students than in participating with their teaching group and embracing citizenship.

Instructors ranked themselves on meeting community and citizenship expectations through the instructor standard of Embracing University Citizenship using a seven-point scale, as described by the following key indicators:

1. Uphold the University's Mission and Honor Code
2. Actively participate in teaching groups, and build relationships with other online instructors
3. Participate in efforts to improve online programs (*BYU-Idaho online*, 2013*)*

Instructors who struggled with Standard 4 often felt more comfortable in executing teaching expectations than in upholding the university mission, participating in teaching groups, building relationships with other online instructors, and improving online programs. The following rubric was used to help instructors self-rank weekly on the standard of Embrace Citizenship:

1. I did not participate with my teaching group in any way this week.
2. In between
3. My participation with my teaching group was inconsistent this week or limited to email communication. I was slow to respond to administrative inquiries and responsibilities.
4. I mostly participated in my teaching group, and mostly exemplified the Honor Code, University mission, and Spirit of Ricks. I responded to administrative inquiries and responsibilities.
5. I actively participated in my teaching group, either synchronously or within the Community. I exemplified the Honor Code, University mission, and Spirit of Ricks. I responded promptly to administrative inquiries and responsibilities.
6. In between
7. In addition to active participation with my teaching group and prompt responses to administration, I inspired others to participate and support teaching groups, the Honor Code, and/or the University mission.

Remote online instructors at the university measured themselves on Standard 4 weekly during Fall 2013. A repeated measures ANOVA with a Greenhouse-Geisser correction determined that the mean instructor report on Standard 4 was statistically significant between the different weeks, $F(129.447, 4946.091) = 12.431, p < .001$. The Greenhouse-Geisser correction was used because Mauchly's test of sphericity revealed that the data violated the assumption of sphericity ($p < .001$). Post hoc tests using the Bonferroni correction revealed that the first self-reports were significantly higher than the second week's, and that scores continued to follow a dropping pattern until the end of the semester. In particular, instructors' ranked themselves significantly lower on Standard 4 during Week 10, which was also significantly lower than the self-reports at the end of the semester (Week 12). Effect size was measured by partial eta squared and was found to be .245. See Table 3.1 for the means and standard deviations each week.

Table 3.1

Standard 4 Descriptive Statistics

Measure	Intro	1	2	3	4	5	6	7	8	9	10	11	12
Mean	5.53	5.38	5.26	5.22	5.24	5.20	5.17	5.20	5.16	5.15	4.86	5.17	5.10
SD	1.11	1.18	1.17	1.11	1.15	1.05	1.09	1.08	1.05	1.03	1.03	2.08	1.07
N	476	476	476	476	476	476	476	476	476	476	476	476	476

Besides the decline seen during the first few weeks of the semester, instructor scores continued to drop, reaching their lowest point on Week 10. It must be noted that the Thanksgiving holiday, took place during Week 10. Online instructors and students were given Thursday of Week 10 as holiday time. The subsequent increase in scores between Weeks 10 and 12 may reflect a revitalization of instructors as they returned from the holiday. This significant change could also be explained by instructor recognition that the end of the semester was nearing, and final feedback and grades needed to be given.

It must be noted that the first three weeks (Intro-Week 2) revealed a significant decline in self-report values, as noted in both Table 3.1 and 3.2. This could be attributed to the fact that instructor standards were new, and at the beginning of the semester teaching group leaders were still reviewing the criteria for each rubric level and reminding the instructors that self-reported scores of six or seven should be rare and reported only under exceptional circumstances. In addition, TGLs were also working with instructors during this time to review personal goals. This time of self-reflection could be mirrored in the significant lowering of self-report values.

Table 3.2

Standard 4: Reported Rankings on Embracing Citizenship

Week	Below Standard	Meeting Standard	Exceeding Standard
Intro	3.2%	49.6%	47.2%
Week 3	6.5%	57.1%	36.4%
Week 10	6.2%	69.9%	23.9%
Week 12	4.6%	63.5%	31.9%

When looking at the data in groupings signifying below standard, meeting standards, and exceeding standards throughout the semester, a Wilcoxon signed ranks test revealed that by week 12 (compared to week 10) significantly less people were below standard and significantly more instructors were meeting standards, $Z = -3.994$, $p < .001$. There was no significant change in the number of instructors exceeding standards.

Focus group participants' self-reported scores for Standard 4 revealed similar trends during Weeks 1-3 as was shown in Table 3.1; however, the smaller sample size in Table 3.3 made individual aberrations more strongly affect self-reported trends. For instance, scores for Week 5 dropped considerably because two participants reported fours. Likewise, the instructor who reported a seven during Week 10 increased the average for the week. Finally, it must be noted that the mean for all instructors fell within the category of meeting the

standard of Embracing University Citizenship. In focus groups, 83.3% of instructors

reported meeting expectations on Standard 4, while 16.7% reported exceeding the standard.

Instructors' self-rankings indicated that they felt they were actively participating in their

online CoP, upholding the university mission, and responding promptly to administration.

Table 3.3

Standard 4: Rankings from Focus Group Participants

ID	Intro	1	2	3	4	5	6	7	8	9	10	11	12	Ave
1	7	6	5	5	6	5	6	5	6	6	6	6	6	5.8
2	7	7	6	7	6	5	6	5	7	7	7	6	7	6.4
3	7	5	4	5	4	4	5	5	6	4	4	5	7	5.0
4	6	5	4	4	6	5	5	5	4	3	4	4	4	4.5
5	5	7	6	6	5	4	6	6	5	6	5	6	6	5.6
6	5	4	5	3	3	5	5	4	5	5	5	5	5	4.5
Total	6.2	5.7	5	5	5	4.7	5.5	5	5.5	5.2	5.2	5.3	5.8	5.3

Asynchronous Mediums. The asynchronous online teaching group site is an online

social networking area that allowed instructors to access community blogs, teaching group

discussions, as well as announcements from the Online Instruction office. The asynchronous

TG site facilitated citizenship and community primarily in three ways: welcoming and

getting to know your activities at the beginning of the semester, encouraging the posting of

personal messages of encouragement or congratulations throughout the semester, and

creating and updating personal profiles, including involvement in a Google map. All

teaching groups had access to these areas, but only involvement in the teaching group

discussion boards was a mandatory requirement for instructors.

Instructors fulfilled the mandatory asynchronous community requirement by

participating in TG discussion board threads at least once a month. Instructors exceeded

community expectations by posting blogs or facilitating discussions on the homepage of the

asynchronous site. Teaching groups frequently started the semester by building relationships

with each other, as shown in the number of welcoming threads during the first few weeks of

Fall 2013. One sample community-building activity facilitated by a TGL entitled "Getting to

Know One Another," opened by saying, "I thought that we could use a discussion board to

get to know one another. Please answer the following questions and respond to one

another! Really be creative. :)

> 1. What course do you teach and how long have you been teaching for University X?

> 2. Where do you live? What is something unique about where you live?

> 3. What was the last movie you watched?"

Responses to the TGL's discussion prompt demonstrated that instructors used the initial

posts to help develop camaraderie and citizenship, as indicated by the following

respondents:

> **Reply by Respondent 2**
> Hi Respondent 1, I love while you were sleeping [*sic*]. It's a great Christmas movie!

> **Reply by Respondent 3**
> Respondent 1, I thought Phoenix was the only place that got haboobs. I was caught
> in one a few years ago that was really scary. I pulled off the road into a parking lot
> for a SubWay [*sic*] sandwich shop and waited until it cleared a little. When it did, I
> found out I was just a few feet away from a McDonald's wall. I couldn't even see the
> wall through the dust. I have a wonderful photo of it, but it is not on this computer. I
> am going to have to make a trip to Lubbock, [*sic*] I love Buddy Holly.

Not only did instructors respond to the initial prompt questions, they began building

relationships with each other as they found similar personal connections, such as movies,

music, and individual life experiences.

In addition to welcome boards, instructors and TGLs also posted personal messages

of encouragement or congratulations throughout the semester, such as a TGL whose

instructor welcomed a new child to their family: "Congratulations to Instructor X on the birth of your new daughter last night. Mother and child are well." Similar messages can be found throughout teaching group spaces in the online community site.

Analysis of the Fall 2013 discussion boards revealed that 15% of all discussion threads were posted in order to welcome group members or share personal information as part of get-to-know you activities. Before the semester officially began, 305 messages were posted pertaining to building relationships with other group members. Another 381 welcoming messages were posted during the first week of class. As one might expect, welcome messages declined to 215 posts during the next three weeks of the term, as asynchronous discussion trends began to reflect more issues arising from teaching and course design. Figure 3.1 shows numbers of discussion board postings in the asynchronous networking site by topic.

DISCUSSION SUBJECT TRENDS FALL 2013
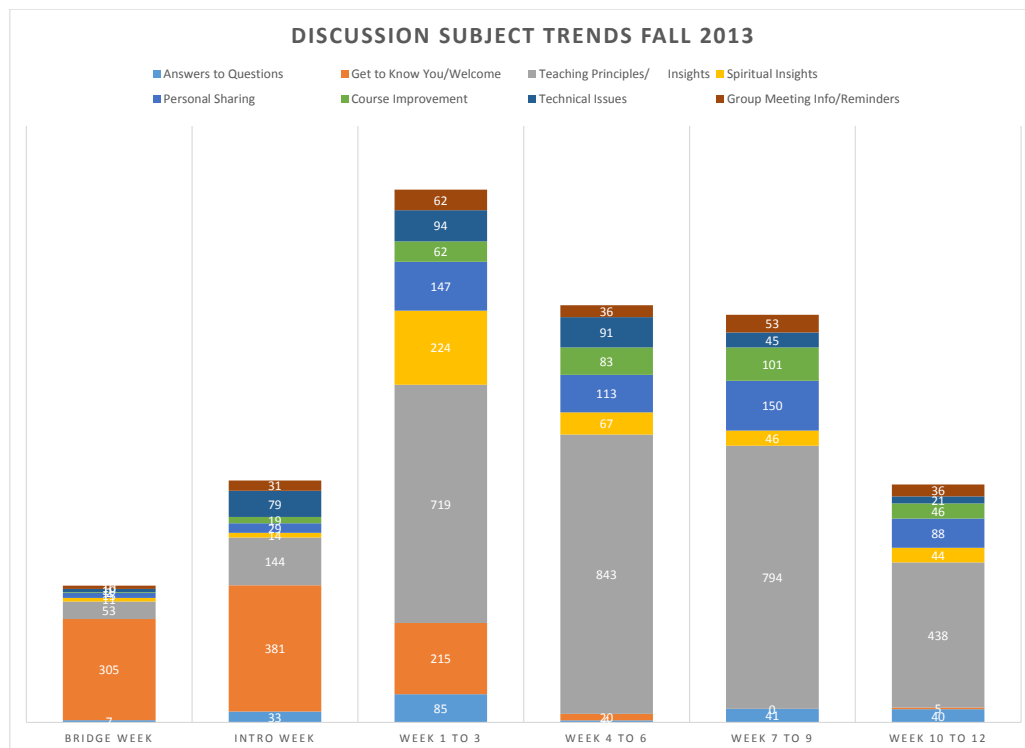
Figure 3.1. Asynchronous discussion trends by week. This figure illustrates the major discussion treads in the teaching group networking site during Fall 2013.

The graphic figure reveals that building a sense of community is a strong part of online

discussion boards, especially at the beginning of the semester. Comments related to personal

sharing maintained an average of 125 posts throughout the latter twelve weeks of the term,

which consisted of 9% of the asynchronous discussion threads involved. Many of these

communications exhibited a spirit of camaraderie and of building relationships.

In addition to asynchronous discussion board trends, Figure 3.2 portrays how the

community networking site used the homepage banner to encourage instructors to update

their personal profiles.

Figure 3.2. Profile page banner. This figure depicts the social networking advertisement to
promote profile updates and personal sharing with other remote instructors.

Finally, a Google map identifying the resident locations of online instructors was

also advertised on the CoP networking site, as shown in Figure 3.3. This map was populated

through instructor profiles. Both tools encouraged instructors to connect and feel a greater

sense of citizenship.

Figure 3.3. Remote instructor map. This figure illustrates the primary locations where online instructors reside throughout the United States.

Focus Groups. Focus groups were coded for confirmation of instructors' sense of community in teaching groups, as well as their overall sense of citizenship with the university. Analysis of the focus groups revealed the extent to which mandatory CoPs were able to build camaraderie and a sense of community among members. Indicators of citizenship in focus groups included instructors' ability to offer feedback and have that feedback heard, as if they were equal members of the online program and university as a whole.

The second, (transcribed) focus group session revealed that the instructors made 36 comments related to their sense of community. Community comments were weighted on a scale of one to ten, with one indicating very negative feelings about citizenship or community and ten indicating highly positive feelings about community and citizenship. The majority of comments related to community were positive ($M = 7.19$, Median = 8), with 100% of focus group participants indicating that teaching groups helped provide a sense of community.

Rich notes from the initial focus group session supported positive community and teaching group insights. The rich notes of focus group facilitators revealed the following three major themes of instructor thought:

1. Teaching groups are unique to the university.

2. Teaching groups provide support and resources to online instructors.

3. Teaching groups give instructors a sense of citizenship.

In response to interactions in teaching groups, Instructor 3 remarked, "We all need support and you can still develop great relationships of support and help each other even when you're on different sides of the United States." In a similar vein, an instructor indicated that TGs helped him feel less isolation (I1). Yet another instructor had experiences teaching online at a community college for seven years and felt more connected to the members of her teaching group than to the instructors with whom she taught at the community college, even though she lived five minutes from the college and much further from the university (I6). Instructor 6 attributed this solely to the teaching group structure.

It should be noted that two instructors did not spend as much time with their teaching group due to working on a Ph.D. and time spent addressing course issues (I2, I4). Still, Instructor 2 indicated that the teaching group provided resources and support if they needed it. Instructor 4 rarely met with the other teachers because she spent so much time trying to fix technology issues within her online course. Still, that same instructor indicated that it was extremely helpful to know someone was there to answer her questions, even if she wasn't as involved (I4). Instructor 5 made one negative comment about the frequent turnover in members of his teaching group, but still commented that TGs were a unique tool that allowed instructors to be more successful than at other online universities.

RQ 1: Summary

Do teaching groups support remote faculty and build camaraderie and citizenship among online instructors? Triangulation of the results from instructor reports, discussion board posts, the asynchronous networking site, and focus groups all confirm that teaching groups do build camaraderie and citizenship among the remote online instructors. Table 3.4 reports the connections between the different mediums.

Table 3.4

RQ1 Triangulation Table

Medium	Build Camaraderie	Build Citizenship
Reports	n/a	X
Disc Boards	X	X
Networking Ads	X	X
Focus Groups	X	X

Camaraderie, citizenship, and a sense of community was facilitated by asynchronous social discussions on the networking site, by the overall design of the asynchronous teaching group space, including maps of "members in your neighborhood," and by encouragement to update personal profiles and visit each other's profiles. Though participation in teaching groups was mandatory for online instructors, the requirement did not seem to affect the development of citizenship or community. In fact, it may have promoted involvement as indicated by instructors' self-reports on meeting community expectations. Instructor 3 summarized what she's learned from being part of a teaching group when she eloquently stated:

> We all need support and you can still develop great relationships of support and help each other even when you're on different sides of the United States or wherever we are, and there are still ways to support each other that way.

Like this instructor, the majority of online teachers at the university experienced support and combated isolation by being part of the teaching group community.

RQ 2: Professional Development

To investigate whether teaching groups helped facilitate professional development, this study analyzed instructor self-reports with regards to Instructor Standard 5, which measured how instructors felt about their own professional development activities. In addition, the asynchronous group networking site was explored for the presence of professional development activities and/or learning, including an analysis of discussion board threads. Finally, an investigation of focus group responses helped determine whether instructors felt teaching groups facilitated their professional development through self-regulated learning and whether they empowered instructors in their own development and learning design.

Reports. Throughout Fall 2013, instructors ranked themselves on meeting the standard of Seek Development Opportunities (Standard 5) using a seven-point scale, as described by the following key indicators:

1. Learn and effectively implement trustworthy facilitation and teaching skills

2. Master tools that enable effective communication and promote learning online

3. Increase content knowledge, depth, and expertise in respective discipline

Instructors ranked themselves on Standard 5 by using a rubric with a seven-point description of what it meant to Seek Professional Development. Instructors below level four were not meeting the development standard. Instructors ranked between four and under six were meeting standards, and rankings between six and seven represented instructors who were exceeding the standard of professional development, as indicated in the following rubric:

1. I struggled with course tools this week and made no effort to improve my teaching strategies or understanding of the course or content.

