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Online Training Impact on Adjunct Faculty Compliance and Satisfaction With Professional Development

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Elizabeth Pete

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Abstract

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MA, New York University, 1986

BA, Herbert H. Lehman College, 1984

Doctoral Study Submitted in Partial Fulfillment

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Abstract

The problem addressed by this project study was low levels of adjunct faculty compliance and satisfaction with the professional development program at a local college. The purpose of the study was to determine if an alternative delivery method would yield higher levels of compliance and satisfaction than would a traditional professional development workshop. The guiding research question was whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop. The theoretical base included andragogy, self-directed learning, and connectivism. Using an experimental design, the project examined archival data concerning compliance and satisfaction for 69 adjunct faculty members who had been randomly assigned to an online (experimental group; n = 39) or on-campus (control group; n = 30) professional development workshop. A chi-square analysis showed that compliance levels were significantly higher for participants in the online professional development workshop compared to those who participated in an on-campus workshop. An analysis of variance found that the overall satisfaction level was higher for participants in the online workshop compared to those who participated in the on-campus workshop. The project resulting from the study was a policy recommendation report. Online professional development can positively influence social change by increasing adjunct faculty participation and facilitating the creation and maintenance of networks of health educators. Additionally, direct and indirect costs currently associated with traditional professional development may be reduced through the use of online professional development.

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Dedication

I wish to thank Lauren Pete, who has always been more than a sister. She has been my mentor throughout my professional career and a source of love and wisdom. I would also like to thank Augustus DiOrio, who would not let me give up and has always supported my dreams.

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Section 1: The Problem

Introduction

The local problem addressed by this project study was the need to improve compliance and satisfaction with a professional development program. Research related to compliance and satisfaction with professional development among adjunct faculty showed that an online method of delivery may offer opportunities to improve adjunct compliance and satisfaction. The theoretical foundation for the study was the idea that adjunct faculty members are self-directed adult learners. The hypothesis tested concerned whether an alternative delivery method would improve compliance and satisfaction with a professional development workshop. Focus groups conducted by the local college with faculty members indicated that reasons for nonparticipation included lack of time and logistical issues, such as timing and the central location of organized activities. The local college's administration suspected that online professional development might address these reasons for nonparticipation. This quantitative study compared adjunct faculty member compliance and satisfaction using participation data and an evaluation survey that addressed workshop participant satisfaction.

This study focused on faculty teaching in the health care administration, community health, and nursing programs. The purpose of the professional development programs is to improve faculty knowledge related to classroom instruction and administrative issues. The professional development program is also used to promote skill development and enhancement. Professional development is required to fulfill accreditation requirements.

Section 1 of this project study includes a definition of the problem. It also includes the rationale for the study, definitions of key terms, and a discussion of the significance and implications of the study. In addition, this section includes a review of the literature.

Definition of the Problem

The problems addressed by this study were poor compliance and low levels of satisfaction among adjunct faculty members with the professional development programs previously presented at a local college in New York. The adjunct faculty members at the local college shared many characteristics that are common to adjunct faculty in the United States. Professional characteristics associated with adjunct faculty include their part-time status and receiving teaching appointments based on expertise or status (professional or specialist) in their respective fields rather than their knowledge of pedagogy or adult learning. Professional development activities provide opportunities for the dissemination of important information, skill development, and networking with other faculty members and staff; therefore, participation is essential for maintaining an informed and effective adjunct workforce.

Rationale

Evidence of the Problem at the Local Level

Evidence of the local problem was presented during personal communication with the chair of the professional and graduate studies program (PGS). The chair revealed that despite attempts to improve compliance with professional development programs, actual attendance at on-campus professional development programs had remained poor. Further

evidence was found in a review of the attendance sheets for annual professional development programs conducted between 2005 and 2010. The review indicated average compliance of 48.9%. The attendance data demonstrated that less than 50% of faculty who were invited to attend professional development sessions actually attended.

Data resulting from anonymous evaluations conducted after each professional development workshop indicated that less than 50% of workshop participants were satisfied or very satisfied with the professional development workshop they attended. Part-time faculty members had expressed dissatisfaction with the professional development program. Most complaints were related to the time and locations of professional development programs. An interview with the director of the human resources department at the college indicated that problems related to scheduling and locations were described by adjuncts teaching at the college. The intent of the study was to address the low levels of compliance and satisfaction among adjunct faculty members in three programs. The purpose of the study was to determine whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop.

Evidence of the Problem From the Professional Literature

The continuing use of adjunct faculty in instruction and other areas such as advisement supports the importance of professional development. Workforce data showed an increase in the use of adjunct faculty from approximately 600,000 in 2005 to almost 800,000 in 2011 (Ryan, 2011). According to Ryan (2011), full-time tenure and tenure track faculty accounted for only 44% of all higher education instructional staff in

2011. The need for well-trained adjunct faculty will increase as the use of this part-time workforce continues to grow.

Many adjunct faculty members hold multiple jobs. A profile of adjunct and part-time faculty in the United States showed that a majority of instructors (66%) hold more than one job. According to an American Federation of Teachers report (2010), one in seven (14%) faculty members has two teaching jobs and a nonteaching-related job. Among adjunct faculty with an additional teaching job, three in four (77%) teach part-time at both jobs, with the rest (23%) teaching full time at one teaching job and part-time at another (American Federation of Teachers, Higher Education, 2010). Adjunct faculty who are working in multiple positions may have lower levels of participation in professional development because of the time restrictions and centralized locations of traditional programs.

It is important to determine reasons for adjunct faculty's nonparticipation in professional development in order to improve compliance. Steinert et al. (2009) explored why some clinical faculty members failed to participate in centralized faculty development activities. Steinert et al. conducted research using focus groups of faculty members who had failed to participate in professional development activities. The researchers found that reasons for nonparticipation included lack of time and logistical issues, such as timing and the centralized location of organized activities. This finding is similar to what was reported by the director of human resources for adjunct faculty at the college. Online professional development may address some of these obstacles to participation.

The importance of professional development for adjunct faculty is also supported by current trends in higher education. Beaver (2009) described increasing national emphasis on professionalism and standardization in higher education instruction. This trend is supported by the use of empirical educational and psychological research to inform student instruction and advisement. In addition, Beaver noted that professional development can be used for integration of curriculum that will allow courses and instructors to be viewed as interrelating parts of systems rather than as autonomous operators. This trend will require increased networking among faculty. Professional development programs are also being used to create and support educational teams. According to Beaver, professional development will be used to facilitate faculty evaluations based on the results of modern input, process, and outcome assessment tools that incorporate multiple criteria and multiple indicators to measure the instructor's effectiveness in facilitating learning. Beaver supported the use of technology for promoting best practices and professionalism through professional development.

Effective professional development should address the needs of the workforce. Additional support for the importance of professional development was found in a study conducted by Sandford, Belcher, Gregory, and Frisbee (2007). Sandford et al. conducted research focusing on part-time faculty working in community colleges. Sandford et al. attempted to identify the skills and professional development needs of adjunct faculty. The findings of this research demonstrated that part-time faculty members needed professional development in several areas, including classifying students' learning

characteristics, applying teaching methods to accommodate learning styles, and instructor involvement in Internet-based instruction.

Reducing professional isolation among the adjunct faculty workforce in higher education supports the need for effective professional development. West (2010) and Dolan (2011) provided additional support for the relationship between adjunct faculty members' satisfaction and their feelings of professional isolation. Dolan, in a study of adjunct faculty, noted that perceived isolation and lack of opportunities for skills development were highly correlated with faculty dissatisfaction. West described how professional development could be used to counter adjunct faculty members' feelings of isolation stemming from their adjunct status. West noted the impact of creating networking opportunities on faculty satisfaction. According to West, using technology for online training and disseminating information to adjuncts are effective means of improving faculty performance and satisfaction. Online professional development may encourage and support networking opportunities that reduce adjunct faculty isolation.

Professional development is essential in the volatile health services field. Southernwood (2008) reinforced the importance of professional development for health care faculty. Southernwood noted that distance learning presents opportunities for lifelong learning provided via professional development for health care faculty. Englebardt and Nelson (2002) noted that asynchronous educational opportunities, available through distance learning, allow for flexible delivery and distributed learning, which are especially important in health care disciplines where workers with multiple

responsibilities are the norm. Online professional development may provide opportunities for professional development for busy health care professionals.

The importance of adjunct faculty participation in professional development is supported by research. The American Federation of Teachers (2010), Ryan (2011), and Sandford et al. (2007) presented evidence of the increased use of adjunct faculty. Beaver (2009) described the use of professional development to facilitate faculty evaluations. The potential impact of nontraditional delivery systems on participation in professional development was demonstrated by Steinert et al. (2009). Evidence that professional isolation may be reduced through professional development was found in research conducted by Southernwood (2008), West (2010), and Dolan (2011). The continued use of adjunct faculty and the use of professional development to facilitate evaluation and reduce isolation demonstrate the importance of improving compliance and satisfaction.