2. In between

3. I made little effort to broaden my expertise in my chosen discipline or to improve my teaching strategies this week.

4. I mostly sought opportunities to broaden my understanding of my teaching discipline and/or to improve my teaching skills or master course tools this week.

5. I sought opportunities to broaden my understanding of my teaching discipline and/or to improve my teaching skills or master course tools this week.

6. In between

7. In addition to improving my teaching skills and increasing my understanding of course tools or my chosen discipline, I shared my insights with other instructors.

A repeated measures ANOVA with a Greenhouse-Geisser correction determined that the mean instructor report on Standard 5 was statistically significant between the different weeks, $F(1117.11, 3382.581) = 16.445, p < .001$. The Greenhouse-Geisser correction was used because Mauchly's test of sphericity revealed that the data violated the assumption of sphericity ($p < .001$). Post hoc tests using the Bonferroni correction revealed that the instructors' reports on Week 10 were significantly lower than self-reports during the rest of the weeks. This could be explained by the Thanksgiving holiday, which took place during Week 10. Online instructors and students were given Thursday of Week 10 as holiday time. It must also be noted that the introductory week as well as the following seven weeks showed self-report scores that were significantly higher than the last week. Effect size was

measured by partial eta squared and was found to be .033. See Table 3.5 for the means and standard deviations for each week.

Table 3.5

Standard 5 Descriptive Statistics

Measure	Intro	1	2	3	4	5	6	7	8	9	10	11	12
Mean	5.38	5.38	5.33	5.23	5.26	5.23	5.20	5.19	5.16	5.06	4.91	5.08	5.02
SD	1.12	1.14	1.09	1.07	1.06	1.08	1.07	1.06	1.07	1.05	1.01	1.04	1.03
N	476	476	476	476	476	476	476	476	476	476	476	476	476

When looking at the data in groupings signifying below standard, meeting standards, and exceeding standards, a Wilcoxon signed ranks test was calculated to identify if there was a significant change between weeks 10 and 12, $Z = -1.864$, $p = .062$. By the end of the semester fewer instructors were below standards and more instructors were meeting standards compared to week 10. There was no significant change for instructors exceeding standards between week 10 and 12.

Table 3.6

Standard 5: Reported Rankings on Seek Development Opportunities

Week	Below Standard	Meeting Standard	Exceeding Standard
Intro	3%	53.6%	54.5%
Week 10	6.2%	70.5%	23.3%
Week 12	5.6%	67.1%	27.2%

Table 3.6 also reflects a general trend of reported rankings decreasing in the exceeding standards category as the semester progressed. As a result, reported rankings in the below standard and meeting standard categories increased from the initial weeks to the end of the semester. These trends could be explained by instructors' increased understanding of new standards. At the beginning of the semester, teaching group leaders were still reviewing the criteria for each rubric level and reminding the instructors that self-reported scores of six or seven should be rare and reported only under exceptional circumstances.

Focus group participants' self-reported scores for Standard 5 showed slightly higher scores during Weeks 1-3 than overall instructors reported scores in Table 3.5, but the general trend of decreasing scores during the first weeks of the term remained consistent. The smaller sample size of focus groups made individual aberrations more strongly affect the self-reported weekly totals in Table 3.7. For instance, the average total score for Week 4 dropped considerably because two participants reported 4's, and no participants reported 7. In addition, it must be noted that the weekly average for focus group participants remained slightly higher overall than the weekly mean for all instructors in Table 3.5.

In focus groups, 83.3% of instructors reported meeting expectations on Standard 5, while 16.7% reported exceeding the standard (see Table 3.7). Instructors' self-rankings indicated they felt they were actively seeking out professional development in their online CoP, improving their teaching skills, and mastering course tools. Instructor 3 reported the lowest scores for the development standard, with an average of 4.2, but even these scores fell within the weekly expectation to seek opportunities for professional development.

Table 3.7

Standard 5: Rankings from Focus Group Participants

ID	Intro	1	2	3	4	5	6	7	8	9	10	11	12	Ave
1	7	7	4	5	5	5	5	5	5	5	5	5	5	5.2
2	6	5	5	7	6	7	7	7	7	6	7	7	7	6.5
3	7	4	4	4	4	4	4	4	4	4	4	4	4	4.2
4	6	6	6	6	5	7	7	7	6	5	5	5	4	5.8
5	6	7	6	5	5	4	6	5	6	6	6	6	7	5.8
6	5	4	5	4	4	5	4	5	5	5	5	5	5	4.7
Tot.	6.2	5.5	5	5.2	4.8	5.3	5.5	5.5	5.5	5.2	5.3	5.3	5.3	5.4

Asynchronous Mediums. The asynchronous teaching group networking site allowed instructors to access training videos, tips, blogs, and announcements from the

Online Instruction office. In addition, TGLs had a mandatory requirement to facilitate at least one discussion a month in their asynchronous teaching group space.

Upon investigation, the asynchronous training space contained twelve online tools for improving teaching strategies and connections with students, including Jing, Adobe Connect, Camtasia, Vocaroo, Skype, and Evernote. In addition to tools, the training space held 19 total tutorials on topics such as updating profiles, communicating with students, setting up student groups, and giving feedback. Finally, an area was provided in the asynchronous training space for instructors to access "Hints & Helps" on using the group networking site.
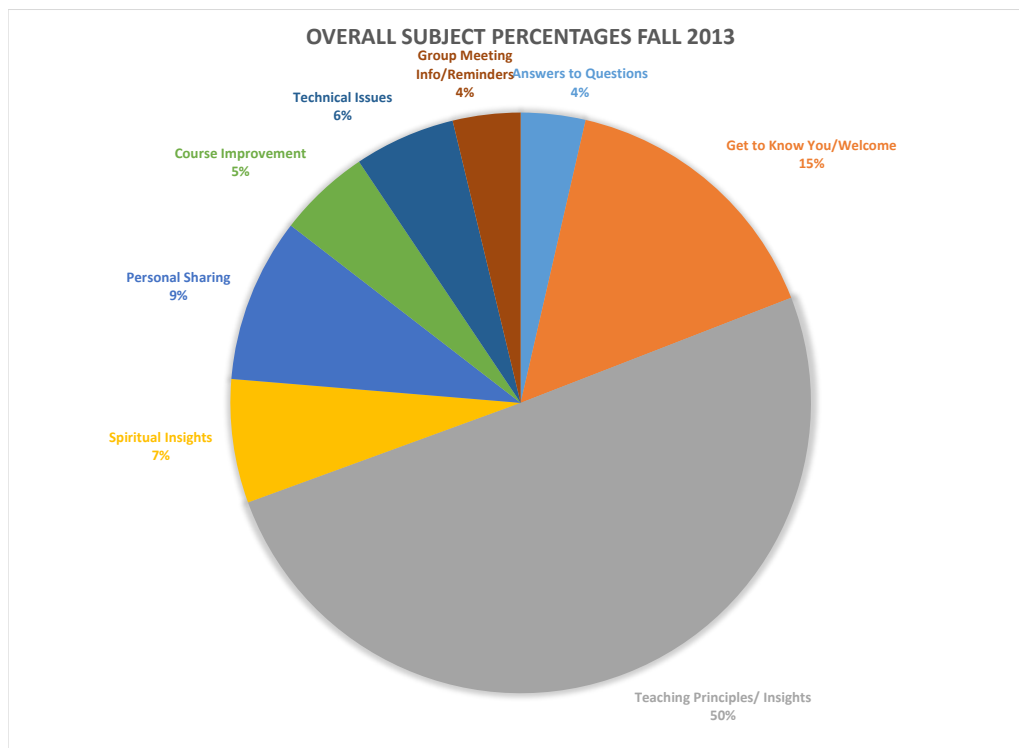

Figure 3.4. Asynchronous discussion board categories.

Analysis of the asynchronous TG discussion space identified high involvement in professional development. Figure 3.1 indicates the highest discussion trends in teaching

groups reached and remained centered around instructor development following the introductory week of classes. Discussions focused on teaching principles accounted for half of all total asynchronous discussion threads. Figure 3.4 shows categories of discussions based on TG discussion board topics throughout Fall Semester 2013.

In addition to discussions about teaching, instructors also participated in threads about course improvement (5%), technical issues (6%), and answers to instructor questions (4%), which all fall under the category of professional development, as exemplified in the following discussion posts:

Technical Issues

I am having a hard time getting my welcome screencast to show up as a video that students can just click on to play. The only way I have gotten it to work is to insert the link. I'm sure someone has already addressed this issue somewhere, can [*sic*] anyone *direct me to where I can find a solution to this problem?* (Instructor)

Answers to Questions

Last semester, I changed my Notes for Instructor page into an optional discussion board (and [*sic*] *approved edit for everyone). While I know many of my students didn't interact with me there, it did provide a place where I could share and discuss items, sometimes only remotely to* [*sic*] *week's topic, with my students. It was an added fun spot to go to to* [*sic*] *see what had been posted, or who had replied to my optional comments.*
This didn't replace my participation in regular discussion boards, but as you suggest, sometimes it got pretty rote and my notes from Instructor [*sic*] *allowed me to go a little off-script or break up the monotony a little.* (Instructor)

Instructor X, I'm delighted you care so much and are looking for ideas from peers here. We [Online Administration] *hope to adopt tools in the future that will help our discussions from a technical standpoint. Even simple notifications (i.e. to cell phone) will increase the naturalness of discussion amongst class participants. I look forward to being able to choose to be notified when a students has responded directly to one of my posts. Additionally, a feature that lets students reply to assignment feedback will generate some more desirable, contextualized and immediate student-teacher interactions. The idea,* [*sic*] *is not to simply increase the volume of messages, but rather make them more meaningful, natural, and relevant.* (TG leader)

Instructors looked to their teaching group for ways to enhance interactions with students in their classrooms, improve online teaching tools, and develop good online teaching strategies. Overall, an analysis of the teaching group networking site indicated that professional development took place in teaching groups, as revealed by instructors' involvement in professional development discussions (65%) and the ability instructors had to access a variety of training tools and tutorials.

   Focus Groups. In order to discover if professional development was taking place in teaching groups and to uncover whether mandatory participation affected professional development, focus group data was coded and measured on a spectrum from negative to positive. Comments about development were weighted on a ten-point scale, with ten being highly positive remarks and one being extremely negative. In the transcribed focus group, 40 total comments were made about professional development, indicating overall positivity about the requirement and ability to obtain development ($M = 7.67$, Median = 9). Analysis of the comments showed two major themes in the professional development category: adult learning and the ability to self-regulate learning. In the transcribed focus group, 100% of the participants made some comment about self-regulation, and 83% mentioned aspects of adult learning. It must be noted that 100% of the participants in the transcribed focus group commented on professional development, and that development was also the main theme from the non-recorded focus group. Table 3.8 displays the theme development chart on professional development.

Table 3.8

Professional Development Theme Frequency Counts

ID	New Strategies	Teach One Another	Connect to Students	Self-regulate
1	2	4	3	4
2	0	2	1	1
3	3	1	0	1
4	2	1	0	1
5	2	0	2	2
6	5	4	1	4
Total	14	12	7	13

Themes surrounding professional development discussions included learning new teaching strategies, teaching others within the CoP, sharing ideas to connect with students, and the ability for self-regulated learning. A majority of instructors indicated they learned new teaching strategies and taught one another in teaching groups (83.3%), while 66.7% of focus group instructors used teaching groups to get ideas on how to better connect with students. Frequency count analysis revealed that all focus group instructors (100%) indicated they had opportunities for self-regulated learning.

In discussing learning new strategies, the professional development theme with the highest frequency, Instructor 6 said this about what she learned:

> … lots of little, tiny things. It would be hard to pinpoint exactly what. I learned how to use the Gradebook more effectively and I learned how to make the discussion groups a really effective size instead of too big or too small, things like that. And lots of those things. Probably at least 15-20 things like that.

Instructors 1 and 2 specifically discussed visiting other instructors' classrooms, mirroring, and adapting others' teaching techniques. Specifically, Instructor 1 described "a great wealth of experience out there" he gained from interacting with other members of his group.

RQ 2: Summary

Overall, reports, discussion board topics, and focus group responses indicated instructors' professional development needs were met through teaching groups, and that 100% of instructors had opportunities for self-regulated learning. Instructors pinpointed asynchronous discussion boards with their colleagues and one-on-one attention from their TGL as the chief way they met their professional development needs. Specifically, Instructor 2, described his TGL as "amazing." Another instructor made the following comments about her experiences with TGLs across multiple semesters:

> I've had two different TGLs and both were fabulous. They've been great as far as support, motivation, and also a place to help me organize myself as far as dates and what's expected. They've been great as far as contacts and communication and as far as helping me brainstorm through things. My TGLs have been a really positive influence for me.

Half of the instructors referred specifically to the asynchronous discussion boards as a way to enhance their professional learning. While it must be noted that training tips were provided on the social networking site to help enhance instructors' development, no instructors specifically mentioned the tutorials and tools as a means for professional development, although two instructors noted having access to resources and support.

Table 3.9 reports the triangulation of the data, which confirmed that instructors chose professional development scenarios and discussions that trained them on new strategies and principles for teaching in the online classroom. Instructors also focused on how to better connect with their online students.

Table 3.9

RQ2 Triangulation Table

	CoP Interactions			Online Pedagogy		
Medium	Self-regulate	Teach Others	TGL Mentor	New Strategies	Connect to Students	Principles
Reports	n/a	X	n/a	X		X
Disc Boards	X	X	X	X	X	X
Networking	X			X		X
Focus Groups	X	X	X	X	X	X

Although professional development was a mandatory requirement for instructors, as described by Instructor Standard 5, it did not seem to affect instructors' learning or ability to self-regulate that learning. As suggested by Baran and Cagiltay (2010), there were some criticisms of the mandatory nature of the CoP. Still, even the instructor with the most criticisms (I5) recognized that professional learning took place in his teaching group. Instructor 5 commented that participating in the group felt like busy work at times, but he also mentioned enjoying the synchronous teaching group meetings, and responded yes when asked if being part of a teaching group improved his professional learning.

RQ3: Instructor Morale

Asynchronous Discussion Boards. This study looked at themes present in comments and instructor postings on the asynchronous CoP networking site in order to determine instructor satisfaction in each area. When instructors exhibited passion for a topic, they received either a positive or negative frequency count mark (signified by either P or N). Specific teaching group asynchronous discussion themes included instructor management procedures, attitudes toward courses and course improvement, and feelings of satisfaction toward student and teaching group relationships (see Table 3.10).

Table 3.10

Focus Group Theme Frequency Counts

ID	Inst. Management		Course Improvement		Students		Teaching Group	
	P	N	P	N	P	N	P	N
1		1		1		1	1	
2	1				1		1	
3				2	3		2	
4				2		1	2	
5			1	1	2		1	
Total	1	1	1	6	6	2	7	0

  The study analyzed comments associated with specific teaching group discussion boards in the asynchronous social networking site. The discussion board analysis of the teaching groups corroborated the information from the focus group participants (note: Instructors 2 and 5 both belonged to Group 2). An analysis of the discussions showed that 40% of groups commented on instructor management procedures, with half responding positively and half negatively. Eighty percent of the groups commented on their courses or course improvements, with all respondents indicating some sort of dissatisfaction. It must be noted that there were six negative comments to one positive group comment about courses and the Course Improvement Process. All groups made comments in discussion boards about students, with most of those being positive. For each negative comment about students, there were three positive ones. Finally, all groups made comments pertaining to their teaching group or teaching group members. All of these comments were positive and showed enthusiasm for the group. Overall, instructors exhibited the most enthusiasm for their teaching groups, followed by enthusiasm in working with students. Though they expressed mixed feelings about instructor management procedures, course and course improvement issues proved to be the area of greatest dissatisfaction. Table 3.10 illustrates a breakdown of instructor comments in teaching groups related to satisfaction and morale.

Specific expressions of skepticism and distrust included the following comment from a random instructor: "To me it feels like we are becoming more and more detail focused, bureaucratic and micromanaged and much less trusting in teachers to use their initiative, professional expertise, and experience to deal with student needs and course expectations." At times, campus departments have tried to maintain possession of a course rather than taking into honest account the feedback of the adjuncts who are more familiar with online teaching pedagogy. Though not all online instructors expressed the same sentiments, a significant portion expressed dissatisfaction with the process of making improvements and updates to their courses (80%).

Even though negative feelings about course improvement changes existed, instructors still showed high morale for their teaching groups (100%) and for the opportunity to work with students (60%). The two negative remarks concerning students dealt with strategies for handling student plagiarism and what instructors deemed rare, but combative students. All other instances showed high enthusiasm in working with students.

Focus Groups. In addition to asynchronous discussion boards, instructor focus groups asked specific questions regarding instructors' satisfaction with their experience teaching and participating in teaching groups. During the focus group, however, instructors did not limit their discussion to teaching groups alone, but spoke about many different aspects of teaching. One hundred percent of participants commented on instructor management procedures. Responses were weighted on a scale from one to ten, with one representing extremely low satisfaction and ten representing extremely high satisfaction. While responses were predominantly positive (83.3%, M = 9.3), it must be noted that one person felt significantly dissatisfied (M = 2). Instructor 5 recounted feeling criticized by his

TGL—both in trying to implement new strategies and in feedback received after the TGL's course visit. Other instructors, in contrast, felt very satisfied with the ability to communicate and receive feedback (I3, I6). They appreciated the opportunity to set goals each semester. Table 3.11 gives a breakdown of instructor satisfaction with management, as well as other weighted areas of instructor morale.

Instructors participating in the focus groups expressed very different opinions about what affected their morale. Therefore, the area of instructor morale was split into several categories: organizational policies, course improvement, opportunity to give feedback, feelings about the new course visit rubric, instructors' relationship with their TGLs and teaching groups, and instructors' relationship with their students—all themes that were independently expressed by focus group participants.

While many instructors expressed a strong belief in the organization's mission (50%), most did not feel they were contributing to the organization significantly nor were significant members of the organization as a whole, aside from their smaller peer communities. A majority of participants (66.7%) expressed their dissatisfaction with organizational policies (M = 1.9). The other 33.3% of participants identified some degree of enthusiasm for the organizational system (M = 7.5). In general, however, participants were unhappy with the opportunities they had to implement changes in their course as well as the inability to do more than just facilitate pre-designed curriculum. All participants who mentioned curriculum (66.7%), made negative comments about improvement abilities (M = 2.25). See Table 3.11 for a numerical analysis.

Table 3.11

Focus Group Morale Themes

ID	Instructor Management	Organizational Policies	Course Improvement	Feedback Opportunities	Rubric	TGL	Students
1	9	1.5	2.5	2.67	2	8	10
2	9.5	1.67	NA	2	NA	10	8
3	10	8	NA	NA	7	9	8
4	8	2	2	1.5	NA	8	NA
5	2	2.33	2.5	1.67	1	3	10
6	10	7	2	NA	4	10	9
%	100%	100%	66.67%	66.67%	66.67%	100%	83.33%

More specifically, Instructor 4 indicated her course was unprepared for students, and that she spent so much time trying to fix issues with the course, she was unable to spend time with her teaching group. Others commented on a disconnect between instructors and course designers. Instructor 1 called trying to make course improvements "an impediment because the policies governing that are so riddled with red tape, it's impossible to get any real improvements made in a course . . . I've been teaching the same class for three and a half years and I cannot get [*sic*] improvement." Rich notes from the initial focus group also revealed a general discontent with instructors' inability to give input on curriculum.

Similarly, instructors commented on difficulties in giving feedback to the larger organization and on offering feedback about courses. The topic of feedback received negative responses from all 66.7% of the population who commented on feedback opportunities (M = 1.96), as seen in Table 3.11. Most participants linked their lack of ability to give feedback to the inability to connect with course designers. One instructor specifically commented on being able to contribute to his teaching group and to the online community, as well as to students' learning; however, he felt he had no opportunities to contribute to the overall online organization (I2).

The final focus group theme receiving mostly dissatisfied responses was initiated by a new evaluation rubric (Table 3.11). The new course visit rubric was introduced in Fall 2013, and enabled TGLs to more clearly evaluate instructors on teaching performance. Most instructors who commented on the rubric (50%) felt negatively about the evaluation form (M = 2.3). Instructor 5 specifically noted that his TGL was critical on the evaluation form, but did not offer any feedback. The TGL simply returned the completed assessment form. However, Instructor 3 had a more positive affiliation with the rubric (M = 7) because the TGL did not share the form directly with her. Rather, the TGL used the rubric to make general observations and then form goals to improve teaching with the instructor. This enabled the instructor to receive feedback without feeling formally evaluated. This instructor termed the rubric as more of a "helpful guide" than an evaluation (I3).

Overall, focus group instructors expressed the most enthusiasm for TGLs, TGs, and students. All participants mentioned something about their TGL or teaching group, with 83.3% of those responses being positive (M = 9). These instructors felt strong mentorship through their TGL. One instructor commented that his TGL was "amazing" (I2), and another mentioned both her past TGLs as being strong sources of support and motivation (I3). According to Instructor 3, they were always available to contact, and helped her brainstorm on issues. Another instructor specifically appreciated his teaching group because of the opportunity to learn from others (I1). Instructor 5, who felt as if his TGL did not offer him any additional help (M = 3) also mentioned not really needing any help and wanting to do things on his own.

Eighty-three percent of instructors felt the strongest enthusiasm and highest morale in working with students (M = 9). They commented that students were their main reason for

enjoyment and improved morale in working for the university. Even when there were difficulties with course design, the TGL, or new policies and rubrics (as with I5), the instructors still felt highly about their relationship with students. Those relationships kept them teaching and working to fulfill the mission of the university. It must be noted that the rich notes of the initial focus group showed a similar enthusiasm for working and interacting with students.

RQ 3: Summary

In analyzing instructor morale, two distinct positive and negative aspects emerged. The division in instructors' feelings of morale was seen not only in focus group responses, but in the analysis of asynchronous discussion boards as well. While teaching groups seemed to improve instructor's morale—or while instructors' morale was high for teaching groups and their teaching group leader in both discussion boards and focus groups—morale was low in areas of feedback and course improvement, as indicated in Triangulation Table 3.12. Instructors did not express the same satisfaction in working with the university or online department as they did in working with teaching groups. The strongest correlations between discussion boards and focus groups were seen in participants' teaching group morale as well as in their morale for course improvement: high on the one hand and low on the other. Table 3.12 gives a complete triangulation of the data in terms of overall negative (-) and positive (+) comments made by instructors.

Table 3.12

RQ3 Triangulation Table

Medium	TGLs & TGs	Students	Management	Course Impr.	Feedback
Disc. Boards	+	-/+	+	-	n/a
Focus Groups	+	+	-/+	-	-

Mixed feelings about instructor morale were expressed regarding instructors' relationship with management procedures and interactions with students. In focus groups, relationships with students exclusively improved instructors' overall morale for teaching; however, asynchronous instructor discussion boards explored issues dealing with "problem" students and plagiarism, in addition to positive interactions. Overall, feelings of positive morale outweighed negative interactions, and instructors found ways to cope with difficult students by sharing strategies with their other teaching group members.

Management procedures and policies was another area of mixed instructor morale. Lack of opportunities for feedback, especially feedback on course improvements, as well as new policies, such as a new course visit rubric, made instructors feel less confident and decreased their overall morale. Instructor morale might improve if the online CoP had more built-in opportunities for feedback on courses and technical issues, since those problems seemed to be the most frustrating for instructors.

Results Summary

The online department at a private university in the northwestern United States bears the responsibility of providing professional development that positively impacts remote instructors' teaching. Teaching groups were designed to help instructors overcome their stress and sense of isolation by providing an environment of applicable social and self-regulated learning where professional development could flourish; however, this study questioned whether teaching groups were functioning like traditional Communities of Practice (CoPs), as intended by administration. Did they help remote adjuncts combat feelings of isolation while providing an environment of continual professional learning?

Results revealed that online instructors feel a great sense of satisfaction and confidence when working within their own strong culture and community as seen in online CoP teaching groups. Teaching groups allowed instructors to self-regulate their learning, teach one another, and receive direct mentorship from TGLs. In addition, teaching groups validated instructors' knowledge and recognized their teaching expertise.

Through triangulation of information from observation, teaching group artifacts, analysis of the CoP social networking site, and instructor focus groups, this study found that both a sense of citizenship and professional learning was taking place in online teaching groups. Teaching groups empowered remote adjuncts to establish and continue good teaching practices by implementing principles of adult learning through social interaction with peers and application of learning. However, allowing instructors more self-regulation over their courses and more input and feedback loops through the community could improve instructor's morale and help them feel a sense of citizenship even outside their direct peer CoP.

Discussion and Conclusions

While a majority of instructors (95%) were active in their online CoP during Fall 2013, the degree of their activity varied depending upon instructor and teaching group. A small portion of online instructors did not engage with their teaching group and reported low scores for their instructor standard of citizenship (5%). High involvement in teaching groups reflects the mandatory nature of the requirement to teach at the university. In order to fulfill this responsibility, an instructor in a teaching group might choose to post a teaching dilemma in an online group forum, or may share some teaching knowledge and strategies in a synchronous group meeting online. Through these social avenues, instructors engaged in a

continual, self-regulated learning process. Instructors' experience in teaching groups reflected the literature promoting human resource development focusing on professional learning as described by adult learning theorists (Cercone, 2008; Houle, 1996; Knowles, 1980; Webster-Wright, 2009). In addition, the avenues of professional development used by teaching groups were shown to incorporate ideals of social communities. These results supported theories of effective CoPs, where continual professional development takes place (Webster-Wright, 2009; Wenger, 2006; Wenger & Snyder, 2000).

This study revealed that mandatory participation in an online CoP increased member involvement over time, even though there were some critical comments made about the mandatory requirement. This correlates with Baran and Cagiltay's study, since some criticisms were expressed during instructor focus groups pertaining to discontent with the mandatory nature of the community citizenship requirement (2010), although the critical comments were made by only one instructor. In the five critical comments made, Instructor 5 indicated that the community requirement wasn't necessary for him, and that he worked better on his own. Instructor 5 made additional comments relating to busy work with teaching group expectations, as well as disunity in his teaching group because the members fluctuated from semester to semester. Overall, these criticisms did not outweigh the benefits of regular social and professional learning from the majority of participants, nor the ability for instructors to self-regulate their own learning environments. Literature shows that voluntary online CoPs struggle for full and consistent participation over time (Baran & Cagiltay, 2010; Farooq et al., 2007). In fact, the voluntary online CoP, Tapped In, is no longer in operation. The mandatory nature of teaching groups, then, may be a key component to the success of this program.

Other components that seemed to contribute to the success of the teaching group program included TGLs—leaders and mentors who guided and directed the group as they self-regulated their own learning. Both focus groups and asynchronous discussion boards expressed feelings of self-confidence about TGL leadership and their own opportunities for self-regulation (83.3%). Previous research identified that the most successful online CoPs are flexible, develop strong leadership programs, and create and maintain feedback loops (Farooq et al., 2007). This study corroborated this data.

Although teaching groups provided strong leadership and the flexibility of self-regulation, instructors still expressed the least confidence in their ability to give feedback, specifically concerning courses and the course improvement process. Dissatisfaction with course improvement was a repeated theme both in focus groups (66.7%) and in asynchronous discussion boards. In addition, a significant portion of side topics in asynchronous discussion boards included technical and course improvement issues (11%). Instructor dissatisfaction in this area showed the importance of creating and maintaining stronger feedback loops, as suggested by Farooq et al. (2007).

It is the conclusion of this study that mandatory CoPs are and effective means of delivering regular professional development opportunities—at least in online learning environments. While mandatory CoPs experience a slightly increased amount of criticism, feelings of citizenship and community were still present since leadership focused on giving instructors the ability to self-regulate their own learning and to teach one another. Providing clear feedback opportunities, especially regarding course and course improvement issues, could strengthen morale for citizenship and community even further.

Limitations

Every study involving human research and participants has some degree of limitations. This study is bounded by the experience of remote faculty and leaders at a small, private, religious-affiliated university in the northwestern United States. Most other universities that offer online degrees or online courses either teach fully online (their faculty are all remote) or utilize full-time faculty from campus to teach online courses. The university that lies at the focus of this study is unique in that it works with a separate education department. The entire online faculty was comprised of adjuncts teaching discipline-specific courses that are also taught on campus by full-time faculty. The sampling of instructors represented adjuncts who were uniquely tied to campus curriculum, and who were hired as facilitators of pre-designed courses. Therefore, the university is unique in its application of teaching groups.

This study sought to increase qualitative rigor by randomly inviting instructors to participate in focus groups; however, in order to arrange for a meeting time that would accommodate the majority of instructors, those who participated held similar schedules. The afternoon focus group sessions may have drawn more participants who did not work full time elsewhere, and hence had more time to contribute to the university. Those instructors willing to be part of a focus group might either reflect those that already enjoy being socially connected, and hence were more positive about CoPs, or reflect those that had issues with the system and wanted their voice to be heard. Moreover, asynchronous discussion forum artifacts used by teaching groups may trend toward agreement with university policies and procedures due to their public nature.

In addition, the Online Instruction department introduced new instructor standards during Fall 2013, which may have increased dissatisfaction with reports and administrative processes. When introducing new instructor standards, administration emphasized the reporting scores of 4's and 5's as normal and acceptable work that met expectations. They also indicated that scores of 6's and 7's should be rare and more difficult to achieve by exceeding expectations. The data suggested that as instructors better understood the new standards throughout the semester, there was a slight but continual decrease in the weekly scores they reported.

Beyond sampling and program maturity limitations, this study was constrained by its timeline to four months of data collection, using a Rapid Assessment Process. Participation in this study was voluntary, and results might have been skewed by response rates—or by instructors who were inclined to participate because they might receive more attention by university administration. The questions asked by researchers were subject to interpretation, and responses may have had different meanings to different people.

Finally, the chief researcher for this study was strongly tied to the online program and served as an administrator over remote instructors. The chief researcher, in particular, sought to increase qualitative rigor by keeping the research participants anonymous, by not facilitating the focus groups, and by keeping a journal of her own thoughts and biases with the program. The study also sought to improve accuracy in data analysis by member checking, using multiple coders, and by keeping the research participants anonymous.

Qualitative Rigor

In order to increase the qualitative rigor of the study, trained professionals who had no ownership in the study or with the online program, facilitated focus groups. Both the

second focus group recorder and transcriber were professionally trained, and the transcriber followed the TypeWell Code of Ethics and was NIH certified. Audio and visual recordings of focus groups were housed with a professional media developer. The chief researcher and online administration were not given access to the data, except where participants were made anonymous. Participants' responses were also made anonymous to coders, and participants were informed before the study about the anonymous nature of their contributions and that no indicative data would be shared with those in the online department that evaluate or manage remote instructors.

In order to maintain anonymity and improve accuracy, focus group facilitators were selected from doctoral students who had no previous contact with instructors. Focus group facilitators were trained to member check during the group interviews. Member checking after the research was conducted enhanced the study's credibility (Lincoln & Guba, 1985).

This study also increased academic rigor by triangulating data gathered from multiple mediums, including teaching group observations, artifacts, and discussion boards, as well as from focus groups. Triangulation allowed the study to compare multiple sources of data across times and sites, which helped establish the credibility of the research (Lincoln & Guba, 1985). In addition to multiple coders, the study utilized Dedoose to help analyze qualitative data. Multiple data points and methods of data collection and analysis helped triangulate the study (Beebe, 2001).

In a final effort to improve accuracy, the chief researcher, who worked within a management role in the online department, practiced reflexivity by writing regularly in a journal, with the purpose of revealing underlying biases and assumptions that may have affected interpretation of the data (Lincoln & Guba, 1985). Finally, thick description was

employed in the writing process in order to increase the study's transferability (Lincoln & Guba, 1985).

Implications for Practice

This study has implications in the immediate professional development practices at the university studied. The research recommends continuation of mandatory online CoPs for professional development and remote citizenship. In addition, based on the research, the university could explore and improve feedback loops for online instructors, including investigating the impact of a job satisfaction survey, remote feedback lunches with online faculty, and an asynchronous feedback box in the online instructor community site.

In addition to exploring feedback improvements for instructors, this study points to implications for facilitating a needs assessment for remote instructors in order to determine how to best meet their needs and improve instructor morale. The online department at the university could also conduct focus groups to develop ideas for increased academic freedom while still maintaining course integrity.