The purpose of this project study was to determine whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop. The alternative delivery method studied was an online professional development workshop. The traditional method studied was an on-campus professional development workshop.

Definitions

There are several, sometimes interchangeable, terms applied to professional development and computer software applications used in online professional development. These terms include the following:

Blackboard learning system: This is an educational system that includes a virtual classroom. It is a course-managing program used to support campus-based instruction and distance learning (Quinney, Smith, & Galbraith, 2010).

Compliance: Compliance is defined as participating in a prescribed program of a professional development workshop (Kleijnen, Dolmans, Willems, & Hout, 2013).

Distance education: Distance education refers to educational activities where the instructor and student are located a distance from each other. Educational activities may be asynchronous or synchronous (Quinney et al., 2010).

E-learning: This term refers to forms of electronically sustained instruction. E-learning uses information and communication systems to initiate and maintain the learning process. The term is often, but not exclusively, used for out-of-classroom learning but can also be applied to in-classroom educational experiences that occur via technology. This term also refers to using computers and networks to transfer skills and knowledge (Quinney et al., 2010).

Faculty satisfaction with professional development: Faculty satisfaction is defined as the degree to which adjunct faculty members rate the professional development experience as personally rewarding and professionally beneficial (Hagedorn, 2000).

On-campus professional development: This is professional education or training activities provided on the college or university campus (West, 2010).

Online learning: Online learning involves instruction that is primarily delivered via the Internet. This term excludes other nontraditional teaching methods that do not rely on the Internet (Quinney et al., 2010).

Online professional development: This type of professional development is training that is personal and career focused and education that uses computer and network technology to impart skills and knowledge (Moon, Passmore, Reiser, & Michaels, 2013).

Professional development: This is term is defined as skills, training, and knowledge acquired for both personal development and career advancement (Moon et al., 2013).

Web-based training: Web-based training refers to instruction that is principally provided through the Internet. The two most often used models are synchronous and asynchronous. Web-based training includes static methods, web broadcasts, and interactive methods (Quinney et al., 2010).

Significance

Improving adjunct compliance and satisfaction with professional development is significant because of the extensive use of adjunct faculty in higher education today and the increased use of computer technology. The part-time, professional adjunct workforce is a growing percentage of the instructional and advisory staff at many colleges and universities. Adjunct faculty members now make up a majority (78%) of the higher education workforce of colleges' instructional staff (American Federation of Teachers, Higher Education, 2010). In recognition of this continuing trend, the local college acknowledged the need for adjunct faculty members who are prepared to meet the current and future challenges confronting higher education. The college has made financial investments in computer hardware and software applications in recognition of growth in the use of technology for instruction, professional enhancement, communication, and

networking. Finally, communications with the college's administration raised concerns about changes in the health care market that are exceeding faculty members' ability to stay current in their respective fields and an interest in using technology to address these gaps. Adjunct compliance and satisfaction are important because of the role that professional development plays in disseminating information and improving instructors' skills, especially in the use of technology and in the field of health care.

Guiding/Research Question

The guiding research question for the project study concerned whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop. The first research question addressed by the study was whether an alternative delivery method would yield higher levels of compliance than a traditional professional development workshop. The null hypothesis was that an online method of delivery would not yield higher levels of compliance than a traditional professional development workshop. The alternative hypothesis was that an online method of delivery would yield higher levels of compliance than a traditional professional development workshop. The second research question addressed was whether an online delivery method would yield higher levels of satisfaction than a traditional professional development workshop. The null hypothesis was that the online method of delivery would not yield higher levels of satisfaction than a traditional professional development workshop. The alternative hypothesis was that an online method of delivery would yield higher levels of satisfaction than a traditional professional development workshop.

There is evidence that alternative delivery methods may be as effective as traditional delivery methods. Donavant (2009) suggested that alternative methods of delivery might be as effective as traditional on-campus professional development. Robinson (2008) demonstrated higher levels of compliance and satisfaction with online professional development programs for health care workers and other professionals compared to traditional programs. Research specifically related to the local problem of poor compliance and satisfaction was not available. This study addressed the local problem of poor levels of compliance and satisfaction among adjunct faculty members through a quantitative analysis of the impact of an alternative delivery method on compliance and satisfaction with a professional development workshop.

Review of the Literature

The search strategy for the study involved using key words and phrases that matched the purpose of the study. A multidatabase electronic search was conducted using key words associated with adjunct faculty participation in, and satisfaction with, professional development and training programs. The key words searched were *online instruction, online professional development, online training, virtual training, online faculty development,* and *virtual instructor training.* The search was conducted through the online Walden University library using the EBSCO multisearch database. Other databases searched included Education Research Complete, SAGE, ProQuest, and ERIC. The campus-based libraries of two local colleges were also used. The literature review involved research related to health care faculty. In addition, the review included literature related to the application of adult learning theory, self-directed learning,

connectivism, methods of delivering professional development, and adjunct training programs.

Theoretical Foundation

The theoretical foundation for this research included the theory of andragogy and the concepts of self-directed learning and connectivism. The theory of andragogy indicates that adults and children learn differently (Knowles, 1973). The concept of self-directed learning focuses on learners taking responsibility, with or without guidance, for identifying their own learning needs, goals, and resources (Fleming, Artis, & Hawes, 2014). Self-directed learners select learning strategies and methods for evaluating learning outcomes. The concept of connectivism focuses on new methods of learning in the digital age (Boitshwarelo, 2011). The following is a description of the theoretical foundation for this research study.

Theory of andragogy. The theory of andragogy is one of many theories and models intended to explain how adults learn and how learning in adulthood differs from learning in childhood. The theory of andragogy is based on the belief that adults and children differ significantly in how they learn. It has persisted despite numerous challenges (Knowles, 1973). The theory of andragogy is grounded in humanistic learning theory and is supported by cognitive learning theory. Humanistic learning theory is an expansion of Maslow's humanistic theory (McInerney, 2007). This theory is founded on the concept that experience is essential in the investigation of human learning (Baumgartner, 2001). According to Baumgartner (2001), cognitive learning theory emphasizes the acquisition of problem-solving abilities. Under cognitive learning theory,

the learner experiences behavioral change by obtaining information from the environment. The theory of andragogy is founded on five key assumptions. The first key assumption is that adult learners are capable of guiding their own learning experiences. The second assumption is that adults accumulate a growing reservoir of experience that they use to learn. The second assumption emphasizes the need to design instruction that is relevant for the learner and the adult learner's ability to build on previous knowledge and experience. The third assumption is that adults' learning readiness is closely associated with developmental tasks related to their social roles and personal learning goals. The fourth assumption is that adult learners are more problem centered than subject centered. This assumption requires professional development to be conducted by facilitators who can impart and encourage problem-solving skills in addition to providing vital information. The fifth assumption is that adults are internally motivated to learn in order to achieve personal and professional goals. The theory of andragogy combines these five assumptions to explain adult learning.

Adjunct faculty members share all of the characteristics of adult learners. All of Knowles's (1973) assumptions are applicable to adjunct faculty members as adult learners. It is logical that the first of Knowles's assumptions, which is that adult learners have the ability to direct their own learning experience, is applicable to adjunct faculty because they are required to be experienced professionals in order to teach in higher education. Experience is a condition for adjunct faculty employment. In addition, the nature of the work adjunct faculty members perform and the educational requirements of

the PGS program require adjuncts to be autonomous, independent, and self-reliant. This assumption is applicable to the adjunct workforce at the college.

Adjunct faculty members, most of whom are seasoned professionals, have access to a reservoir of knowledge and experience in the area they are teaching, as well as experience working in higher education settings. The second of Knowles's (1973) assumptions, that adult learners have access to a reservoir of knowledge and experience, is applicable to adjunct faculty members in PGS. Adjunct faculty members are expected to operate independently in preparing for and presenting their courses. Adjunct faculty members are also trusted to implement learning activities and conduct assessments of their students with minimal supervision. Despite the presumed independence and autonomy of adjuncts, professional development programs reflect traditional instructor-designed and instructor-led methods of teaching. Many adults, including adjunct faculty in higher education, want to take advantage of Internet-based learning environments. These environments offer adults the opportunity to apply their knowledge and experience to new situations and challenges.

Adjunct faculty members have demonstrated an interest in having access to meaningful professional development programs. The third of Knowles's (1973) assumptions describes the relationship between adult learners' readiness to learn and the developmental tasks required as part of their social roles and personal learning goals. Readiness to learn has not been examined for adjunct faculty working in PGS; however, research on adjunct faculty has indicated an interest in continuing professional development. In their research on willingness to participate in professional development,

Forbes, Hickey, and White (2010) found that adjunct faculty were overwhelmingly interested in professional development. The adjunct faculty members Forbes et al. surveyed reported being willing to attend professional development workshops even if continuing education credits or other compensation were not provided. Because the workforce of interest in the present study was adjunct faculty, the assumption of readiness to learn was applicable.