Suggestions for Future Research

Given the time and participant limitations of the Rapid Assessment Process, this study recommends further research into the effectiveness, participation, and longevity of mandatory online CoPs—especially those used for regular professional development of employees. This research should be extended to public universities with a larger participant base, over a prolonged period of time, in order to determine if study results could be extended to the general population of higher education professionals.

This study corroborated data from Baran and Cagiltay (2010), which indicated that mandatory CoPs were more criticized than voluntary CoPs. Additional research could help

identify and find solutions to the criticisms expressed by instructors involved in mandatory CoPs. While this study suggested creating improved feedback opportunities for remote instructors, future research might compare types of remote feedback and its effect on instructor morale and criticisms of mandatory CoPs.

Since this study bears the potential of indirectly improving teaching and learning in online classes, more research is needed to identify the effects of increased instructor morale and self-regulated professional development on teaching in the online classroom. For instance, if better feedback opportunities were created for remote adjuncts, could a positive correlation be found with online student learning or online student satisfaction? Similarly, do self-regulated development opportunities for instructors equate to a better online student learning experience?

Finally, through this study, a majority of instructors identified their TGL as a chief source for support and professional development. This study suggests future research comparing mentoring programs for remote adjuncts with mandatory CoPs, especially with regards to areas of professional development, citizenship, community, and overall morale. A mentoring program might prove more cost-effective while delivering similar or better results than mandatory Communities of Practice.

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CHAPTER 4: BALANCING INDIVIDUAL LEARNING AND ORGANIZATIONAL

CONTROL IN TEACHING GROUPS

Abstract

This cultural study explored how online Communities of Practice (CoPs) helped balance the professional development needs of online adjunct instructors with the organizational needs of a rapidly growing online program in the northwestern United States. In addition, this study examined the ability of organizational learning to take place within a mandatory Community of Practice environment. It specifically examined how remote leaders of CoPs balanced their instructors' professional development needs with upholding the programs, policies, and procedures of the institution—as well as investigating the impact these responsibilities had on CoP leaders. The study asked whether CoPs were able to provide a climate of self-regulation and whether self-regulated learning helped facilitate organizational learning within the online institution. Triangulation of information from focus groups, rich notes, and thick description were used to create an overall picture of online CoPs at the university. Live focus groups were held with eight of the Fall 2013, remote CoP leaders. Results revealed high levels of self-regulation and professional development in online CoPs, although remote leadership seemed to struggle between balancing professional development with upholding university policies and procedures. While leadership agreed that both organizational and individual needs were met, impediments to organizational learning took place in some CoPs because effective feedback loops were not intact.

Keywords: Communities of Practice, organizational learning, online adjuncts, professional development, online learning

Introduction

As of 2001, the number of adjunct faculty members in the United States grew to 468,890, or one out of every three postsecondary instructors (Babb & Mirebella, 2007). This number continues to increase as the face of higher education changes and more and more educational programs are offered online. According to a 2009 U.S. Department of Education survey, 75% of all faculty members were adjunct (Flannery, 2012). A Distance Education Report conducted by the Primary Research Group in 2012 showed adjunct faculty teaching an average of 42.7% of courses in distance learning programs in the United States (Primary Research Group, 2013). Although the percentage of online adjuncts varied from state to state and program to program, rates were higher among private institutions, with the maximum amount of adjunct faculty in distance learning programs reaching 95% (Primary Research Group, 2013).

While enrollment growth is exciting for those involved in online programs, increased enrollments for many universities mean more remote adjuncts to hire, train, and manage. Within the past two years, from Fall 2011 to Fall 2013, the Online Learning Department at a private university in the northwestern United States experienced a 128% increase in online adjunct instructors alone (Routson, 2013). More than ever, personnel in higher education are called on to provide professional training and development of online adjunct faculty because of their unique distance from campus and students (Rogers, McIntyre, & Jazzar, 2010). In addition, the National Staff Development Council (NSDC) has asked all higher education institutions to ensure that appropriate professional development is provided for every adjunct instructor (2001).

Adjunct faculty members have an enormous impact on university culture and on fulfilling institutional missions (Green, 2007; Townsend & Twombly, 2007). Faculty and administration at all institutions seem to equally recognize the demand for a consistent and effective way to manage the quality of teaching provided by online adjunct hires (Green, 2007; Hoyle, 2010; Lorenzetti, 2003; Vail, 2006). Professional development at institutions of higher education must serve the individual instructor's learning, while human resource development must benefit and support the organization as a whole. The ultimate goal of faculty professional development programs should align with the vision of the educational institution so adjunct faculty can effectively contribute to the instructional work of the organization (Rogers, McIntyre, & Jazzar, 2010). It has been suggested that the more adjunct faculty are able to align their goals with those of the university, the more likely they are to become an active and valued part of the organization (Easton, 2009).

Of equal importance, higher educational institutions bear the responsibility of providing professional development that is personally and individually relevant for each instructor. Recent studies suggest that adults learn and develop best in environments that support andragogy and principles of adult learning, including the ability to regulate their own learning (Knowles, Holton, & Swanson, 2012; Webster-Wright, 2009). However, universities must not only provide effective professional learning for their adjuncts, they must also maintain institutional missions, goals, programs, policies, and procedures. Unfortunately, these do not always align with individual instructors' learning needs. Learning theorists have recognized tension within institutions that are simultaneously trying to meet both individual learning needs and the mission of the organization when the goals of these two entities are not aligned (Knowles, Holton, & Swanson, 2012). Universities

struggle with the balance between creating a profitable environment for adult learning and implementing human resource development through set policies and procedures meant to benefit the entire organization.

Problem Statement

Taken altogether, the mission of online departments experiencing significant increases in their remote adjunct population must simultaneously focus on individual learning through professional development *in addition* to higher-level organizational learning that allows the department to continuously adapt methods, procedures, and policies to best meet the overarching mission and goals of the university (Crossan, Lane, & White, 1999). On the professional development level, universities are tasked with incorporating principles of andragogy and following strategies for adult learning (Cercone, 2008; Knowles, Holton, & Swanson, 2012; Webster-Wright, 2009). At times, however, adult learners go beyond the boundaries of organizational needs when designing their own development, making it harder for administration to implement set institutional policies and procedures. In some online departments, tension exists between self-regulation by instructors and pressure to meet the institutional goals of the organization (Hopkins, 2013; Wallin, 2007).

In order to meet instructors' professional development needs as well as satisfy university aims and undertakings, both the university and instructors must share the same goals (Easton, 2009; Knowles, Holton, & Swanson, 2012). However, the university cannot solely dictate what these will be and still meet the requirements of adult learning. Clear communication must exist not only from online departments to their remote adjuncts but also from remote adjuncts back to online administration. Theorists call this second feedback

loop (from instructors to the institution and subsequent adaptation and incorporation of that feedback into university policies and procedures), organizational learning. To continue to learn as an organization, educational institutions must adapt to meet the needs of their students and instructors by fostering a *culture*, *strategy*, *structure*, and *environment* where organizational learning can take place (Fiol & Lyles, 1985, p. 804). These four contextual factors describe the learning environment of an institution and "have a circular relationship with learning in that they create and reinforce learning and are created by learning" (Fiol & Lyles, 1985, p. 804). The overall influence on learning of an organization's structure and environment can be summed up by how easily that institution's culture allows change and learning to take place. In a culture and structure where programs and policies have been firmly established and routines are set and predictable, there is little need, motivation, or avenue from the organization for change or learning to occur among individuals or the institution as a whole (Fiol & Lyles, 1985; Hedberg, 1981).

Similarly, organizations that experience constant, un-strategic change, and that have no routines or established rules, occupy too turbulent of an environment for learning to take place. Learning requires an environment where both learners and the organization can adapt, while still maintaining a sense of stability (Hedberg, 1981, p. 5). In short, the ultimate learning organization is one that fosters innovation and even experimentation, but within a stable working environment. An organization that learns, fosters a culture that is comfortable with creativity and new methods, but is not unpredictable and uncertain from constant change.

Scholars describe an organization's need for flexibility both in terms of exploration, which describes the need for innovation and change, as well as in terms of feed-forward

processes where the learning of the individual is communicated forward and becomes part of

the understanding of the institution as a whole (Crossan, Lane, & White, 1999). The

opposite side of organizational balance is found in stability and established patterns,

described as exploitation, or the way institutional policies, procedures, and rules affect

individuals and groups (Crossan, Lane, & White, 1999). One of the most difficult jobs of a

learning organization such as a university is to establish and maintain the appropriate

balance between feedback and feed-forward loops, between exploration and exploitation in

the organization.

Some may question whether professional development programs for online adjunct

instructors allow for adult learning, and subsequently whether those programs are conducive

to organizational learning by opening feed-forward loops to the university rather than just

promoting feedback processes. March (1991) explains, "Maintaining an appropriate balance

between exploration and exploitation is a primary factor in system survival and prosperity . .

. Both exploration and exploitation are essential for organizations, but they compete for

scarce resources" (p. 71). The ability of online programs to continually adapt to the

changing needs of higher education depends upon their agility in balancing exploration and

exploitation and whether they are able to allow organizational learning to thrive.

Purpose Statement

The Online Learning department at a private university in the northwestern United

States has exemplified a structure with phenomenal growth at times and low response to

necessary adaptation at others, though the program itself was born from the need to

organizationally adapt. Since its inception in 2009, the university's online program increased

its number of remote adjuncts by an average of 57% each semester (Routson, 2013). By Fall

2013, the organization was responsible for the professional development of 575 remote online instructors (Routson, 2013). Since 2009, strategies for hiring and training instructors, as well as for delivering courses have changed to adapt to the constantly growing program. In order to learn as an organization, the online department must successfully balance both a flexible and a stable culture, strategy, structure, and environment (Fiol & Lyles, 1985).

One way the online organization adapted to meet the needs of their students and instructors was by instituting Communities of Practice (CoPs) called teaching groups. Teaching groups were comprised of approximately ten instructors with one peer mentor called the Teaching Group Leader (TGL). TGLs managed a small group of instructors and interacted with instructors in complex ways. They served as mentors, answering questions and encouraging peers in a self-regulated learning environment while simultaneously balancing the organizational need to support institutional policies and procedures. TGLs sat at the crossroad of communication between online instructors and administration. They were given the commission to support institutional processes, policies, and procedures (exploitation) as well as promote deeper learning and thinking in teaching groups (exploration).

This study explored the balance between exploration and exploitation within online (CoPs) headed by the peer community leader (TGL). Findings explored whether CoPs were able to foster adult and professional learning, as well as feedback loops that informed organizational learning at a private university in the northwestern United States.

Significance of Study

This research informed and improved professional development and online CoP programs by suggesting leadership training related to better balancing exploration and

exploitation within online CoPs. It also revealed the importance of prominent feedback methods for improving organizational learning in CoP environments. Findings from this study could improve immediate practice in online learning programs, specifically through an investigation into the management and professional development of online instructors as implemented by remote leadership and Communities of Practice. This study is significant in that it has the potential of improving interpretation of knowledge by online leadership, as well as universities' balance of exploration and exploitation, as manifested in their management and professional development techniques. In such a manner, it informs and improves a specific CoP program at a university in the northwestern U.S.

Literature Review

Theoretical Framework

Organizational Learning takes on a deeper level of meaning when viewed through the lens of human communities and culture. One such theoretical lens through which we can analyze organizational learning is Hermeneutics. From Hermeneutics' first beginning as an interpretation of the written word, the methodology has expanded into reading physical human events, situations and practice in order to bring a greater understanding of human culture (Crotty, 1998). Friedrick Schleiermacher (1768-1834) was one of the first theologians to extend the study of Hermeneutics from texts to speech. According to his theories, the speech of others reveals meaning about their culture, beliefs, and attitudes. Hermeneutics teaches "interpretation has become part of our cultural self-understanding that only as historically and culturally located beings can we articulate ourselves in relation to others and the world in general" (Rundell, 1995, p. 10). If "world" is replaced with "organization" in Rundell's statement, hermeneutics gives a greater cultural understanding

to organizational learning: "we articulate ourselves in relation to others in the organization and the organization in general." When universities are framed as organizational learning communities, hermeneutics teaches that the instructor within the university understands what it means to be an instructor through their interactions with peers and the larger educational organization.

Hermeneutics finds meaning by looking at culture in a circular manner. The circle understands the whole by an analysis of its parts and comprehends the meaning of parts through "divining the whole" (Crotty, 1998, p. 92). Hermeneutic theorist, Hans-Georg Gadamer, similarly indicates:

> The movement of understanding is constantly from the whole to the part and back to the whole. Our task is to expand the unity of the understood meaning centrifugally. The harmony of all the details with the whole is the criterion of correct understanding. The failure to achieve this harmony means that understanding has failed. (1989, p. 291)

In a circular manner, theories of organizational learning support the idea that understanding an organization comes through analyzing the component parts of that organization. In a higher educational setting, these component parts might be online administration, remote adjunct instructors, remote leadership, or the policies, procedures, and mission of the university.

In 1993, Cook and Yanow conducted a cultural interpretive study of Organizational Learning that focused on flute manufacturing in three companies around Boston (Sandberg & Targama, 2007). In their approach, the theorists argued, "the construct of 'culture' was useful in theorizing about the collective aspects of organizational learning" (Yanow, 2000,

p. 248). In essence, they studied organizational learning in flute-making companies by looking specifically at the culture surrounding the flute-makers.

Yanow (2000) asked what perspective of organizations a study of culture allowed and what it meant to take a cultural, ethnographic approach to the study of organizational learning. In his research, he posits that using the metaphor of culture enables researchers to "see" what is truly taking place with an organization's learning practices, procedures, and processes. Approaching an organization as a culture enables researchers to get under the surface placeholders, the tables, chairs, and programs, and see what is taking place between the individuals that make up an organization on a deeper level. When organizations such as universities are studied through the lens of culture, the language, actions, and processes of individuals within the university framework can be studied as a collective entity (Yanow, 2000). An online program can take on a life of its own in the sense that its culture lives through the interactions of the individuals and processes within it (Yanow, 2000).

In the light of Rundell's writings on Hermeneutics, Yanow (2000) reveals how an examination of both organizational and individual language can help better understand the culture of an organization. Looking at an organization as a culture gives meaning to the thoughts, actions, and expressions of the individuals within the organization.

Organizational Learning Theory

Organizational Learning Theory describes "the process of improving actions through better knowledge and understanding" within an organizational framework (Fiol & Lyles, 1985, p. 803). Current literature in organizational learning defines an organization that is able to successfully accomplish their mission and goals as continuously learning from experiences and adapting to changes in the environment (Crossan, Lane, & White, 1999;

Daft & Weick, 1984; Fiol & Lyles, 1985). Organizational learning theorists take different views on what constitutes learning in an organization. They describe learning as constituting anything from new structures to new systems, or even new actions or insights (Fiol & Lyles, 1985, p. 803). The key importance of organizational learning, no matter how it is manifested, is stability, continuance, and growth of organizations (Crossan, Lane, & White, 1999; Daft & Weick, 1984; Fiol & Lyles, 1985).

According to theorists, organizational learning and growth must happen first at an individual level, but organizations struggle with cognitive learning and growth when their structure, culture, or environment does not allow individuals within the organization the flexibility to adjust rules or take actions based on their learning and reflections (Fiol & Lyles, 1985). Four contextual factors within an organization help determine the probability to which learning will occur. They include "corporate culture conducive to learning, strategy that allows flexibility, an organizational structure that allows both innovativeness and new insights," and an environment that is neither too complex nor too dynamic for individuals within the organization to handle (Fiol & Lyles, 1985, p. 804-805). Fiol and Lyles describe two divergent organizations as follows:

> A centralized, mechanistic structure tends to reinforce past behaviors, whereas an organic, more decentralized structure tends to allow shifts of beliefs and actions. By reducing the information demands, the decentralized structure reduces the cognitive workload of the individuals, thereby facilitating the assimilation of new patterns and associations. (1985, p. 805)

The second administrative environment described here equates to those types of organizations that foster and produce high amounts of cognitive organizational learning.

Management and administrative structure, culture, and environment, then, have a high degree of influence on the organizational learning that can take shape through individual growth and development.