Adjunct faculty members are motivated to take a problem-centered approach that is related to their roles as educators. The fourth of Knowles's (1973) assumptions is that a problem-centered approach requires professional development activities that address issues related to effective instruction and improving student outcomes. This assumption was also not explored for PGS faculty; however, Forbes et al. (2010) reported that adjuncts they surveyed wanted courses or workshops on instructional design and developing test questions. These topics reflect an interest in addressing specific problems related to classroom outcomes. The administrators at the college have indicated that adjunct faculty members at the college are problem centered in their approach to their responsibilities as educators.

The last assumption, intrinsic motivation, as noted earlier, is also applicable to adjunct faculty members. These professionals are highly motivated to fulfill contractual and professional obligations associated with being faculty. All five of Knowles's (1973) assumptions about adult learners are applicable to adjunct faculty members because these individuals are highly educated, experienced, self-motivated, and independent professionals.

Concept of self-directed learning. Self-directed learning allows the learner to control several aspects of learning. Learners' responsibilities include identifying their learning needs and resources. Learners must formulate their own goals, as well as select and employ appropriate strategies. The learner is also responsible for assessing the results of the learning activity (Knowles, 1975). This approach was developed over 150 years ago in the United States. The self-education efforts of several historical figures were documented in the 19th century (Craik, 1840). During the 21st century, self-directed learning has become an important area of educational research. Houle (1961) laid the groundwork for research into self-directed learning at the University of Chicago in Illinois. Houle categorized 22 adult learners based on their reasons for participating in learning activities. The categories included goal oriented (those who participated in order to reach a specific goal), activity oriented (those who participated for socialization), and learning oriented (those who participated to learn the material presented). Subsequent research into self-directed learning referred to the latter group of learners. More recently, Sang (2010) stated that the self-directed learning perspective suggests that control of learning resides within the adult learner. Self-directed learners are described as independent learners who are comfortable with risk, who are persistent, and who possess a natural desire to learn. Self-directed learning requires specific skills such as the ability to organize time and the ability to be goal oriented. Sang conducted research on the characteristics of adult learners and suggested that adjunct faculty, many of whom probably have these traits, should be able to benefit from the type of self-direction that online professional development can provide. The study also indicated that many adults,

including adjunct faculty in higher education, want to take advantage of online learning environments (Sang, 2010). Adjunct faculty, as self-directed learners, may thrive in online learning communities.

Applying the concept of adjunct faculty as adult learners with the application of adult learning techniques for professional development was a key component of this project study. The objective of professional development designed for adjunct faculty is to provide continuing education and skill enhancement to a diverse group of formally educated professionals. Despite the independence and autonomy of adjunct faculty members, professional development programs presented on campus reflect instructor-designed and instructor-led methods of teaching. Lesley (2008) conducted research that focused on autonomous learners or those who underwent self-directed learning. Lesley suggested that instructional technology and distance education managers must be prepared to serve adult learners who operate well in a facilitative style of instruction. This style of instruction changes the role of the instructor to one of facilitator.

Online professional development formats offer participant support while allowing self-directed learners flexibility in how they approach learning topics. Henschke (2011) expanded on the concept of flexibility for adult learners. Henschke examined the future of andragogy as it relates to distance learning technology and concluded that distance learning technology offers promising opportunities for faculty support and flexibility. Support and flexibility are related to faculty participation and satisfaction with professional development.

The theory of andragogy and concept of self-directed learning together constituted the theoretical foundation for this project study. Online professional development for adjunct faculty members is consistent with Knowles's five key assumptions (Knowles, 1973). In addition, adjunct faculty as a group demonstrate characteristics that are necessary for effective self-directed learning, including formal education, autonomy, and the ability to organize time and to be goal oriented.

Connectivism. Connectivism is a method of conceptualizing learning in the digital age. Boitshwarelo (2011) described the importance of connectivism for creating an adult learning community. Key features of connectivism include a reciprocal relationship where learners link to a learning community. Learners benefit from, and contribute to, the learning community. The learning community becomes part of a wider network of professionals. The professional networks support the creation of autonomous knowledge development. Knowledge in this context is distributed across an information network of multiple individuals. The importance of connectivism is supported by research conducted by Dolan (2011). Dolan performed a qualitative study that used grounded theory to examine the views of 28 adjunct faculty members. Dolan focused on the adjunct faculty members' views on the impact of periodic face-to-face meetings with management and peers on job-related motivation. A key finding of the study was that subjects reported that professional development activities presented online and in person were not offered often enough and did not support ongoing communication. Dolan found that this group of adjunct faculty identified the need for improved communication, a form of connectivity, for both delivery methods. Dolan's findings addressed criticism of online professional

development based on the belief that on-campus face-to-face delivery methods support connectivity in ways that online professional development does not. Online professional development, if properly administered, can support connectivity.

Connectivity is also important for faculty during the knowledge creation process. Boitshwarelo (2011) described the importance of bringing members from diverse disciplines into the knowledge creation processes. Boitshwarelo noted that the need for interdisciplinary connection is addressed well by the Internet environment because of the dispersed nature of its information. This research did not address adult learners specifically; however, these features can be applied to adult learners who may benefit from the autonomous and diverse learning environment available online. Bridges, Davidson, Odegard, Maki, and Tomkowiak (2011) also addressed using distance education training methods to connect faculty. Bridges et al. demonstrated that faculty members became more participative when their colleagues used a training model that incorporated community-based experience with an interprofessional simulation experience. Connecting adjunct faculty through shared experiences offers opportunities for increasing professional support and reducing adjunct isolation.

This study is based on the theory of andragogy, the concepts of self-directed learning, and connectivism. The study applies the theory of andragogy to adjunct professional development in recognition of adjunct faculty as adult learners who are able to direct their own learning activities and benefit from accumulated experience. As seasoned professionals, adjunct faculty members are problem centered and motivated to fulfill their social and professional roles. Sang (2010), Lesley (2008), and Henschke

(2011) supported the concept of adjunct faculty members as autonomous, independent and self-reliant. Applying the concept of self-directed learning to professional development for adjunct faculty is supported by research that suggests that adult learners benefit from facilitative methods of instruction and flexibility (Knowles, 1973). Boitshwarelo (2011) and Bridges et al. (2011) supported the use of connectivism to create adult learning communities that facilitate scholarship by creating forums for reciprocal relationships among learners and serving as part of a wider network of professionals. Connectivism can be initiated and maintained online via adult learning communities.

The theories of andragogy, adult learning, self-directed learning, and connectivity are related to the project study because they address adult learners' characteristics that impact compliance and satisfaction with professional development. The theory of andragogy, emphasizing how adults and children learn differently, is applicable to the project study because adjunct faculty are adult learners. Self-directed learning, which focuses on the learner taking responsibility, is applicable to the project study because online professional development encourages learners to take responsibility for identifying what they need to learn, their goals, and potential resources. The concept of connectivism is relevant to the project study because it focuses on new methods of learning in the digital age that are available through online professional development.

Critical Review of the Current Literature

The current literature addresses several areas related to professional development for faculty. Researchers who studied adjunct faculty compliance and satisfaction described methods for improvement through the application of adult learning theory. In

addition, alternative methods of delivery and the importance of addressing the needs of faculty teaching health care practitioners and administrators have been addressed in recent research.

Compliance with professional development. Previous researchers have demonstrated that faculty compliance with professional development may be affected by the method of delivery. Ladhani et al. (2011) discovered higher levels of faculty participation for an online professional development program than they found for similar programs presented on campus. Ladhani et al. found that online role-play increased participation among a disparate group of international educators. The findings of their research supported role-playing, in an online environment, as an effective method of professional development for mid-career health care faculty members.

The literature review also revealed research that described reasons for adjunct compliance or noncompliance with professional development programs. Steinert et al. (2009) examined reasons for regular adjunct participation in professional development programs. These researchers found that faculty members had higher levels of participation in professional development programs that added to personal and professional growth, were relevant to job performance, and offered the opportunity to network with colleagues. Varela (2012) identified three characteristics of traditional professional development that reduce compliance with professional development programs. Varela found compliance with professional development was lower when the program involved a nonprogram specific approach and when in-service programs were not related to daily classroom practices. The third factor found by Varela was that

reduced participation was related to the lack of follow-up for professional development programs. Adjunct compliance or noncompliance with professional development programs was impacted by the quality and usefulness of the material presented. The extent of reinforcement available through follow-up after the program was completed also impacted compliance.

Many health care specialists use professional development to meet requirements for mandated continuing education, however, the existence of such mandates does not increase participation in professional development. Neimeyer, Taylor, Zemansky, and Rothke (2013) surveyed 410 licensed psychologists. They studied the impact of awareness of the state mandate for continuing education on participation in professional development programs. These researchers found that awareness of impending mandates was not related to higher participation in professional development.