Adult Learning in Organizations

The idea that an organization's mission and goals must connect with individuals' goals and educational needs in order for adult learning to be effective coincides strongly with principles of Organizational Learning Theory. Only after individuals form ideas and share information can learning be stored within organizational memory and become organizational learning (Armstrong & Foley, 2003; Robinson, 2001). According to the theory, organizational learning happens in three main steps. First, memories are acquired. This may take place as an organization collects data from individual learners on their systems, policies, and processes. Next, an organization must interpret the memories or data they have collected. Lastly, knowledge gained should take the form of action, or a continual adaptation of organizational goals, outcomes, processes, and conditions (Armstrong & Foley, 2003; Robinson, 2001).

Despite connections between individual learning and organizational learning, agreement exists among scholars that individual and organizational learning are not the same thing (Crossan, Lane, & White, 1999; Daft & Weick, 1984; Lawrence & Dyer, 1983). Scholars consider the importance of individual learning, but also recognize that "organizational learning is not simply the sum of each member's learning" (Fiol & Lyles, 1985, p. 804). Beyond the individual within the organization, framed and influenced by the organization's culture, mission, and goals, the learning for the organization as a whole enables it "to build an organizational understanding and interpretation of their environment

and to begin to assess viable strategies. It results in associations, cognitive systems, and memories that are developed and shared by members of the organization" (Fiol & Lyles, 1985, p. 804). Though they are not one and the same, individual growth and development shapes organizational learning, just as an organization's structure affects the ability of individuals to cognitively learn.

Good systems for professional development need to allow a degree of freedom to their adult learners or they will not only stifle individual development, they are likely to stifle organizational learning as well. The heart of Malcolm Knowles' adult learning model centers on the fundamental human need to experience autonomy, relatedness, and competence (Turner, 2013, par. 9) during knowledge-making activities. If adult learners have no autonomy within an organization, and if they cannot professionally connect to their own development, they will not be able to add to the cognitive growth of the organization. According to Cercone, "high-quality online learning for adults is characterized by: 1) social interaction and collaboration with peers, 2) connecting new knowledge to past experience, 3) immediacy in application, 4) a climate of self-regulation, and 5) self-regulated learning" (2008, p. 151). An environment that encourages high levels of collaboration and self-regulation would also cater to an organizational structure allowing for flexibility, innovation, and learning.

Organizations that meet these characteristics of adaptation and learning are described as meeting the challenges of "strategic renewal" (Crossan, Lane, & White, 1999). Other scholars describe the flexible learning environment in terms of a balance between exploration and exploitation (Fiol & Lyles, 1999; March 1991). Feed forward relates to exploration. It is the transference of learning from individuals and groups through to the

learning that becomes embedded—or institutionalized—in the form of systems, structures, strategies, and procedures. Feedback relates to exploitation and to the way in which institutionalized learning affects individuals and groups (Fiol & Lyles, 1999, p. 524). Learning environments that are flexible enough to give feedback while maintaining open avenues for feed forward processes allow individuals to create knowledge that has the power to change the organization as ideas are shared, action is taken, and common meaning is developed (Crossan, Lane, & White, 1999, p. 524).

Communities of Practice (CoPs) theoretically provide flexibility to learning, allowing individual instructors to share ideas, take action, and develop common meaning. They have the potential for maintaining both feed-forward and feedback loops. As such, they are optimum environments for deep and self-directed learning. They are "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermont, & Snyder, 2002, p.4). CoPs function according to principles of adult learning and andragogy. Andragogy, a theory advanced by Malcolm Knowles in the 1960's, assumes adults learn best when they understand the reason for learning something, when they involve themselves in the planning and evaluation of their learning, and when their learning has immediate relevance to their work or personal lives (Knowles, Holton, & Swanson, 2012). This implies that adults learn better through internal rather than external motivations. In addition, adult learners bring their own experiences to their learning environments, and are typically more invested in problem-centered learning activities rather than those focused on theory (Knowles, Holton, & Swanson, 2012). In short, adult learners thrive in environments where they can exercise control over their learning situation. CoPs foster adult learning

where learners share similar needs, internal motivations, and collaborate to solve immediate professional problems of practice. When CoPs are instituted successfully in educational platforms, they are used within the context of professional development among instructors and as a tool through which teachers and administrators can connect (Wenger, 2006).

Organizational Learning as Metacognition

CoPs function mainly as an area to exchange ideas, solve problems, and as a repository for information (Kirschner & Lai, 2007); however, the benefits of a high-functioning CoP go beyond basic intentions. They have the power to connect individuals with a wide range of roles and provide a potential breeding spot for organizational learning to occur. One of the main ideas behind CoPs is community knowledge, where the sum of the knowledge incorporated in an organizational community is greater than sum of individual participants' knowledge (Johnson, 2001, p.48). The symbiosis between community knowledge and individual learning allows the collective knowledge of the group to advance when individual learning increases (Bielaczyc & Collins, 1999).

Individuals within a CoP interact in a way that follows social constructionist theory, where the "world is shaped by the dialogue and discourse we have with one another," moving participants to "create a shared worldview" (Gunawardena, Hermans, Sanchez, Richmond, Bohley, & Tuttle, 2009, p. 7). It is through this shared worldview that each member's previously separated worldview converges and metacognition is acquired. "Group-mediated cognition" is acquired when "the thinking of each individual is inevitably influenced by the thinking of the other members taking part in the activity, even if it is only to disagree" (Gunawardena et al., 2009, p. 10). To reach this metacognition, members must first work through a process of discourse, action, reflection, and reorganization

(Gunawardena et al., 2009). Presumably, metacognition in CoPs can change the shape of members' cultural, structural, and environmental organization, and allow learning to occur on an organizational level.

Although metacognition and professional development have been studied within the context of CoPs and been found successful for social and adult learning, there is little understanding of how organizational learning applies to CoPs. No known literature to date examines how CoPs may or may not promote organizational learning. In addition, there are few studies that explore the effectiveness of organizational learning within a higher education setting. Some studies suggest that universities can adopt organizational learning models with positive results (Akhtar, Arif, Rubi, & Naveed, 2011), but others debate organizational learning's relevance to higher education and see the theory as more of a management fad (Kezar, 2005). Still, even skeptics recognize that rapid changes in higher education, including technology, globalization, and online learning, may necessitate a greater examination of organizational learning theory (Kezar, 2005, p. 22). Organizational learning has not yet been studied within the context of online programs, which follow a pace of rapid change and have greater need to adjust and learn than well-established universities.

Research Questions

This study explored the effectiveness of online CoPs at a private university in the northwestern United States in respect to their facilitation of organizational learning within the online program. It examined how online CoPs (small communities of remote instructors called Teaching Groups), balanced exploration and exploitation, and identified if tension existed between adult learning and upholding the programs, policies, and procedures of the institution as experienced by Teaching Group Leaders (TGLs). It also identified how TGLs

at the university balanced the professional development of their instructors with upholding the programs, policies, and procedures of the institution. The following research questions guided the study:

1. Do online CoPs (teaching groups) administer the flexibility necessary for professional learning while encouraging organizational learning to also take place? If so, how have they done this?

2. Does the amount of self-regulated learning employed by online instructors affect their adherence to policies, procedures, and organizational knowledge?

3. Does the institution's policies, rules, and procedures facilitate or impede online instructors' learning process?

4. How do TGLs balance institutional requirements with online instructors' individual needs?

Methodology

The Department of Online Instruction at a private university in the northwestern United States bears the responsibility of upholding the institution's mission and goals, while continuously improving the online organization through professional development of their online employees. During Fall 2013, remote instructors at the university sought deep and self-directed learning through online CoPs, called teaching groups. Teaching groups have the potential to provide an environment rich in professional learning; in addition, they also benefit the online department by providing a natural path toward human resource development. Still, this study questioned the level of knowledge that was integrated from individuals in teaching groups to produce organizational learning at higher levels in the institution.

Research sought to inform implementation of the teaching group program and improve the interpretation of knowledge by TGLs, as well as their balance of exploration and exploitation, as manifested in their management and professional development techniques. This study investigated whether organizational goals as well as the professional learning needs of remote instructors were being met. Organizational learning in the online department was investigated in order to identify ways of balancing institutional control with individual control in teaching groups. How do teaching groups administer the flexibility necessary for professional development while encouraging organizational learning to take place? This study investigated how the teaching group and TGL structure allowed online administration to meet instructors' development needs, maintain organizational stability, and understand through remote instructors how to better innovate and adapt their organization to meet future needs.

Research Design

This study followed a qualitative research design due to the ethnographic nature of the research. Creswell has indicated that part of conducting ethnography is analyzing one specific theme of a culture-sharing group (2013, p. 94-95). Some of these include cognition, learning, and enculturation. This study focused on the organizational learning practices of TGLs, and on TGL's balance of exploration and exploitation within environments of professional learning.

This study used two methods of data collection: Rapid Assessment Process (RAP) and Participatory Action Research (PAR). Both RAP and PAR allowed data to be gathered and interpreted in shortened lengths of time, within four months (Stringer, 2007; Beebe, 2001). Using PAR allowed researchers to assess and prescribe solutions to a problem of

practice, specifically the balance of exploration and exploitation in teaching groups. The study utilized RAP to focus on an ethnographic inquiry of teaching group culture. In keeping with the action research approach, however, this study recognized that TGLs' interactions with instructors are part of a complex network of events, and that solutions to problems of organizational learning must operate at all levels of the teaching group program.

In addition to RAP and PAR, this study gathered and interpreted data following the theory of Hermeneutics. Hermeneutics coincides strongly with RAP and provides the best fit for deriving meaning from communication between individuals (Crotty, 1998). In examining speech and language patterns between TGLs and instructors in teaching groups, researchers derived meaning and understanding about how TGLs balance individual and organizational control and how they communicate organizational exploration and exploitation needs to instructors. Under a hermeneutic framework, language is a "means of transmitting meaning—experience, beliefs, values—from one person or community to another" (Crotty, 1998, p. 91). TGLs hold the responsibility of transmitting meaning to instructors in the university's online organization. This study interpreted TGLs' communication with instructors in context of the balance between exploration and exploitation. In the teaching group study, researchers took instructors' and TGLs' individual speech, actions, and experiences, applying them to the whole teaching group program and to organizational learning within the online department. In addition, researchers examined policies and procedures of the organization in order to better understand the actions of individuals within the framework.

Participant Selection

To be consistent with RAP, the selection of participants for this study involved insiders who best understand the issues surrounding teaching groups (Beebe, 2001, p. 28-34). Action research dictates that those individuals incased in the research problem (instructors and TGLs) must help researchers paint the overall picture of professional development and organizational learning at the institution (Stringer, 2007).

A brief survey was first administered to all Fall 2013 remote instructors, asking for their voluntary participation in a research study on the function and purposes of teaching groups. TGLs were separated from instructors in the initial survey list, and each survey participant was given an identifying number. These numbers were randomized following the initial survey. After randomization, groups of five to six TGLs were invited to participate in a focus group. The target population for interviews and focus groups were leaders from varied subjects and backgrounds.

Data Collection

Data collection began with observations made at the online department's physical site within the university and in remote teaching groups. In addition to observations, artifacts were gathered from the online department and from teaching groups during the initial stage of data collection. Observations and artifacts helped further develop and specify clarifying questions for focus groups.

Before focus groups were conducted, a general, demographic survey, asking for voluntary participation in the study, was delivered to all current online faculty members at the university. Participants for focus groups were selected from a randomized list of TGL survey respondents. Focus groups were semi-structured with open-ended questions, allowing

TGLs to tell their own story of the relationship between adult learning and organizational learning in the online program. In addition, TGLs expressed their own experiences with tension in balancing institutional programs and policies with professional learning. This study looked for reoccurring themes to guide follow-up questions. Focus groups were recorded and notes taken for later transcription, coding, and analysis. Based on researchers' analysis, this study sought to describe and inform the processes of exploration and exploitation employed in teaching groups.

Observations. Since the chief researcher held a management position within the online department, initial observations were made during administrative meetings and informal water cooler talk at the physical department location. Field notes were taken. These initial observations helped determine levels of current organizational control and administrative culture, without impinging upon remote instructors or TGLs. Observations were also made and notes taken during the focus group sessions by professional facilitators present at the sessions.

Artifacts. Initial artifacts that were gathered included published policies and procedures for the online program and online instructors, including the *Online Instructor Handbook*, *Leadership Handbook* (for TGLs), *Policies and Procedures* document, and online reference pages to department and university policies. Such artifacts helped establish the set organizational knowledge of the online program.

Focus group format. Focus groups followed a semi-structured format. They began with a grand tour question—"How have you approached professional development with the instructors in your teaching group?" Then, additional, clarifying questions were presented if participants required more direction. General sub-questions included:

- How do teaching groups increase instructor skills necessary to the organization?

- How do they allow instructors to self-regulate their own learning?

- What tension do TGLs feel in their leadership role?

Specific focus group questions can be found in Appendix G. These questions helped create a cultural framework of how organizational learning functions in teaching groups.

Professionally trained facilitators conducted focus group interviews, and multiple (up to three) facilitators were present. Due to the proximity of remote instructors, focus groups took place via online video conferencing software unaffiliated with the university, called MeetingPlace. Focus groups lasted approximately an hour.

Data Analysis

Once gathered, the data, including artifacts, notes, observations, and transcriptions, were organized by date and time. Recordings of focus groups were kept on a secured computer in a locked office with an unaffiliated media professional. All focus group participants were given an ID number, and names were made anonymous to the study.

An official transcriber, unassociated with the study, generated the focus group transcription. The transcriber was NIH certified and followed the TypeWell Transcriber's Code of Ethics. In addition to the transcription, rich notes were written and utilized. Note takers added details about the setting and activity of the participants after the transcription.

Once data was organized, potential themes were identified by reading through the transcription and memoing trends. Coding allowed an analysis of themes in order to reach general conclusions. Data analysis focused specifically on principles of Hermeneutics that analyze word choice and speech, as well as non-verbal cues, to create a picture of exploration and exploitation tensions in teaching groups.

Delimitations

This study limited remote adjunct participants to those who were teaching within the online department in Fall 2013, but who also lived outside the direct geographical location of the university. TGLs taught online for at least one full semester prior to the study, and did not have any other professional affiliation with the university aside from teaching online. In addition, the study took a cross-section of departments and courses in order to provide a greater distribution area. Finally, while this study sought to implement a plan to improve the balance of exploration and exploitation in teaching groups, an evaluation of the plan lies outside the scope of the study.

Statement of Reflexivity

This study was conducted by an administrator within the online department of the same university at the core of the research study. The administrative researcher managed the performance and support of remote faculty within this study, and as such observed both strengths and weaknesses of online administrative processes and CoPs before entering into the study. Due to personal and professional observations, the researcher assumed remote leadership would express ample frustration about institutional policies and procedures as well as about feedback loops.

<p align="center">Results</p>

This study investigated how both a university's organizational needs and individual online instructors' professional learning needs were met within the crosshairs of remote, part-time leadership at a private university in the northwestern United States. Research worked toward improving the immediate practice of the part-time leadership role of TGLs in an online learning program by asking what (if any) tension exists between adult learning and

upholding organizational programs, policies, and procedures. This study looked for better ways to balance TGLs' institutional management obligations with individual and organizational learning.

Data was collected to answer the research questions via observation of teaching group artifacts as well as from focus groups with TGLs. Research questions specifically asked (1) whether TGLs were able to provide an environment for both professional and organizational learning to take place, (2) whether the environment of self-regulated learning affected instructors' adherence to organizational policies and procedures as well as whether (3) organizational policies and procedures impeded instructors' opportunities for professional and self-regulated learning, and finally, (4) if TGLs experienced tension in fulfilling these requirements of their role, and how they balanced institutional requirements with online instructors' individual needs.

Participants

There were 53 Teaching Group Leaders (TGLs) at the university during Fall 2013. Of the 98.1% who were willing to identify their ethnicity, 98% were Caucasian, and one was Hispanic (2%). The eight TGLs who agreed to participate in focus groups were all Caucasian (H. Hall, personal communication, January 31, 2014). Participants were equally distributed among male and female (50%). One person identified having previous experience teaching online, three individuals identified having no previous online teaching experience before working for the university, and four participants did not identify their previous teaching experience. Of the 50% who reported their age, 25% were between 25-34, 50% were between 35-44, and 25% were between 45-54 years of age. One individual represented each teaching department, except English, which was represented by two TGLs

(Math, English, Business, Communications, Foundations, and Religious Studies). While half of the participants did not identify how long they had been teaching, the other half of TGLs interviewed had taught online for the university for over five semesters.