Ellias (2010) identified barriers related to participation in professional development programs. Ellias found that time constraints, course suitability, geographical location, and costs related to travel were all substantial factors deterring participation in professional development. These findings highlighted the need for further research on whether an alternative method of delivery would alleviate or reduce the impact of timing, geographic location and travel related costs on participation in a professional development program.

Satisfaction with professional development. The literature review revealed recent research related to online adjunct faculty members' satisfaction with training and professional development programs. Betts (2009) described the relationship between

adjunct faculty members' dissatisfaction with training and retention. Betts found that higher levels of satisfaction with training were positively correlated with adjunct faculty retention. Fish and Gill (2009) described the positive impact of satisfaction with professional development on course development. Bollinger and Wasilik (2009) found that satisfaction with professional development was positively correlated with overall satisfaction for adjunct faculty members who teach online courses. Cleary, Horsfal, O'Hara-Aarons, Jackson, and Hunt (2011) found that clinical nursing faculty reported high levels of satisfaction with work-based and clinically focused professional development. Erickson, Noonan, and McCall (2012) examined the effect of asynchronous online professional development on satisfaction for special education teachers. Erickson et al. found several areas where asynchronous online professional development increased satisfaction. The researchers found that subjects reported that participation increased their knowledge and ability to apply research-based practices. The teachers also reported that they were more able to implement research-based transition practices within their classrooms. Furthermore, participants reported greater satisfaction than experienced during traditional professional development programs. Participant satisfaction was associated with developing meaningful, collaborative relationships with colleagues and convenience. Professional development has been identified as a factor that affects overall workforce satisfaction. Cody, Ferguson, and Desbrow (2011) explored factors cited by metropolitan dietitians as being critical to their workforce satisfaction. Cody et al. found that overall satisfaction was positively impacted by professional development. Adjunct

faculty members' satisfaction in several areas can be improved with training and professional development programs that meet their needs.

Application of adult learning theory. Recent researchers in the field of adult learning support viewing adults as self-directed learners. An important and recurrent theme in the literature is the application of theories of adult learning to professional development. The application of adult learning theory to professional development is often presented under the umbrella term of lifelong learning. Mukhopadhya (2011) defined lifelong as "the systematic acquisition, renewal, updating, and completion of knowledge" (p. 477). This concept is consistent with the principles of andragogy. It emphasizes autonomy, independence, reflection, and learning from experience. Mukhopadhya found that professional development, based on the principles of andragogy, was effective for continuous professional development. Quinney et al. (2010) evaluated a technology-training program in terms of adult and self-directed learning. They found that a self-directed approach to professional development fostered technology skills that participants needed to serve students. In addition, Quinney et al. found that this approach promoted lifelong learning and supported incorporating the use of emerging technologies. Professional development that supports lifelong learning and adoption of technology is essential for a well-trained adjunct workforce that is able to adapt to, and technological advances in higher education.

Professional development can be used to encourage independent, self-directed learning among faculty. Hatem et al. (2007) studied a faculty development program that fostered individualized, self-directed learning for participants. Hatem et al. found that

after taking a course that used learner-centered teaching methods participants reported increased confidence in several areas including conducting interviewing, clinical and teaching skills and self-awareness. Swanson and Kayler (2010) developed a model for transforming higher education through professional development and adult learning in the United States. Their model emphasized the use of technology and the Internet to provide successful training workshops for self-directed learners.

Online versus on campus delivery methods. An important question raised when comparing online to traditional professional development is whether the delivery methods are equal in participant outcomes and preferences. Research conducted by Donavant (2009) demonstrated that online and traditional delivery methods are equal in outcomes for adult participants. Donavant compared the efficacy of traditional delivery methods to online methods for police officers. Donavant did not find a significant difference between the delivery methods based on the race, or gender of the adult learner, or their years of police service. Donavant also did not find any significant differences based on participants' previous exposure to online delivery methods. An important finding was that the adult learner's level of education was statistically significantly associated with their success in online formats. Donavant found that participants with a bachelor's degree or higher benefitted more from online professional development than those without a bachelor's degree. Donavant raised two important questions. The first question raised was whether online professional development is equally effective for different groups of learners. The second question raised was whether there are circumstances in which online professional development would be the preferred delivery method. The relationship that

Donavant found between formal education and success in online professional development suggests that formally educated professionals, such as adjunct faculty, may have a greater potential than other groups to benefit from online professional development. Additional research is needed in the field of adult education that shows the impact of online professional development on different learner groups and on learners' attitudes toward themselves and the subject matter.

Online professional development may also have benefits for faculty related to access and the quality of professional development activities. Robinson (2008) discussed how access, equity and the quality of professional development were enhanced through an online delivery method for rural teachers in a province in western China. Robinson noted the continuing relationships and support participating teachers experienced after completion of an online course. Robinson's research addressed the use of an online delivery method for improving professional development by creating and maintaining a support network and learning community among educators. Further support for online professional development for adult learners was found in the research of Quinney et al. (2010). These researchers examined the impact of a technology challenge program. Quinney et al. analyzed results from a survey of participants before and after the program was implemented. An important finding was that a self-directed approach supported lifelong learning habits and improved technology skills. These findings supported the use of technology for adult learners particularly in promoting networking among participants.

Another benefit of online professional development is the diversity of the content and form available. Olofsson and Lindberg (2011) described the possibilities and

limitations of an Internet-based learning community for teachers' professional development. Six different online communities for professional development were described. Online professional development can be an important tool for collaboration among faculty. Kabilan, Adlina, and Embi (2011) completed a qualitative study of an online collaborative project for English teachers. The purpose of their research was to identify the participants' meaningful experiences and how the project had enriched the participants' professional development. The participants' reflective reports revealed four major components of professional development that they described as meaningful. These experiences included obtaining and augmenting skills, exchanging information, and socialization.

Professional development in health care administration education. The research previously described does not specifically address professional development for health care administration, community health, or nursing faculty. The growing demand for health care professionals and the evolving state of health care in the United States raises particular challenges for clinical, community health and health care administration faculty. The usefulness of online professional development for continuously improving clinical skills and practice has been confirmed through research on E learning. Gill (2007) described the role of E learning in conjunction with continuing and personal professional development. Gill described how health care professionals utilized an innovative, self-directed, distance-learning module that was delivered online or by CD-ROM. Gill used a questionnaire and telephone interviews to determine staff opinions about the program. The results of the study indicated that 90% of staff reported some

improvement after completing the course. Gill's research, involving both clinical and administrative staff demonstrated that online professional development was the preferred method of learning for these health care professionals. For health care professionals online professional development may be the preferred method of delivery.

The literature review also showed that online technology could be used to impart important skills. Palmer, Samson, Triantis, and Mullen (2011) evaluated the use of a web-based interactive course to train health care providers on issues related to cultural competence in treating breast cancer patients. The interactive web-based course included multimedia applications and text used to educate providers and raise awareness of cultural issues related to breast cancer. Palmer et al. found that the majority of participants (95%) reported this training method was appropriate for training health care providers. These findings support the use of online professional development for health care professionals.

Online professional development may also be used to support and enhance more traditional methods. Research conducted by Einarson, Moen, Kolberg, Flingtorp, and Linnerud (2009) discussed the successful use of E learning to support on-the-job training for health care providers. Einarson et al. described using an interactive web-based learning environment to explore and exploit informatics to support on-the-job training. Einarson et al. focused on the importance of interactivity and multimodality for creating virtual learning environments. These environments allow users to practice a series of realistic tasks in a simulated environment. The research findings indicated that this use of educational technology provided a safe environment to practice and perfect skills. This

educational method also promotes learner reflection on performance in ways not available in a traditional classroom. Carroll, Booth, Papaioannou, Sutton, and Wong (2009) contributed to the evidence supporting the use of online professional development for health care professionals. Carroll et al. analyzed several studies of health care professionals' E learning experiences to identify five key themes for professional development that are effectively administered through a web-based program. These themes included knowledge validation, peer communication, flexibility, support, and course design and presentation. The use of online technology may enrich traditional methods of delivery.

Virtual environments can also provide important training opportunities online. An example of the successful use of virtual environments for professional development of health administration faculty was demonstrated at Children's Memorial Hospital in Chicago, Illinois (Boulos, Hetherington, & Wheeler, 2007). The facility used Second Life, a virtual environment program, to conduct disaster preparedness training. The facility was able to provide safe, reasonably-priced training by creating a virtual environment. The virtual environment replicated their facility and provided a genuine immersive training experience for administrative staff that improved emergency response planning without interfering with normal facility operations. Participants reported high levels of satisfaction with the program. The use of virtual environment technology to provide authentic, safe professional development is growing in use for health care professionals. Krautscheid, Kaakinen, and Warner (2008) demonstrated the use of simulation to provide professional development to health care faculty. Krautscheid et al.

used simulation to instruct clinical faculty in teaching roles. The program used pre-recorded clinical teaching simulations and reflection on teaching strategies. The pre-recorded clinical teaching simulations were used to help faculty analyze and reflect on clinical teaching strategies that facilitate or hinder student learning. Krautscheid et al. stated that the most helpful application of this technology was the clinical teaching simulations. These applications made it possible for faculty being trained to receive instant responses from master teachers and student volunteers. Virtual environments and simulations make it possible for online professional development to present real life scenarios and challenges to health care professionals.

Other professional development models that have been successfully used for health care workers are hybrids. These models combine E learning technologies with traditional delivery methods. Barksdale et al. (2011) described a comprehensive and cost-effective program for professional development of faculty members. The program was designed to provide a professional development program for faculty members that built on the expertise of current faculty while fostering career development. Barksdale et al. designed a hybrid program that provided annual clinical workshops and monthly face-to-face meetings integrated with an online educational program. The online program included a website for faculty orientation and training modules for continued professional development. An evaluation of the program found it was positively received and reviewed by all faculty members. Another example a hybrid program was found in the research conducted by Notarianni, Curry-Lourenco, Barham, and Palmer (2009). Notarianni et al. created the Progressive Professional Development Model (PPDM). This

is a framework for guiding and planning learning experiences that promote professional and personal development. The model combines the use of standardized cases with simulated practice settings. The model addressed the diverse learning styles of a multigenerational work force. Outcome measures demonstrated participants increased their knowledge of values, skills, and other competency-based behaviors. This research is relevant to the project study because it demonstrated the use of computer technology to replicate reality for professional development in the field of health care administration.

The literature review did not reveal public data related the delivery of adjunct professional development. Professional data that is available to the public is related to the growing use of adjunct faculty and the personal and professional characteristics of this workforce. According to a public report compiled by the American Foundation of Teachers (2010), adjunct faculty often hold multiple positions. This fact may make online delivery, that offers flexibility in locations and scheduling, attractive for adjunct faculty members.

The literature review revealed research supporting the application of adult learning concepts to professional development for adjunct faculty members. In addition, the review disclosed the effective use of online delivery methods for professional development. Current research, while pointing to the need for further investigation, strongly suggested that online delivery may offer an especially beneficial method of providing professional development to college graduates and health care professionals. Research has shown that online professional development may improve the quality of professional development programs. Equity and access to professional development may

also be enhanced through the use if online delivery methods. The literature review also included research related to the use online professional development for faculty networking and collaboration. There are several models for online professional development including hybrids that combine traditional methods of professional development with online delivery methods. Current researchers also support the efficacy of online professional development, delivered in various formats, for continuously improving clinical and administrative skills for health care professionals and educators.

Implications

The collection and analysis of data resulting from this study could be useful information for designing more effective professional development programs that can be used online or on campus, or presented as hybrids. The project that resulted from data collection and analysis was a report that detailed recommendations for improving professional development. My community partners and I decided that a policy recommendations report, that includes evidence-based recommendations, would be the best approach for improving adjunct faculty participation and satisfaction with the professional development program. A policy recommendations report detailing short-term and long-term recommendations is included in Appendix A.

Summary

The importance of improving compliance and satisfaction with professional development is supported by the current reliance on adjunct faculty members in higher education. This is particularly true for faculty teaching health care professionals. Past research has presented evidence that supports the need for flexible professional

development that can accommodate the needs of adjunct faculty while providing a forum for effective connectivity and networking (Carroll et al., 2009; Einarson et al., 2009; Kabilan et al., 2011; Olofsson & Lindberg, 2011; and Robinson, 2008). Research has also shown that overall job satisfaction for adjunct faculty members is linked to satisfaction with professional development (Betts, 2009; Bollinger & Wasilik, 2009; Cody et al., 2011). The next section describes the methodology used including the setting, sample, and the instrumentation.

Section 2: The Methodology

Introduction

The purpose of this research was to determine whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop. Section 2 describes the methodology, process of data collection and analysis, and results of the study. The assumptions, limitations, scope, and delimitations of the study and measures used to assure ethical protection of human populations are also included in this section. I used a quantitative experimental design to conduct an analysis of archival data to determine the impact of an alternative delivery method on compliance and satisfaction with a professional development workshop. The study was a true experiment. I compared data for a control and an experimental group on compliance measured by participation in the workshop. I also compared the control and experimental groups on satisfaction measured by a workshop evaluation survey. The study sample included archival data for faculty who had participated in an online (experimental group) or an on-campus (control group) professional development workshop. The study involved a sample of adjunct faculty members from two campuses of the college. The following is a description of the study's research design and approach.

Research Design and Approach

The research methodology was a quantitative study. I analyzed adjunct faculty members' compliance and satisfaction with a professional development workshop using archival participation and evaluation survey data. The data were collected by an independent workshop facilitator under contract with the college. The study met the

criteria for a true experiment as defined by Creswell (2012). Creswell defined a true experiment as "an experiment that includes the random assignment of participants to different conditions of an experimental variable" (p. 153). This research design was a logical approach to comparing these two groups because a true experiment incorporates random assignment of individuals to separate conditions of the independent variable. The research design allowed me to determine the effect that each condition had on the dependent variable. Random assignment of the participants by the workshop facilitator allowed me to draw conclusions about whether a causal relationship existed between the independent variable (delivery method) and dependent variables (compliance and satisfaction). The use of randomization allowed me to address several potential individual and interactive threats to internal validity, including maturation, history, regression, and selection.

Setting and Sample

The population selected by the college consisted of all adjunct faculty members at the college. The sample consisted of a convenience sample of 80 adjunct faculty members from the health care administration, nursing, and community health programs. I used power analysis to determine whether the sample of data from 80 adjunct faculty members would be sufficient to correctly determine differences between the groups. I used archival data from professional development workshops offered at two campuses and online. The workshop facilitator randomly assigned participants to the experimental or the control group prior to the workshops. The professional development workshop was delivered by the facilitator to adjunct faculty members under two conditions: online via

the Internet (experimental group) and in a traditional classroom on campus (control group). This approach considered the level of statistical significance (alpha), power and effect size. Due to the small sample sizes, significance testing can be misleading; therefore, I selected a large effect size (Cohen, 1988). The criterion I selected was .80, and the effect size selected was .50. I selected a confidence level of 95%. Both of these values have traditionally been used for educational research. Based on these criteria, a power analysis indicated that the appropriate sample size was 65. The convenience sample of 80 adjunct faculty members exceeded the required sample size. The workshop facilitator used random sampling to assign adjunct faculty to the control group or the experimental group by assigning random numbers for each adjunct faculty member.

The eligibility criteria included being an adjunct faculty member teaching in the departments of health care administration, community health, and nursing. Full-time faculty and nonteaching adjuncts were excluded from participation. The workshop facilitator sent adjunct faculty members a form letter and an email inviting them to participate in the professional development workshop. Of the 80 adjunct faculty members invited to participate in professional development, 69 attended one of the workshops. The invitation also included a request that participants complete an evaluation of the workshop. Adjunct faculty members were informed by the facilitator that the deidentified workshop evaluations would be used as part of a research study. I was not in direct contact with adjunct faculty members who were invited to participate or any of the workshop participants.

Instrumentation and Materials

The instrument that was used to collect data was the Workshop Evaluation Survey (see Appendix B). The instrument is a training satisfaction survey developed by the U.S. Office of Management and Budget (OMB) for the Center of Substance Abuse (OMB, 2011) and adopted by the college. The survey has been used to measure worker satisfaction with professional development programs offered to federal employees. The concepts measured by the survey include participant satisfaction with the format of the workshop (online vs. on campus), the materials presented, and the facilitator, as well as overall satisfaction. The survey also measured participants' perceptions of the applicability of the workshop to their teaching responsibilities and whether they would recommend the workshop in the current format to their colleagues.

The survey contained 22 questions, including a 5-point Likert scale with 15 closed-ended questions, five demographic questions, and two open-ended questions. The Likert scale appeared in the first section of the survey. Scores on the Likert scale were calculated by having participants rate how strongly they agreed or disagreed with a number of statements related to their satisfaction with the workshop and whether the material presented during the workshop was relevant to their work as adjunct faculty members. A higher rating on each item in the scale indicated higher levels of disagreement with each statement. The range for the survey was 1 = *strongly agree*, 2 = *agree*, 3 = *undecided*, 4 = *disagree*, and 5 = *strongly disagree*. The option *undecided* was included as a neutral response. The college's administration, as a community partner,

revised the original evaluation of 13 Likert items to include the following statements of local interest:

- The material presented during the workshop will be useful for the courses I teach.
- The workshop will allow me to better serve my students.

The open-ended questions were in the next section of the survey. These questions allowed participants to elaborate on what they liked about the workshop and identify areas they felt needed improvement. The two questions asked were the following:

- What about this workshop was most useful in supporting your work as an adjunct instructor?
- How can the school of professional and graduate studies improve its faculty development program?