Data

In order to answer the research questions, this study proposed conducting one focus group of TGL participants. A voluntary survey was distributed among online instructors at the university in Fall 2013, and focus group participants were randomly selected from those who responded to the survey. Six TGLs were invited to the first focus group, and four participated. When the initial focus group was not recorded due to technical difficulties, a second focus group was constructed and implemented. Five were invited to the second focus group, and four participated.

Following the first focus group, facilitators suggested revising the questions based on confusion from participants over the wording of some questions. Rather than asking the three main grand tour questions, the second focus group was limited to sub-questions. Original grand tour questions were as follows:

1. Do teaching groups administer the flexibility necessary for professional learning while encouraging organizational learning to also take place? If so, how have they done this?

2. How does the amount of self-regulated learning employed by instructors affect their adherence to policies, procedures, and organizational knowledge?

3. How do TGLs balance their institutional requirements with their instructors' individual needs? Do they feel divided?

A complete list of sub-questions is located in Appendix G. In addition, one question was added to the revised set to add more ability for participants to consider social learning: "How do you help your instructors teach one another? What makes 'teach one another' difficult among instructors?" (Q2). Finally, examples such as weekly reflections, group status reports, instructor evaluations, and course visits were included with one of the original sub-questions (3.a.) in order to better clarify university policies and procedures.

Although the first focus group was not recorded, rich notes were taken in order to provide fullness to the research and validate the data. The second focus group was recorded and transcribed by an unaffiliated transcriber. Interviews were semi-structured in nature, but group facilitators were given sets of interview questions to guide the discussion (Appendix G).

Professional and Organizational Learning Flexibility (RQ 1)

The first research question explored whether TGLs were able to address the professional learning needs of their instructors—and what mediums they used in order to promote flexibility. In addition, if TGLs were able to simultaneously facilitate organizational learning or whether self-regulation impeded learning for the organization. Analysis of the rich notes and the focus group transcription revealed that TGLs provided the versatility needed for professional learning by facilitating self-regulated learning environments. Seventy-five percent of TGLs utilized some method of polling in order to identify the learning topics that instructors most desired to study. The flexibility of instructors being able to identify their own learning topics allowed 62.5% to teach other instructors through synchronous meetings and 37.5% of instructors to lead learning

discussions in asynchronous group spaces. See Table 4.1 for a complete analysis of the

flexibility used by TGLs to enable professional and social learning in their teaching groups.

Table 4.1

TGL Methods of Flexibility and Self-regulation

ID	Polls	Instr-led DBs	Instr-led Synch Meetings
L1		X	
L2	X (needs assessment)	X	
L3			X
L4	X		X
L5	X		X
L6	X	X	X
L7	X		X
L8	X		
%	75%	37.5%	62.5%

In addition to measurements showing that TGLs encourage flexibility and self-

regulated learning, six of the focus group TGLs (66.7%) reported that instructors have a way

of giving feedback (feed-forward loops) to the main organization in order for organizational

learning to take place. However, two of the focus group TGLs (33.3%) felt there was no

avenue for instructors to share their feedback or concerns. Two leaders indicated that within

their role as TGL, instructors seemed more reluctant to share concerns with them (L1, L2).

Leader 3 also agreed that instructors treated him differently as a TGL.

TGLs handled instructors' insecurity about giving feedback in several ways. Leader

2 tried to facilitate organizational learning by framing her role as a peer, working together

with other instructors, rather than by the title of TGL. Another leader encouraged

organizational learning by saying he had two faces: one face pointed toward instructors,

gathering feedback and giving instruction; the other face pointed to administration, giving

feedback and gathering more information (L4). Despite some skepticism, the majority of

participants in this study felt instructors had opportunities to give feedback and have that feedback heard by administration.

Adherence to University Policies and Procedures (RQ 2)

The second research question in this study explored whether a self-regulated learning environment affected instructors' adherence to university policies and procedures. As demonstrated by the results of the first research question, self-regulated learning did occur in teaching groups during Fall 2013. TGLs demonstrated how they facilitated self-regulated learning in their teaching groups through polls, surveys, a needs assessment, and giving instructors' responsibility over synchronous and asynchronous professional development discussions (see Table 4.1).

Analysis of focus group responses revealed that 100% of TGLs would rather discuss how they mentored and empowered instructors than consider how well they enforced institutional policies and procedures. However, when asked directly whether instructors adhered to the policies and procedures of the university, 100% of TGLs said the instructors in their group observed institutional requirements and guidelines. Two TGLs qualified their affirmative responses, indicating that 90% of the instructors in their groups followed policies and procedures all the time, but there was some divergence in following policy among the other 10% of instructors in those groups (L4, L6).

Even though 25% of participants expressed doubt about all instructors adhering to policy all of the time, neither mentioned self-regulated learning as an impediment to following policy. In fact, those instructors who were more involved in the learning process were more likely to follow policy. This study asked if instructors' freedom within a self-regulated learning environment would negatively affect their adherence to the policies and

procedures of the university. Triangulation of the focus group members revealed that in 100% of focus groups where instructors adhered to university policies and procedures, TGLs also indicated that self-regulation was occurring. This study found no negative relationship between strategies TGLs used to institute self-regulated learning and instructors' adherence to university policy.

Effect of University Policies on Professional Development (RQ 3)

The third research question asked if university policies impeded instructors' professional development and learning. When TGLs were asked whether policies and procedures affected their instructors' learning process, 100% of TGLs responded in the negative. Policies did not impede instructors' learning. Still, TGLs gave several qualifiers in their responses.

Leader 2 mentioned that learning was dependent upon how the TGL approached presenting policies and procedures, and clarified that they approached new policy delicately, as did Leaders 1 and 5. Softening "the blow" of new policy was recommended by 37.5% of the population. Specifically, Leader 5 approached policy with "a carrot rather than a stick." The more these TGLs could entice instructors to follow new procedures, the less likely they felt they experienced opposition. Two TGLs (25%) actually encouraged self-regulated learning from instructors while presenting policies and procedures (L4, L6). Leader 6 referred instructors with questions about policy to the *Instructor Handbook* and other online resources. Leader 4 welcomed instructors' questions and criticism to new policy. This approach more than any other maintained an environment of self-regulation in learning. It must be noted, however, that one TGL uniquely expressed the belief that new instructors needed less self-regulation and more support from the policies and procedures as they first

were introduced to the online program (L8). Over time, as instructors felt secure with

expectations and their role as instructor, they became more ready to regulate their own

learning (L8). Finally, 37.5% of TGLs expressed the importance of making sure as leaders

they clearly understood the policies and procedures before presenting them to instructors.

Balance of Institutional Requirements and Meeting Instructors' Needs (RQ 4)

Although this study asked how TGLs balance institutional requirements with

meeting instructors' individual needs, focus group participants did not identify any strong

themes concerning how they balanced their roles as administrators and mentors. Focus

groups revealed that the majority of TGLs (87.5%) felt divided between institutional

requirements and meeting instructors' individual needs. However, TGLs interpreted the idea

of balance and tension in diverse ways.

TGLs experienced tension on a number of levels, from a variety of sources. In the

focus groups, 87.5% of TGLs mentioned something about the tension they felt in their role,

with half of study participants identifying tension between administrative expectations and

fulfilling instructors' needs (see Table 4.2). Three TGLs (37.5%) discussed the difficulties

of instructors who were trying to balance teaching expectations with an already busy life,

including family and full-time jobs. When these TGLs felt they were adding an additional

administrative burden on instructors, they experienced strain in fulfilling their role.

Three focus group participants (37.5%) experienced tension when managing

instructors who expressed frustration between meeting the needs of students and meeting the

expectations of the teaching group. Leader 4 commented about "always feeling a tension

about the time burden I put on the instruction . . . I don't want to increase their time looking

at administrative stuff because, as everybody said, they're doing this because they love to

teach and want to be teaching." Finally, one participant (12.5%) experienced stress when

mediating conflicts between instructors within the teaching group. A summary of the types

of tension experienced by TGLs are presented in Table 4.2.

Table 4.2

Sources of TGL Tension

ID	Busy Life	Instructors & Admin.	Students & TG Requirement	Conflict Mediation
L1	X			
L2	X	X	X	
L3		X	X	
L4	X	X		
L5				X
L6			X	
L7		X		
L8				
%	37.5%	50%	37.5%	12.5%

Although TGLs identified many points of tension between balancing the needs of

instructors with administrative, student, and life responsibilities, they did not clearly identify

ways of managing their stress or balancing the many tensions they experienced. Leader 2

indicated that she tried to be sensitive to the needs of group members, but this action

reduced the stress of instructors more than it helped manage her own tension. Rather than

confront possible conflict with administrative policies or frustration from instructors about

having to meet TG requirements in addition to class requirements, Leader 2 said she tried to

be a model of good behavior. Leaders 1, 2, and 5 (37.5%) also expressed using softer ways

of presenting policy rather than explicitly dictating it. This was one way that TGLs

circumvented possible tension and stress.

Half of the TGLs handled tension by supporting the organization without question

and advocating for university policies. After presenting new policy, Leader 3 handled

tension by "not wavering from them [standards and administrative procedures] when they're questioned." In addition, Leader 6 referred instructors to the *Instructor Handbook* and other administrative resources when questioned about policy. A final TGL tried reminding instructors they were all part of a bigger, greater work going forward, which started but extended beyond their classrooms (L4).

Summary

Through triangulation and coding of focus group responses, this study found that self-regulated learning in teaching groups does not impede instructors' adherence to university policies and procedures. Neither, do policies and procedures negatively affect instructors' learning process. Still, TGLs expressed a desire to focus on instructors' professional learning and development, as well as self-regulated learning in teaching groups, rather than on enforcing institutional policies and procedures. One TGL expressed this sentiment when he stated:

> Policy and procedures are . . . the smallest aspect of what we do as a teaching group leader. Whereas the majority of what we do can't be measured. It's the phone calls we make to the instructors. It's the chats we have, and text messaging, and the emails we receive, the support we give as we review their courses; those are things that are above and beyond anything in policy. (L1)

In focus groups, TGLs separated the responsibility to mentor and support instructors from evaluating instructors and making sure they met teaching group expectations. Seventy-five percent of participants conveyed the desire to mentor instructors on topics of their own choosing rather than to enforce policy.

Overall, TGLs made 46 total comments about providing flexibility for their instructors through self-regulated learning. When these comments were coded and weighted on a scale of one to ten (ten being highly positive), the majority of comments made were positive (M = 7.5, Median = 8), meaning that TGLs interpreted that their instructors had a high degree of opportunity for self-regulated learning.

Despite positive feelings about mentorship and self-regulated learning in teaching groups, the majority of TGLs (87.5%) felt tension in a number of areas within their role. Seventy-five percent of participants associated tension in balancing their administrative responsibilities (evaluating, maintaining standards, upholding policy) with supporting instructors in their teaching. Although TGLs provided examples of strategies they took to avoid conflict, no solid method of managing or eliminating stress was identified.

Finally, TGLs were divided on their perceptions about the ability for organizational learning to take place through instructional feedback loops to administration. While the majority of focus group participants indicated that some degree of organizational learning was taking place (66.7%), another 33.3% perceived distrust from instructors toward TGLs in their leadership role. At least 33.3% of instructors in a similar study felt they contributed to their teaching groups but not to the overall online organization (Carter, 2013). In the social networking site for teaching groups, one instructor described the university's online structure as "a great moving machine," and compared their online instructor role to "an immobilized cog" in that machine. Another instructor described the online teaching experience as "being put in a fence and told to operate there" (Carter, 2013, I5). Still, Instructor 5 insightfully remarked that the boundaries of the fence could be expanded. This imagery reveals that, at least in some remote instructors' minds, the Online Learning

Department could improve organizational learning by providing more opportunities for

instructors to share their insights and give relevant feedback to the organization.

Discussion

This study examined learning on two different levels: individual and organizational.

At an individual level, it focused on adult learning principles, specifically self-regulation, in

the online Community of Practice (CoP) structure. Analysis of the research questions

revealed that TGL flexibility with learning in teaching groups (TGs) allowed professional,

adult learning to take place. In addition, analysis verified that organizational policies do not

impede instructors' individual learning in TGs. This study confirmed the literature

demonstrating that mandatory CoPs can be used as a successful tool for social, adult, and

self-regulated learning (Knowles, Holton, & Swanson, 2012; Lave & Wenger, 1991;

Wenger, McDermont, & Snyder, 2002). Beyond initial studies on CoPs, this research also

identified that remote management and evaluative leadership within the CoP did not impede

individual learning.

At an organizational level of learning, this study examined whether innovative

learning ideas from instructors were being shared with their leaders and administration, and

if those feed forward processes allowed knowledge to be integrated by the organization as a

whole. In addition to individual learning, the first research question explored whether

instructors had the opportunity and avenues to provide feedback to the organization,

allowing organizational learning to take place. This study revealed mixed results on whether

instructors had and/or used opportunities to give innovative feedback to their TGLs.

Although, the majority of participants in this study (66.7%) felt instructors had opportunities

to give feedback, TGLs expressed skepticism on whether instructors were freely sharing their thoughts and ideas with their remote leaders.

In order for the online department and Teaching Group Program to develop to meet organizational needs and respond to environmental change, organizational learning must take place. The theoretical framework of this study indicated that organizational learning requires a balance of exploitation and exploration within an organization (Crossan, Lane, & White, 1999). In the online department, this organizational balance conceptually materializes when TGLs supervise their instructors' professional learning (exploration) while effectively managing those instructors through institutionalized programs, policies, and procedures (exploitation).

The final research question revealed that a high level of TGLs (75%) expressed tension between balancing exploitation (fulfilling their management role) and exploration (allowing instructors to focus on their classes, students, and self-regulated learning). At the crossroads of exploration and exploitation, TGLs bore the responsibility of giving feedback to instructors, while subsequently gleaning information from instructors to take back to administration. For organizational learning to take place, they had to interpret the knowledge they gained from instructors and help integrate relevant information into the institution (Crossan, Lane, & White, 1999). If the organization does not foster an environment where exploration (self-regulated learning) can happen, then organizational learning, subsequently down the chain, cannot occur.

In the end, for organizational improvement and learning to occur, this study needed to determine how TGLs balanced exploitation and exploration, as well as self-directed learning and organizational control (Akhtar, Arif, Rubi, & Naveed, 2011; Crossan, Lane, &

White, 1999; Fiol & Lyles, 1985). While this study showed that self-directed learning did not impede the process of organizational control, and that likewise organizational control did not impede self-regulated learning, it was unable to confirm how TGLs effectively balanced exploitation and exploration, due in part to high amounts of TGL tension in balancing their role. This study also identified that while TGLs allowed instructors to self-regulate their learning, some TGLs shied away from a sense of exploitation by softening policies and procedures. It was difficult to determine if Communities of Practice (CoPs) provided an optimal environment for organizational learning, because an analysis of the integration of knowledge into the institution was outside the scope of the study. Although online CoPs may have fostered more feedback loops for instructors, the rapid pace with which online learning changes in the higher education landscape requires the institution to find better ways to increase feedback and organizational learning, to the extent that a higher majority of instructors add to the learning of the organization.

One way to increase feedback from innovative instructors to the main organization would be to better train TGLs in stress-management in order to effectively handle the tension present within their leadership role. If TGLs were trained on effective ways to discuss policy while still encouraging organizational learning, they could release tension as well as make themselves more relatable to instructors and more likely to receive and pass on innovative and explorative thoughts. In addition, the more conspicuous feedback opportunities are created for instructors, the more they will feel like a part of the larger university. For instance, administration might consider placing immediate feedback buttons within courses for both instructors and students and follow a similar design in the asynchronous TG networking site.

Limitations

This study was limited by the experience and background of participants: remote part-time leaders at a small, private, religious-affiliated university in the northwestern United States. In order to reduce limitations, the TGL sample was randomized; however, those TGLs who participated in focus groups volunteered and held similar schedules. The afternoon focus group sessions may have drawn more participants who did not work full time elsewhere, and hence may have been more positive about the time they had to contribute to the university. Results may be skewed by those who desired greater recognition by the university or who had specific issues they wanted to address in the focus groups.

This study was also limited by technical difficulties during the initial focus group session. A second focus group was conducted in order to counter those limitations in the study. In addition, improved training of focus group facilitators made the second focus group more clear, productive, and valid than the first.

Besides technical difficulties and sampling limitations, the chief researcher for this study was strongly tied to the online program, serving as an administrator over remote instructors. Therefore, the chief researcher took particular care to improve accuracy in the analysis of data by keeping focus group participants anonymous, by objectively listening to the thoughts and analysis of focus group facilitators, and by regularly reflecting on personal sentiments and bias.