Questions 1 through 17 (the Likert items and open-ended questions) addressed the usefulness and quality of the workshop. Questions 18 through 22 were used to collect demographic and work experience data in order to determine if there were pre-existing differences between the control group and the experimental group in abilities or characteristics that might affect the dependent variable. Demographic questions appeared in the final section of the survey. These included the following:

- participant race and ethnicity,
- gender,
- age,
- highest level of education achieved measured by degree obtained, and

- experience teaching in higher education and at the college, measured in years of teaching experience.

The two added Likert-scaled items had the potential to impact the reliability of the OMB items. To examine this potential effect, the college conducted Cronbach's alpha testing on the OMB items and compared the result with previous reliability ratings for the OMB survey. The workshop facilitator who presented the survey did not change the wording of the OMB items. For purposes of this study, the college assumed that the validity of the OMB survey would not be impacted by the addition of these items.

The OMB conducted an assessment of the reliability and validity of the instrument. It estimated the instrument's test-retest reliability by administering the survey to the same respondents at two different times (OMB, 2011). The correlation coefficient between the two sets of responses was 0.7. This correlation coefficient is a strong indicator of the reliability of the instrument. OMB measured internal consistency using Cronbach's alpha. Cronbach's alpha for this survey was 0.9, which is considered highly consistent (OMB, 2011).

The process for completing the survey for the control group involved participants completing a paper version of the survey that was distributed at the end of the workshop. The process for completing the survey for the experimental group required using an electronic link that was activated upon completing the workshop. The electronic link connected the participants to an online version of the survey, which they completed and submitted.

Compliance was measured using deidentified attendance data for the experimental and control groups. Satisfaction with the workshop was measured using the workshop satisfaction survey, which addressed overall satisfaction, satisfaction with the information and materials presented, and satisfaction with the workshop facilitator. Relevance and usefulness of the workshop were included to address the relevance of the workshop in terms of adjunct teaching responsibilities. These questions addressed the useful application of the workshop in terms of the courses that adjuncts teach, improving teaching skills, better serving students, and career advancement. The final questions in the Likert survey were intended to measure whether adjunct faculty would take another workshop in the current format and whether they would recommend the workshop to others.

To conduct this experiment, I used archival participation data. I also used archival data from responses to a satisfaction survey that the college had accepted as part of its annual summative evaluation of the professional development program. I received the data through an agreement with the college (see Appendix C).

Data Collection and Analysis

The data collection process was initiated by the facilitator. The process involved the facilitator collecting participation data used to measure compliance and data resulting from a survey that measured participant satisfaction after each professional development workshop. The experimental group received the same workshop as the control group online. Responses to the surveys went directly to the workshop facilitator, who forwarded deidentified raw data to me for analysis as required by an agreement with the college.

The details of the agreement with the college to share archival data are described in Appendix C. Following the analysis, the data were permanently stored in a secured file located at the college. The raw data will remain stored for a minimum of 5 years and are available upon request.

In order to test the hypotheses, I analyzed archival data for compliance and satisfaction for both delivery methods. The study addressed the following research questions and hypotheses:

RQ1: Will an alternative delivery method yield higher levels of compliance than a traditional professional development workshop?

H_o1: An alternative delivery method will not yield higher levels of compliance than a traditional professional development workshop.

H_a1: An alternative delivery method will yield higher levels of compliance than a traditional professional development workshop.

RQ2: Will an alternative delivery method yield higher levels of satisfaction than a traditional professional development workshop?

H_o2: An alternative delivery method will not yield higher levels of satisfaction than a traditional professional development workshop.

H_a2: An alternative delivery method will yield higher levels of satisfaction than a traditional professional development workshop.

Compliance

Compliance data were analyzed by comparing participation rates for the online and on-campus workshop attendees. Participation was based on the number of adjunct

instructors who attended a workshop. I conducted a chi-square analysis to test the hypothesis that an alternative delivery method would yield higher levels of compliance than a traditional professional development workshop.

Satisfaction

I measured workshop participant overall satisfaction using the workshop evaluation survey. Questions 1 through 15 (with a Likert scale) were used to measure satisfaction. I measured overall satisfaction using Question 1. I conducted a one-way between groups analysis of variance (ANOVA) to test the hypothesis that an alternative method of delivery would yield higher levels of satisfaction than a traditional professional development workshop. This statistical test was appropriate because in this study, there was only one grouping (delivery method) being used to define the groups. An ANOVA was selected because this statistic measures the differences between two groups (online workshop participants compared to on-campus workshop participants) and because it allowed for the determination of whether the group means on overall satisfaction differed significantly. I conducted the chi-square analysis comparing compliance for the both groups and the ANOVA comparing satisfaction for both groups.

Two types of assessments were used for this study. Compliance for each workshop was based on participation. Satisfaction with the workshop was measured using a workshop evaluation survey the college had adopted as part of its annual summative evaluation of the professional development program. Lodico, Spaulding, and Voegtle (2010) described combining program evaluation techniques and research methodology to inform decision and policy making in educational settings. These

assessments were selected because they provided the information needed to produce a policy recommendations report, which included actions that could potentially improve adjunct faculty compliance and satisfaction.

I summarized participant demographics including teaching experience, age, gender, race, ethnicity, and hours spent teaching for the control and experimental groups. Compliance was based on participation in the workshop and measured as a continuous variable. The satisfaction survey yielded both categorical data and ordinal data. As recommended by Creswell (2012), I analyzed descriptive and inferential statistics to test the hypotheses. I used descriptive statistics to compare the experimental and control groups on participation in the professional development workshop. The descriptive analysis of compliance I conducted was based on the percentage of adjunct faculty members who attended each workshop. I performed a chi-square analysis to determine whether the alternative delivery method yielded higher levels of compliance than the traditional professional development workshop. I used an ANOVA to determine whether the alternative delivery method yielded higher levels of satisfaction than a workshop.

Assumptions, Limitations, Scope, and Delimitation

Assumptions

This study incorporated the assumptions that the professional development workshops offered online and on campus differed only in the method of delivery used and that the delivery method did not substantially change the quality of the material presented at the workshop. The study did not address variances in participant experience or interest in computer technology or Internet-based applications. I also assumed that

random assignment addressed any differences in the two groups of faculty members and that experience and interest differences did not affect their satisfaction and compliance.

Limitations

Limitations of the study included influences on the participants unrelated to the experimental condition. Additional limitations included individual participant characteristics, communication among participants outside of the experiment setting, and the impact of workshop facilitator bias in presentation of the workshops. A limitation that may challenge the external validity of the study was its narrow focus. The narrow focus of the project study limited its scope and the generalizability. The study's results cannot be generalized to individuals who do not share the characteristics of the participants or who are in other settings.

Scope

The scope of the study was limited to one college's experience. The study was part of a larger evaluation of the professional development program. The study was focused only on current adjunct faculty employed by the college in health care administration, community health, and nursing programs.

Delimitations

This study was delimited to adjunct faculty members who were employed by the college's health administration, community health, and nursing programs. Faculty who meet all other qualifications but are not currently working as adjunct faculty were excluded from the study. Restricting participation to adjunct faculty members who were currently working in these programs is consistent with the college's mandate that the

project study focus on the programs that have the lowest levels of compliance and satisfaction with professional development. Satisfaction was measured using a modified Likert-type scale with an instrument designed specifically to evaluate the satisfaction with professional development programs held in a variety of settings.

Protections of Participants' Rights

The annual professional development workshop is a requirement for adjunct faculty, and participants were not exposed to professional or personal harm as a result of participation or nonparticipation. Each participant was required to complete an informed consent form, provided by the workshop facilitator, which included a general description of the purpose of the study. The names of workshop participants were kept confidential in order to ensure that the rights of participants were protected. The facilitator randomly assigned faculty members to the control and experimental group and collected all completed workshop evaluation surveys. The workshop evaluations that I received did not include any identifying information. My role in the study was to enter data for each participant into a database using a unique identifier that maintained participants' confidentiality. I analyzed data for both the experimental and the control group and prepared a policy recommendations report summarizing the research findings for the college's administration (Appendix A). I attended and successfully completed the ethics training course presented by the National Institutes of Health. I received Walden Institutional Review Board (IRB) approval for the methodology of the study. The IRB approval number is 06-24-14-0228106I.

Data Analysis Results

The data analysis included both descriptive and inferential statistics. I used IBM SPSS Version 21 to perform the analysis. I conducted a descriptive analysis that compared the experimental and control groups on participation in the professional development workshop. The descriptive analysis of compliance was based on the percent of adjunct faculty members who attended each workshop. Descriptive statistics and tables were used to summarize demographic and compliance data. The project deliverable resulting from the study was a policy recommendations report that would describe the findings and recommend actions the college could take to improve adjunct compliance and satisfaction with the professional development program.

Demographics

In order to produce a simple description of the nominal-level variables used in the study I used descriptive statistics to summarize the demographics of the sample. Tables 1 through 6 summarize workshop participants' teaching experience, age, ethnicity, race, gender, and hours spent teaching. The following is a description of the demographics of the workshop participants.

Teaching experience. The workshop participants were experienced instructors. The majority of workshop participants reported teaching in higher education for between 1 and 10 years. Most of the participants reported teaching at the local college between 1 and 3 years. Table 1 summarizes the number of years participants reported teaching in higher education. Table 2 depicts the number of years participants reported teaching at this college.

Table 1

Years Teaching in Higher Education by Group

	Online		On campus		Total	
	N	%	*N*	%	*N*	%
less than 1 year	5	13%	2	7%	7	10%
between 1 and 3 years	15	38%	13	43%	28	41%
between 3 and 10 years	9	23%	8	27%	17	25%
Over 10 years	9	23%	7	23%	16	23%
No response	1	3%	0	0%	1	1%
Total	39		30		69	100%

Table 2

Years Teaching at This College by Group

	Online		On campus		Total	
	N	%	*N*	%	*N*	%
less than 1 year	5	13%	3	10%	8	12%
between 1 and 3 years	20	51%	17	57%	37	54%
between 3 and 10 years	6	15%	5	17%	11	16%
Over 10 years	7	18%	5	17%	12	19%
No response	1	3%	0	0%	1	0%
Total	39		30		69	100%

Age, gender, race, and ethnicity. The majority of workshop participants were between 22 and 49 (54%) years of age. Table 3 shows the distribution of the participants by age.

Table 3

Workshop Participants by Age

Age	21 or younger		22-49		50-65		Over 66		No response		Total	
	N	%	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%
Online	0	0%	22	54%	10	56%	5	71%	2	67%	39	57%
On campus	0	0%	19	46%	8	44%	2	29%	1	33%	30	43%
Total	0	0%	41		18		7		3		69	100%

The majority of on campus workshop participants were male (58%) while the majority of online workshop participants were female (74%). Table 4 summarizes the participants by gender.

Table 4

Gender Distribution of Workshop Participants

	Male		Female		No response		Total	
	N	%	*N*	%	*N*	%	*N*	%
Online	15	42%	23	74%	1	33%	39	57%
On campus	21	58%	8	26%	1	67%	30	43%
Total	36		31		2		69	100%

Most workshop participants were White, European American, non-Hispanic (33%), followed by Black, African or Caribbean American, non-Hispanic (32%), Latino American, Hispanic (16%), Asian American or Asian (3%) and 10% of workshop participants reported other or no response to the question. Table 5 shows the race and ethnicity of the participants.

Table 5

Racial and Ethnic Distribution of Workshop Participants

	Online		On Campus		Total	
	N	%	*N*	%	*N*	%
White, European American – Non Hispanic	9	23%	14	47%	23	33%
Black, African or Caribbean American – Non-Hispanic	11	28%	11	37%	22	32%
Latino American, Hispanic	8	21%	3	10%	11	16%
Asian or Asian American	0	0%	2	7%	2	3%
Other or No response	11	28%	0	0%	11	16%
Total	39		30		69	100%

Hours spent teaching. All of the workshop participants were adjunct instructors. The mean for the number of hours workshop participants spent teaching college courses was 6.84 per week. Some workshop participants reported currently teaching no classes while the maximum number of hours spent teaching was 16. Table 6 shows descriptive statistics for the number of hours participants reported teaching.

Table 6

Descriptive Statistics for Hours Spent Teaching

Mean	6.848
Standard error	0.396
Median	6.500
Mode	6.000
Standard deviation	3.291
Range	16
Minimum	0
Maximum	16
Count	69
Confidence level (95.0%)	0.790673532

Research Questions

Research Question 1. The first research question addressed by this study was whether an alternative delivery method would yield higher levels of compliance than a traditional professional development workshop. Compliance was measured based on participation in the workshop that the adjunct faculty member was invited to attend. Online participants had higher levels of compliance (98%) than on campus participants (75%). Table 7 shows compliance data for each delivery method.

Table 7

Workshop Compliance: Invited Compared to Actual Attendees

	Invited	Attended	% of Invited
Online	40	39	98%
On campus	40	30	75%
Total	80	69	86%

To determine whether the difference in compliance levels for the online and the on campus groups was statistically significant a chi-square analysis was conducted. Compliance was significantly higher for the online participants than it was for the on campus participants, X^2 (1, N = 69) = 8.538, $p < .01$, therefore the null hypothesis was rejected. The alternative hypothesis that an alternative delivery method would yield higher levels of compliance than a traditional professional development workshop was accepted.

Research Question 2. The second research question addressed by this study was whether an alternative method of delivery would yield higher levels of satisfaction than a traditional professional development workshop. Overall satisfaction was measured using the first question from the Likert scale in the workshop evaluation survey. This question asked the degree to which workshop participants agreed with the statement "I was satisfied with the overall quality of the workshop". The scale for this question was 1 = strongly agree and 5 = strongly disagree. A one-way ANOVA was conducted to analyze the group differences in scores on overall satisfaction. The findings of the ANOVA on overall satisfaction indicate that the control and experimental group differed significantly

on overall satisfaction. Results of the analysis indicated that overall satisfaction was significantly higher for participants in the online workshop compared to participants in the on campus workshop, $F(4, 64) = 2.974$, $p < .05$. These findings allowed for the rejection of the null hypothesis and acceptance of the alternative hypothesis that an alternative delivery method would yield higher levels of satisfaction than a traditional professional development workshop. Table 8 includes descriptive statistics for overall satisfaction by workshop. Table 9 includes a summary of the one-way ANOVA findings for overall satisfaction by type of workshop attended. The results indicate that the control and experimental group varied significantly on overall satisfaction.

Table 8

Descriptive Statistics for Overall Satisfaction by Workshop

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Strongly Agree	12	1.42	.515	.149	1.09	1.74
Agree	40	1.30	.464	.073	1.15	1.45
Undecided	1	2.00	.	.	.	.
Disagree	11	1.73	.467	.141	1.41	2.04
Strongly Disagree	5	1.80	.447	.200	1.24	2.36
Total	69	1.43	.499	.060	1.31	1.55

Table 9

Analysis of Variance for Overall Satisfaction by Workshop

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.658	4	.665	2.974	.026
Within Groups	14.298	64	.223		
Total	16.957	68			

Summary of Outcomes

This study was conducted to determine whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop. Analyses of data were conducted using descriptive and inferential statistics. The summary of demographics of the sample indicated that the majority of workshop participants reported teaching in higher education for between 1 and 3 years, were male and aged between 22 and 49. The workshop participants represented a variety of racial and ethnic backgrounds. The results of the chi-square analysis supported the alternative hypothesis, which stated that an online delivery method would yield higher levels of compliance than a traditional professional development workshop. Results of an ANOVA indicated that participants in the online workshop reported higher levels of overall satisfaction than those who attended the on campus workshop. These findings allowed for the rejection of the null hypothesis and acceptance of the alternative hypothesis that an online method of delivery would yield higher levels of satisfaction than a traditional professional development workshop.

The findings of the project study resulted in a policy recommendations report which included a description of the problem, review of the literature, summary of the study results and recommendations for improving adjunct faculty professional development at the college (see Appendix A). The policy recommendations report includes specific, evidence-based actions that can be implemented within months as well as actions that can be incorporated into the college's continuous quality improvement plan for professional development.

Conclusion

This quantitative study was designed to determine whether an alternative delivery method would yield higher levels compliance and satisfaction than a traditional professional development workshop. The study analyzed the impact of an alternative delivery method on adjunct faculty members' compliance and satisfaction using archival data. The hypothesis tested was whether an alternative method of delivery would yield higher levels compliance and satisfaction than a traditional professional development workshop. The study compared compliance and satisfaction for two delivery methods, online and on campus. The findings of this study addressed both research questions. The findings indicated that compliance was significantly higher for attendees of the online workshop. These findings allowed me to reject the null hypothesis and accept the alternative hypothesis that an alternative delivery method would yield a higher level of compliance than a traditional professional development workshop. The findings also showed that satisfaction was significantly higher for attendees of the online workshop. These findings allowed me to reject the null hypothesis and accept the alternative

hypothesis that an alternative delivery method would yield higher levels satisfaction among adjunct faculty than a traditional professional development workshop.

Section 3: The Project

Introduction

The problem I addressed by conducting this project study was low levels of compliance and satisfaction with the professional development program among adjunct faculty members at a local college. The genre I used for this project was a policy recommendations report. In the policy recommendations report, I described the background of the problem and included a review of the literature, a summary of the findings of the study, and recommendations for improving adjunct faculty professional development at the college (see Appendix A). Additionally, I outlined evidence-based actions that are potentially implementable. I also addressed the resources needed for improving professional development at the college. This section includes a description of the project that I developed based on the findings of the study. I have included a discussion of the goals of the project and the rationale for selecting the policy recommendations report. In addition, I have included a review of the literature related to the components required for a policy recommendations report and how it was used to inform policy decisions in this educational setting. Last, I discuss the implications for social change presented by the project.