Finally, this study was constrained by its timeline to four months of data collection, using a Rapid Assessment Process. The questions asked by researchers were subject to interpretation, and responses had different meanings to different people.

Qualitative Rigor

This study increased its qualitative rigor by utilizing unaffiliated focus group facilitators. Focus group facilitators were trained to member check during interviews, which helped enhance the study's credibility (Lincoln & Guba, 1985). Focus group members were randomly selected for participation. Participants were informed before the study of the anonymous nature of their contributions, and no indicative data was shared with those in the online department who evaluated or managed remote leaders.

In addition to investigator triangulation, the study gathered information on teaching groups from multiple sources, including observations, artifacts, and focus groups. Multiple data points helped view the research questions from multiple perspectives (Beebe, 2001). The study also utilized Dedoose to help analyze qualitative data.

Full recordings of interviews and focus groups were kept with a professional but unaffiliated audio recorder in a locked office. The chief researcher and online administration were not given access to the data, except where participants were made anonymous. In addition, a professional transcriber was hired to handle the data. The transcriber followed principles of the TypeWell Code of Ethics and was NIH certified.

The chief researcher worked within a management role in the online department, and practiced reflexivity by using a journal to record reflections, concerns, and uncertainties during the study. Underlying biases and assumptions were revealed through these reflective processes. Finally, thick description was employed in the writing process in order to increase the study's transferability (Lincoln & Guba, 1985).

Implications for Practice

This study has immediate implications for practice at the university where research was conducted. It promotes increased opportunities for ground-level feedback from remote instructors to administrators at the university. This could be accomplished through various means, including an instructor job satisfaction survey and online feedback box. Research also suggests increased training for remote leadership, such as Teaching Group Leaders. Leadership training might include modules on developing clear communication practices, as well as procedures for having successful crucial conversations with remote instructors.

Since remote leaders expressed decreased feedback from instructors due to their leadership position, research implies that a rotational leadership pool might promote better feedback. When peers take turns in the leadership position, the TGL role becomes less administrative and more peer-based, creating a safer environment in which to share thoughts and concerns.

Suggestions for Future Research

Further research bears the potential to improve organizational learning within online programs in institutions of higher education, but more research is needed to identify the effects of online Communities of Practice on the minute levels of organizational learning. This study suggests the need to better evaluate how organizational learning is taking place—not just perceived to have taken place. Future studies must find a way of quantifying learning on an organizational level in order to examine its acquisition within the CoP framework. Future research might focus on measurement of intuition, interpretation, integration, and institutionalization, among other elements of organizational learning.

In addition, online learning programs would benefit by extending the results from this study to a larger participant base over a prolonged period of time. Further research is needed to determine if similar results would be found with mandatory online CoPs in public universities.

Findings from this study also spotlight the need to explore better online leadership training. Future research should examine the effectiveness of training for remote leaders who must handle situations of tension and difficult communication. Future research on the effectiveness of such training on organizational learning or on the balance of exploration and exploitation would be beneficial.

Finally, one TGL identified that teaching groups with mixed courses and subject matter facilitate institutional policy discussions, while homogeneous (same course) teaching groups facilitate more individual and professional learning by instructors (L7). Future research might be conducted on the effect of both heterogeneous and homogeneous teaching groups on organizational learning.

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CHAPTER 5: CONCLUSION

This chapter suggests ways to maintain strong professional development programs while improving organizational learning in online programs. It argues that as professional development and organizational learning improve, so does online teaching, student satisfaction levels, and perceived student learning in online programs at BYU-Idaho. In President Clark's inaugural speech to faculty and students (2005), Clark laid out three imperatives for his time as President of the university: lower the cost of education, serve more students, and raise the quality of students' experience (Lenz, 2011). Introducing the online program to BYU-Idaho has already helped the university fulfill two of these imperatives—to lower the cost of education and to serve more students. The online program has always served students at a lower tuition rate; however, since its inception in 2009, it has grown to serve 15,767 students (as of Fall 2013), in 48 states and 24 countries throughout the world (Hales, 2013). Figure 5.1 diagrams a small portion of this growth. Still, online administration is looking for better ways to meet the third university imperative to raise the quality of students' online learning experience.
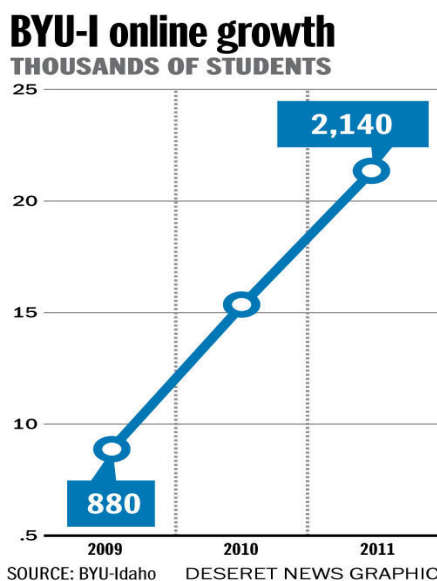

Figure 5.1. First two years of student growth in online programs

Problem Statement

Raising the quality of online students' experience coincides with improving instructors' online teaching through effective human resource development. BYU-Idaho has sought to fulfill remote instructors' professional development needs through online Communities of Practice called Teaching Groups (TG). Teaching groups focus on principles of andragogy, adult learning, and self-regulation (Webster-Wright, 2009; Wenger, McDermont, & Snyder, 2002). However, because an organization must ensure not only that instructors are receiving professional development, but also that instructors' development improves the overall organization and students' learning experience, tension can exist between self-regulated learning and organizational control of learning. Human resource development and andragogy may work in harmony, but the ultimate goal of human resource development is ensuring that the organization's performance improvement needs are met (Knowles, Holton, & Swanson, 2012). Theorists ask:

> Can a large organization in a survival mode allow individuals the freedom to choose whether they want to learn a new way to run the organization? Hardly. Can an organization continue to invest in learning programs for its employees that do not lead to performance improvement over the long run? No. (Knowles, Holton, & Swanson, 2012, p. 170)

In the end, for organizational improvement and learning to occur, BYU-Idaho's online program needs to align instructors' self-directed learning and professional development in teaching groups with the organizational goals of the university. In light of BYU-Idaho's three imperatives, the current university mission that must be aligned with instructors'

development is to raise the quality of students' online learning experience, while still maintaining growth rates at a low cost.

Specific Aspects of the Problem

Research discovered a correlation between instructors with high technology self-efficacy and low Pathway student satisfaction ratings (Chapter 2: Group study). This might suggest that instructors who are highly confident in using computers expect their students to also have a high understanding of technology and may be less patient with those who do not. Still, the effect size for these results was small. This study revealed that other factors—beyond self-efficacy—were more important in improving student satisfaction and perceived learning. Students' year in school, for instance, was a greater factor in student satisfaction than was instructor confidence. In addition, the more experience an instructor had teaching, the lower their student satisfaction levels. Instructors with less experience, who had taught only for BYU-Idaho, received higher satisfaction ratings than those instructors with greater experience and those instructors who had experience teaching online outside of BYU-I. More research is needed in order to uncover the meaning of these correlations and to discover strategies for improving student satisfaction ratings while retaining BYU-I instructor experience.

Recent literature also argues that other factors beyond self-efficacy might have a greater effect on student satisfaction levels. Online teaching skills that could be utilized in professional development programs to improve student satisfaction levels include, but are not limited to, instructors' prompt responses to students, social presence, communication style, learner-content interaction, and having a flexible learning environment (Ke, 2010, Ke & Xie, 2009; Kuo, Walker, Schroder, & Belland, 2013; Zhan & Mei, 2014). If the goal of

both the online program and remote instructors' professional learning focused on raising the quality of students' learning experience, there would be greater likelihood of achieving the third university imperative to raise the quality of students' education while maintaining current growth rates.

When investigating the use of mandatory online Communities of Practice (CoPs) for the professional development of online instructors at BYU-Idaho (Chapter 3), professional development was found to be taking place through the self-regulated learning environment of teaching groups. However, this study did not sufficiently uncover whether the professional development that was taking place at the university also met the organizational needs of the university, specifically the need to improve the quality of students' learning experience as identified by student satisfaction ratings. It fact, it revealed that a significant percentage of remote instructors feel connected to their teaching group CoP, but did not feel the same sense of citizenship toward the university as a whole, and hence may not feel connected to the goals of the university.

Therefore, increased opportunities for feedback and better communication with administration and campus could improve the remote instructors' connection to the university, sense of citizenship, and overall morale. The chief goal of feedback and communication should focus on the university's third imperative of improving the student learning experience. Providing remote adjuncts a variety of ways to provide feedback, with open communication channels from administration to instructors and from instructors to administration could be beneficial. Chapter Three also identified that instructors experience satisfaction and high morale from working with students. Online administration, remote leaders such as TGLs, and instructors should focus the ultimate goal of professional

development on improving students' learning experience. Evidence indicates that instructors would embrace this directive since students are their natural focus.

Chapter Four focused on the role of remote leadership in online CoPs, and how TGLs provided professional development opportunities while managing organizational needs. In order for teaching groups to meet organizational needs and respond to environmental change, organizational learning must take place. The theoretical framework for this study discussed how organizational learning relies on both feedback to instructors and feed-forward processes from instructors within the university (Crossan, Lane, & White, 1999). Online learning is constantly developing and changing at a rapid pace in the higher education landscape. Institutions must find better ways to increase feedback and organizational learning, to the extent that a higher majority of instructors add to the learning of the organization. If the tension of remote leaders could be decreased and feedback loops increased, instructor morale would theoretically improve—and it may be considered that with higher instructor morale and professional development focused around improving the student learning experience, student perceived learning gains and satisfaction would also increase.

TGLs sit at the crossroads of communication between online administration and remote instructors. They bear the responsibility of helping to shape professional development around goals that improve the student experience as directed by administration, as well as gathering feedback from instructors on what is helping to improve the student learning experience from the ground level and sharing that information with administration. When these communication channels are open, organizational learning has the opportunity to occur and institutional goals have more likelihood of being achieved.

Solutions

This dissertation identified that teaching groups were effective mediums for self-regulated learning. Effective professional development programs rely on principles of adult learning, which include a degree of control by the learner (Knowles, Holton, & Swanson, 2012; Webster-Wright, 2009). At the same time, in order for institutions such as online programs to adapt in a highly changing marketplace, they must also focus on organizational learning (Fiol & Lyles, 1985; March, 1991). Organizational learning allows institutions to use the innovative ideas of their ground-level workers (such as online adjunct instructors) to meet the continual challenges of development. Therefore, this research asserts that BYU-Idaho's online program retain teaching groups as the main avenue for self-regulated professional development of online adjuncts at the university. Instructor learning, development, and morale are all high for teaching groups, TGLs, and students.

However, it would behoove the online program at BYU-Idaho to create better feed-forward loops—feedback paths from remote instructors to online administration—in order to improve communication, instructor morale, and organizational learning. This study contends that in order to improve the quality of students' learning experience, an alignment of university and professional development goals for online instructors must take place. As administration, instructors, and TGLs focus around one unified goal, and as communication loops are improved, organizational learning will allow the online program to innovate and discover new ways to improve the online learning experience for students.

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Appendix A

Demographic Instructor Survey Information

Demographic Information

Directions: Please answer the following questions as they relate to your current teaching situation.

I am a:
- ◯ Male (1)
- ◯ Female (2)

Age:
- ◯ less than 25 (1)
- ◯ 25-34 (2)
- ◯ 35-44 (3)
- ◯ 45-54 (4)
- ◯ 55-64 (5)
- ◯ 65+ (6)

How long have you taught online for BYU-Idaho?
- ◯ less than one semester (1)
- ◯ 1-2 semesters (2)
- ◯ 3-5 semesters (3)
- ◯ over 5 semesters (4)

Have you ever taught online for other universities?
- ◯ Yes (9)
- ◯ No (10)

Answer If Have you ever taught online for other universities? Yes Is Selected

Q54 For which other university(ies) have you taught online?

Answer If Have you ever taught online for other universities? Yes Is Selected

How long have you taught online for other universities?
- ◯ less than one semester (1)
- ◯ 1-2 semesters (2)
- ◯ 3-5 semesters (3)
- ◯ over 5 semesters (4)

In what department/subject area do you teach?
- ◯ Art (1)
- ◯ Biology (2)
- ◯ Business (3)
- ◯ Communications (4)
- ◯ English (5)
- ◯ Foundations (6)
- ◯ Home and Family (7)
- ◯ Language (8)
- ◯ Math (9)
- ◯ Pathway (10)
- ◯ Religious Education (11)
- ◯ Science (12)
- ◯ Sociology/Psychology (13)

How were you prepared to teach? Check all that apply.

- ❑ Undergraduate teacher education program (teacher certification) (1)
- ❑ Graduate program of one year beyond bachelor's degree (2)
- ❑ Combined undergraduate and graduate programs (3)
- ❑ Doctorate level program (4)
- ❑ Online teacher training program (5)
- ❑ Other specialized trainings (6)

Would you be willing to participate in a confidential focus group discussing your teaching group experience?

- ⭕ Yes (9)
- ⭕ No (10)

Appendix B

Online Instructor Self-efficacy Survey

Online Teacher Self-efficacy Survey

adapted from the Online Educator Self-Efficacy Scale (OESES), the Online Technologies Self-Efficacy Sale (OTSES), Lee's Self-efficacy Instrument, and Tschannen-Moran & Hoy's Teacher Efficacy Construct.

This assessment is divided into two sections. Section I includes information about the survey and asks for your willingness to participate. Section II contains items designed to assess the self-efficacy of online teachers' pedagogical skills, technical skills, and subject matter expertise.

SECTION I: Informed Consent

You are invited to participate in a survey. The goal of this research study is to identify self-efficacy of instructors in online learning at BYU-Idaho. This study is being conducted by Heather (Bosworth) Carter, Jeffrey Hochstrasser, Rachel Huber, and Brett Yadon, in association with the University of Idaho. In order to participate in this study you need to be an online learning instructor at BYU-Idaho. Participation in this study is voluntary. If you agree to participate in this study, you would be asked to complete a short survey. The survey includes questions about your demographics, perception of your teaching in terms of use of technology, subject matter expertise, and online instruction pedagogy. Participating in this study may not benefit you directly, but it will help us learn how to improve instructor training and professional development for online education. You may skip any questions you don't want to answer and you may end the survey at any time. The information you will share with us if you participate in this study will be kept completely confidential to the full extent of the law. Your information will be assigned a code number that is unique to this study. When the study is completed and the data have been analyzed, the list linking participant's names to study numbers will be destroyed. Study findings will be presented only in summary form and your name would not be used in any report. If you have any questions about this study, please contact us. If you have questions about your rights as a research participant, please contact University of Idaho IRB. YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU AGREE TO PARTICIPATE.

Your responses will be kept confidential. Thank you for completing this survey.

Do you agree to participate in this survey?
- ❍ Yes (9)
- ❍ No (10)

SECTION II: Online Instructor Self-efficacy Survey

Directions: For each of the following topics, select the box that best indicates your level of confidence in performing the described teaching task.

Pedagogical skill: Assess your level of confidence in accomplishing the following pedagogical techniques online.

Q11 Addressing the diverse needs of students
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q61 Responding promptly to student questions and concerns
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q12 Successfully teaching difficult students
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q13 Exerting a positive influence on the personal development of my students
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q63 Exerting a positive influence on the academic development of my students
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q22 Crafting critical questions for students (questions that require analytical thinking)
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q62 Developing critical thinking skills in my students
- ◯ Very Confident (1)
- ◯ Somewhat Confident (2)
- ◯ Not Very Confident (3)
- ◯ Not Confident At All (4)

Q23 Preparing students for the workforce
- ◯ Very Confident (1)
- ◯ Somewhat Confident (2)
- ◯ Not Very Confident (3)
- ◯ Not Confident At All (4)

Q15 Requiring my students to think beyond content toward application and discovery
- ◯ Very Confident (1)
- ◯ Somewhat Confident (2)
- ◯ Not Very Confident (3)
- ◯ Not Confident At All (4)

Q14 Supporting student interaction in asynchronous online discussions (forums or discussion boards)
- ◯ Very Confident (1)
- ◯ Somewhat Confident (2)
- ◯ Not Very Confident (3)
- ◯ Not Confident At All (4)

Q59 Supporting student interaction in synchronous class settings (Adobe Connect or Skype)
- ◯ Very Confident (1)
- ◯ Somewhat Confident (2)
- ◯ Not Very Confident (3)
- ◯ Not Confident At All (4)

Q16 Building a community where students interact with and learn from each other
- ◯ Very Confident (1)
- ◯ Somewhat Confident (2)
- ◯ Not Very Confident (3)
- ◯ Not Confident At All (4)

Q64 What has had the biggest impact in your feelings of confidence in teaching online?

Technological skill: Assess your level of confidence in performing the following technical skills online.

Q28 Copying and pasting content
- ◯ Very Confident (1)
- ◯ Somewhat Confident (2)
- ◯ Not Very Confident (3)
- ◯ Not Confident At All (4)

Q26 Bookmarking a website
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q27 Creating a hyperlink and sharing the hyperlink with students
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q29 Downloading (saving) an image from a web site to your computer
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q30 Uploading or attaching an image to classroom notes or announcements
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q31 Chatting live via a synchronous chat system such as Adobe Connect or Skype
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q32 Reading messages from one or more members of the synchronous chat system (Adobe Connect/Skype)
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q33 Answering a message or starting my own message in a synchronous chat system (Adobe Connect/Skype)
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q34 Using video and microphones in a synchronous chat system (Adobe Connect/Skype)
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q36 Logging on and off the myBYUI email system
- ❍ Very Confident (1)
- ❍ Somewhat Confident (2)
- ❍ Not Very Confident (3)
- ❍ Not Confident At All (4)

Q37 Sending an email message to more than one person at the same time using the mail system in I-Learn
- ❍ Very Confident (1)
- ❍ Somewhat Confident (2)
- ❍ Not Very Confident (3)
- ❍ Not Confident At All (4)

Q38 Attaching a file to an email message
- ❍ Very Confident (1)
- ❍ Somewhat Confident (2)
- ❍ Not Very Confident (3)
- ❍ Not Confident At All (4)

Q45 Updating course notes and announcements
- ❍ Very Confident (1)
- ❍ Somewhat Confident (2)
- ❍ Not Very Confident (3)
- ❍ Not Confident At All (4)

Q39 Creating a new thread in an online discussion board
- ❍ Very Confident (1)
- ❍ Somewhat Confident (2)
- ❍ Not Very Confident (3)
- ❍ Not Confident At All (4)

Q41 Replying to students' discussion board messages and questions
- ❍ Very Confident (1)
- ❍ Somewhat Confident (2)
- ❍ Not Very Confident (3)
- ❍ Not Confident At All (4)

Q42 Uploading a file to a discussion board thread
- ❍ Very Confident (1)
- ❍ Somewhat Confident (2)
- ❍ Not Very Confident (3)
- ❍ Not Confident At All (4)

Q44 Creating a screencast or podcast
- ❍ Very Confident (1)
- ❍ Somewhat Confident (2)
- ❍ Not Very Confident (3)
- ❍ Not Confident At All (4)

Q46 Sharing video and audio files with students
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q65 What task do you feel most confident about executing in terms of using technology to teach online?

Q66 What task do you feel least confident about executing in terms of using technology to teach online?

Knowledge of subject matter: Assess your level of confidence in understanding the subject you teach.

Q51 Answering students' questions about the subject outside the textbook or course materials
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q56 Providing an alternative explanation or example when students are confused
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q57 Teaching students about the subject in simple yet engaging ways
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q49 Understanding the subject well enough to effectively teach both high-performing and struggling students
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q58 Increasing my content knowledge and expertise outside of the classroom
- ○ Very Confident (1)
- ○ Somewhat Confident (2)
- ○ Not Very Confident (3)
- ○ Not Confident At All (4)

Q47 Being aware of new discoveries in my field of study
❍ Very Confident (1)
❍ Somewhat Confident (2)
❍ Not Very Confident (3)
❍ Not Confident At All (4)

Q48 Sharing new discoveries in my field with my students
❍ Very Confident (1)
❍ Somewhat Confident (2)
❍ Not Very Confident (3)
❍ Not Confident At All (4)

Q52 Presenting practical, work-related knowledge of the subject to my students
❍ Very Confident (1)
❍ Somewhat Confident (2)
❍ Not Very Confident (3)
❍ Not Confident At All (4)

Q67 What do you feel has the biggest impact on your ability to teach your subject of expertise online?

Appendix C

Online Student Evaluations

BYU-Idaho end of Semester Course Evaluation by Students

BYU-IDAHO COURSE EVALUATION
Please evaluate the following instructor and course. When you are finished, click on the SUBMIT button at the bottom of the page. Your identity is completely anonymous. Please be as thorough and as accurate as possible. Your feedback is highly valued. It is used by your instructor and the school's administration to improve teaching.

Instructor:	CHECKETTS MAX L
Course :	REL 233 CHURCH HISTORY
Section:	9

Items about Your Performance in this Class: CHECKETTS MAX L -- REL 233

		not applicable	strongly disagree	disagree	somewhat disagree	somewhat agree	agree	strongly agree	very strongly agree
1.	I was prepared for each class.	○	○	○	○	○	○	○	○
2.	I arrived at class on time.	○	○	○	○	○	○	○	○
3.	I was an active participant in online or face-to-face class discussions.	○	○	○	○	○	○	○	○
4.	I sought opportunities to share my learning with others outside of class.	○	○	○	○	○	○	○	○
5	I worked hard to meet the requirements	○	○	○	○	○	○	○	○

	of this class.							
6.	I sought opportunities to reflect on what I had learned in the class.	○	○	○	○	○	○	○	○
7.	I feel that I made important contributions to the learning and growth of fellow classmates.	○	○	○	○	○	○	○	○
8.	The course as a whole has produced new knowledge, skills, and awareness in me.	○	○	○	○	○	○	○	○

Items about the Course: CHECKETTS MAX L -- REL 233

		not applicable	strongly disagree	disagree	somewhat disagree	somewhat agree	agree	strongly agree	very strongly agree
1.	Course objectives were clear.	○	○	○	○	○	○	○	○
2.	Course was well-organized.	○	○	○	○	○	○	○	○
3.	Student responsibilities and expectations were clearly defined.	○	○	○	○	○	○	○	○
4.	Instructional resources –	○	○	○	○	○	○	○	○

	textbook(s), course guide(s), online material, etc – were useful and helped me to achieve course objectives.								
5	Assessment activities – exams, quizzes, papers, hands-on demonstrations, presentations, etc. – accurately and fairly measured the knowledge and abilities I acquired from the course.	○	○	○	○	○	○	○	○
6.	Class assignments contributed to my learning and growth.	○	○	○	○	○	○	○	○
7.	The course provided opportunities to learn from and teach other students.	○	○	○	○	○	○	○	○
8.	Group work, if assigned,	○	○	○	○	○	○	○	○

	was beneficial and meaningful.							
9.	Students were actively involved in this class through discussions, group work, and teaching.	○	○	○	○	○	○	○	○

Items about the Instructor: CHECKETTS MAX L -- REL 233

		not applicable	strongly disagree	disagree	somewhat disagree	somewhat agree	agree	strongly agree	very strongly agree
1.	The instructor effectively modeled problem-solving and application of subject matter.	○	○	○	○	○	○	○	○
2.	The instructor made good use of class time.	○	○	○	○	○	○	○	○
3.	When given, examples and explanations were clear.	○	○	○	○	○	○	○	○
4.	The instructor gave helpful	○	○	○	○	○	○	○	○

	feedback of my work.								
5	The instructor responded respectfully and constructively to student questions and viewpoints.	○	○	○	○	○	○	○	○
6.	The instructor was available to me when I requested assistance, in class or outside of class.	○	○	○	○	○	○	○	○
7.	The instructor motivated me by his/her enthusiasm to want to learn about the subject.	○	○	○	○	○	○	○	○
8.	The instructor starts/dismisses class at scheduled times.	○	○	○	○	○	○	○	○
9.	The instructor held me accountable for coming to each class prepared.	○	○	○	○	○	○	○	○

10.	The instructor provided appropriate opportunities to be an active participant in the class.	○	○	○	○	○	○	○	○
11.	The instructor provided opportunities to reflect upon my learning and experiences in the class.	○	○	○	○	○	○	○	○

Items about Core Values: CHECKETTS MAX L -- REL 233

		not applicable	strongly disagree	disagree	somewhat disagree	somewhat agree	agree	strongly agree	very strongly agree
1.	Appropriately brings Gospel insights and values into secular subjects.	○	○	○	○	○	○	○	○
2.	Inspires students to develop good character.	○	○	○	○	○	○	○	○
3.	Helps students prepare to live effectively in society.	○	○	○	○	○	○	○	○
4.	Is spiritually inspiring	○	○	○	○	○	○	○	○

insofar as the subject matter permits.							

Overall Rating: CHECKETTS MAX L -- REL 233

		very poor	poor	fair	good	very good	excellent	exceptional
1.	What is your overall rating of this **instructor**.	○	○	○	○	○	○	○
2.	What is your overall rating of this **course**.	○	○	○	○	○	○	○

Other Information: CHECKETTS MAX L -- REL 233

		a great deal less	a little less	about the same	a little more	a great deal more
1.	Compared to other college courses you have taken, would you say that you have **learned** . . .	○	○	○	○	○
2.	Compared to other college courses you have taken, would you say that your **satisfaction** is . . .	○	○	○	○	○

	1	2	3	4	5	6	7	8	9	9+
The approximate number of hours per week that I have spent in outside preparation for this class is . . .	○	○	○	○	○	○	○	○	○	○

	90% to 100%	75% to 90%	50% to 75%	less than 50%	never attended
My class attendance has been . . .	○	○	○	○	○

	major	minor	GE/ Foundations	elective	other
This course fills requirements for my . . .	○	○	○	○	○

	A	B	C	D	F	Other
The grade I expect from this course. . .	○	○	○	○	○	○

Is there anything about this course and/or instructor that was particularly good? If so, what?

What could be done to improve this course and help you more?

Appendix D

BYU-Idaho IRB Approval

BYU
IDAHO

October 21, 2013

Dear Heather,

Your request to use human subjects for the study entitled *Assessment of Online Learning and Technologies in Higher Education* is approved for 12 months from the date of this letter.

Please notify the IRB if you intend to make any significant modifications to the study's design or implementation.

Good luck with your study.

Regards,

Scott J. Bergstrom, Ph.D.
Chair, BYU-Idaho Institutional Review Board

Appendix E

University of Idaho IRB Approval

University *of* Idaho

September 19, 2013

To: Linda Taylor
Cc: Heather Carter, Jeffrey Hochstrasser, Rachel Huber & Brett Yadon

From: Traci Craig, PhD
           Chair, University of Idaho Institutional Review Board
           University Research Office
           Moscow, ID 83844-3010

Title: 'Assessment of Online Learning and Technologies in Higher
           Education'

Project: 13-201
Approved: 09/19/13
Expires: 09/18/14

On behalf of the Institutional Review Board at the University of Idaho, I am pleased to inform you that the protocol for the above-named research project is approved as offering no significant risk to human subjects.

This approval is valid for one year from the date of this memo. Should there be significant changes in the protocol for this project, it will be necessary for you to resubmit the protocol for review by the Committee.

Traci Craig

Traci Craig

University of Idaho Institutional Review Board: IRB00000843, FWA00005639

Appendix F

Instructor Focus Group Questions

Original Instructor Focus Group Questions

Grand Tour Question: What has been your learning experience in teaching groups?

1. How do teaching groups improve instructors' feelings of citizenship, enthusiasm for teaching, and overall morale?
    a. Do you feel like a significant contributor to the online organization? In what ways do you contribute?
    b. What do you do as an instructor? Describe your role. Do you wish your role was different in any way? What the best/worst part of your job?
2. How do teaching groups help meet the professional development needs of online adjuncts?
    a. Do you feel like you have the opportunity to learn on your own and explore ways to teach better? (self-regulation)
    b. What have you learned from being part of a teaching group? (social interaction and collaboration with peers)
    c. How has being part of your particular teaching group influenced your teaching? (social interaction and collaboration with peers)
    d. What have you learned in your teaching group that you have been able to apply to your work? (immediacy in application)
    e. How has being part of a teaching group influenced the way you approach your job? (social interaction and collaboration with peers)
    f. How have you collaborated with your peers? How do you socially interact with them?
    g. What past experiences have you had that have changed the way you teach? (connecting new knowledge to past experiences/exploration)
    h. What past experiences have you had that influence the way you understand or keep online policies and procedures? (connecting new knowledge to past experiences/exploitation)
    i. What new learning techniques have you experimented with this semester? (innovation; exploration)
    j. How has that worked for you? (positive/negative? Lessons learned? Would you use it again?
    k. Do you have opportunities to choose what you want to learn and study? Explain. (self-regulated learning)
3. How do the institution's policies, rules, and procedures facilitate or impede instructors' learning process?
    a. How has your TGL influenced your teaching?
    b. Has the new course visit rubric and Instructor Assessments helped or hindered your teaching?
    c. How do online policies, procedures, and the university mission facilitate or impede (exploitation) your professional development opportunities (exploration)?

Final Y/N question for instructors: Has being part of a teaching group improved your professional learning and teaching?

Revised Instructor Focus Group Questions

Grand Tour Question: What has been your learning experience in teaching groups?

1. Do you feel like a significant contributor to the online organization? In what ways do you contribute?

2. What do you do as an instructor? Describe your role. Do you wish your role was different in any way? What the best/worst part of your job?

3. Do you feel like you have the opportunity to learn on your own and explore ways to teach better?

4. What have you learned from being part of a teaching group?

5. How has being part of your particular teaching group influenced your teaching?

6. What have you learned in your teaching group that you have been able to apply to your work?

7. How has being part of a teaching group influenced the way you approach your job?

8. How have you collaborated with your peers? How do you socially interact with them?

9. What new learning techniques did you experiment with last semester?

10. Do you have opportunities to choose what you want to learn and study? Explain.

11. How has your TGL influenced your teaching?

12. Has the new course visit rubric and Instructor Assessments helped or hindered your teaching?

13. How do online policies, procedures, and the university mission facilitate or impede your professional development opportunities?

Final Y/N question for instructors: Has being part of a teaching group improved your professional learning and teaching?

Appendix G

TGL Focus Group Questions

Original TGL Focus Group Questions

1. Do teaching groups administer the flexibility necessary for professional learning while encouraging organizational learning to also take place? If so, how have they done this?

    a. How do you promote an environment where instructors have the opportunity and ability to choose what they will learn and how they will learn it?

2. How does the amount of self-regulated learning employed by instructors affect their adherence to policies, procedures, and organizational knowledge?

    a. Have you seen your instructors share skills in your teaching group that have benefited the online organization? Explain.

    b. In what ways do you support and encourage instructors to support institutional policies, procedures, etc.?

    c. How does your implementation of university standards, policies, and procedures impede or facilitate instructors' unique ideas, input, and the greater understanding of the entire group?

3. How do TGLs balance their institutional requirements with their instructors' individual needs? Do they feel divided?

    a. How do you balance institutional requirements with your instructors' individual learning needs?

    b. What tensions, if any, do you feel in your role as TGL?

    c. How do you maintain high involvement and regular TG meetings while letting instructors work in their own way and in their own timeframe?

Final, Y/N questions for TGLs: Do the instructors in your teaching group follow set policies and procedures of the institution? Do the instructors in your teaching group add to the greater learning of the institution?

Revised TGL Focus Group Questions

1. How do you promote an environment where instructors have the opportunity and ability to choose what they will learn and how they will learn it?

2. How do you help your instructors teach one another? What makes "teach one another" difficult among instructors?

3. Have you seen your instructors share skills in your teaching group that have benefited the online organization? Explain.

4. In what ways do you support and encourage instructors to support institutional policies, procedures, etc.?

5. How does your implementation of university standards, policies, and procedures impede or facilitate instructors' unique ideas, input, and the greater understanding of the entire group?

6. How do you balance university policies and procedures (weekly reflections, group status reports, instructor evaluations and course visits) with your instructors' individual learning needs?

7. What tensions, if any, do you feel in your role as TGL?

8. How do you maintain high involvement and regular TG meetings while letting instructors work in their own way and in their own timeframe?

Final, Y/N questions for TGLs: Do the instructors in your teaching group follow set policies and procedures of the institution? Do the instructors in your teaching group add to the greater learning of the institution?