Description and Goals

Based on the findings of the study, I prepared a policy recommendations report that highlighted important findings of the study and included specific recommendations for improving professional development. The report included an executive summary, a description of the problem, a literature review, policy recommendations, and a

presentation depicting the highlights of the study. The purpose of the study was to determine whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop. The findings of the study provided the college's administration with evidence-based recommendations for improving faculty compliance and satisfaction with professional development. My goal in producing a policy recommendations report was to present the college with a deliverable that would serve as the basis for changes in how professional development is delivered and that would be incorporated into a continuous quality improvement plan. I also selected this genre because of the need for rapid distribution of the findings and recommendations to the college's administration. My community partners determined that the findings of the study should be distributed to key individuals in the college's administration in the form of a policy recommendation report and a group presentation.

In addition, my community partners and I determined that the report should include both short-term and long-term recommendations for improving professional development for adjunct faculty members. The short-term recommendations included providing faculty with online access to professional development resources and implementing methods for incorporating faculty input into the design of professional development programs. Long-term recommendations included increasing the professional development delivery options available to adjunct faculty members and exploring alternative methods of delivery such as the use of simulations and synchronous training. The first two recommendations were deemed part of the short-term plan that would be

implemented within 6 months. The latter two recommendations would be incorporated into the continuous quality improvement program, which would unfold over several years. The long-term recommendations required continuous analysis of adjunct faculty compliance and satisfaction with different methods of professional development.

The short-term recommendations involved the use of available resources to provide online access to professional development materials and implement methods for incorporating faculty input into the design of professional development programs. Giving adjunct faculty members access to professional development resources such as presentations, audio- and videotaped lectures, and sample documents required minimal additional resources because the college already had the necessary materials, equipment, and expertise needed to implement this recommendation. Developing a method for receiving adjunct input regarding professional development programs was accomplished with minimal additional resources through email solicitations and by installing an electronic drop box on the professional development webpage.

Recommendations that would be incorporated into the continuous quality improvement program included increasing the options available to faculty for completing the professional development requirement and exploring alternatives such as the use of simulations and synchronous delivery methods. These recommendations would require additional resources and further investigation. Increasing the options available for professional development would require the college to investigate the fiscal and professional impact of variations of professional development for each program. For example, simulations that are appropriate for nursing may not be appropriate for health

care administration. These variations might include hybrids that involve on-campus and online presentations and activities, partnering with other higher education institutions to share resources, or using training and faculty development forums available via the Internet.

Online professional development is multidimensional and can use several different technologies. This study used an asynchronous delivery method. No simulations were used. In the health care industry, online professional development often includes synchronous delivery and the use of simulations to create a real-time, realistic virtual environment. There are currently many software applications used to teach and promote best practices in clinical and administrative decision making. These sophisticated software applications vary in their cost as well as their technological and training requirements. Each of these methods of professional development has strengths and weaknesses, and the college would need to conduct continuous analyses to determine the impact of different methods on compliance and satisfaction. Implementing this recommendation would require a detailed cost/benefit analysis to determine feasibility. Conducting a feasibility study to determine future possibilities for professional development would become part of the ongoing quality improvement program for the college.

Rationale

The purpose of the project was to describe implementable actions for improving professional development for adjunct faculty members. The project addressed areas related to improving faculty compliance and satisfaction that were raised by the findings

of the study. The criterion I used to design the project was based on the need to present the findings and recommendations resulting from the study in a format containing actionable steps for improving the professional development program. The policy recommendations report was an appropriate method for rapidly disseminating the research findings and recommendations to key community partners and the college's administration. The policy recommendation report includes specific recommendations based on analysis of participant responses. The recommendations are related to those factors that contributed to faculty compliance and satisfaction with the workshop. The sections of the report related to long-term strategies for improving professional development will be incorporated into the college's continuous quality improvement program.

Review of the Literature

The search strategy I used involved a multidatabase electronic search using key words and phrases related to project management, policy and recommendations reports, project deliverables, and organizational change in higher education settings. I conducted the search through the online Walden University library using the EBSCO multi-search database. Other databases I searched included Education Research Complete, SAGE, ProQuest, and ERIC. I also used the libraries of two local colleges. The terms used in the search included *policy*, *research reports*, *continuous quality management*, *recommendation reports*, and *project deliverables*.

Components of the Policy Recommendations Report

Each component of the policy recommendation report addressed the argument that online professional development could improve compliance and satisfaction among adjunct faculty at the local college. McIntosh and Ginther (2013) referred to the policy recommendation report as a type of research paper that shares the characteristics of other genres such as theses and dissertations. McIntosh and Ginther noted the importance of addressing the argument presented by the researcher in the recommendations report. Brownson, Colditz, and Proctor (2012) described the policy recommendations report as a suitable method for disseminating research findings and initiating project implementation. Kangiser (2011) developed guidelines for producing a useful recommendations report that includes an executive summary, a description of methodology, a literature review, findings, and actionable recommendations. The policy recommendations report I prepared conforms to Kangiser's guidelines, is based on the findings of the study, and includes a plan for continued data collection and evaluation.

Community Partner Involvement

For this project study, the college can be viewed as my client. Kangiser (2011) emphasized the importance of client input into the format and structure of project deliverables. In meetings with representatives of the college, it was determined that the project deliverable should include a description of the problem, justification for the research method selected, and evidence-based actionable recommendations. The policy recommendations report genre allowed me to present this information in a format that could be easily distributed to and understood by key policy makers.

My community partners and I collaboratively determined the project's goals and deliverables from the beginning of the study. Miles and Woods (2014) described a process for developing evidence-based policy recommendations that incorporate community partners' input. The concept of working collaboratively with community partners when planning project deliverables was also supported by Evans, Snooks, Howson, and Davies (2013). Wisdom, Cavaleri, Onwuegbuzie, and Green (2012) described the importance of incorporating the perspectives of policy makers in research intended to impact educational policy. My community partners were included in the planning phase of the policy recommendations report. Prior to developing the policy recommendation report, meetings were held with the department chairs to determine the format of the project study deliverables.

The importance of collaborating with end users in producing recommendations reports based on research was revealed in the literature review. Cherney, Povey, Head, Boreham, and Fergusen (2012) noted that collaboration between researchers and end-users is essential for increasing use of research findings to inform policy decisions. By using a format that highlighted specific actions and the resources needed for implementation, I sought to present my research in a format that reflected a recognition of the needs of those who would be directly responsible for implementing the recommendations.

The policy recommendations report links specific recommendations to themes that emerged from the study. Sandelowski and Leeman (2012) suggested that translating policy recommendations into thematic statements could improve intervention and

implementation in educational settings. These themes included increasing faculty access to professional development materials, integrating faculty input into program development, and exploring alternative methods for professional development.

Addressing Obstacles to Implementation

In the policy recommendations report, I have addressed the environment and anticipated obstacles to implementation for each recommendation. Wheeldon (2011) emphasized the importance of addressing obstacles to implementation in policy recommendation reports used for managing ongoing projects. These obstacles include failing to adequately plan for the costs of implementation and insufficient monitoring of the progress of long-term projects. The recommendations in the report dealt with these challenges by planning for the cost of implementation and including a process for monitoring ongoing progress through the continuous quality improvement plan.

Use of the Policy Recommendation Report in Education

In preparing the policy recommendations report, I reviewed several sources to ensure that I was addressing specific problems in implementing policy changes in higher education. The policy recommendations report I prepared for the college outlined solutions that directly address the problems of poor compliance and satisfaction with professional development. It was also important that the policy recommendations report was unbiased. Canada, Pigott, Polanin, Valentine, and Williams (2013) discussed the importance of diligence in reporting all findings in the report. The policy recommendations report described all the findings from the study, thereby decreasing bias in reporting the results.

The policy recommendations report was designed to be useful by the diverse group of health, education, and technology professionals involved in improving the professional development program. Rao (2014) viewed the policy recommendations report as an effective mode for communicating research findings to diverse professionals. Rao emphasized the importance of using the recommendations report to communicate the theoretical basis for research that informs policy and the importance of explaining the findings in clear, nondogmatic terms that can be understood by multidisciplinary policy makers. Ball (2012) discussed the effective use of the policy recommendations report format for addressing policy changes in higher education. Gray (2013) also supported the use of the policy recommendations report as preferable to other genres for reporting education research. Wisdom et al. (2012) found that the policy recommendations report format is also suitable for reporting research related to educating health care professionals. Ball, Gray, and Wisdom et al. supported the use of the policy recommendations report for reporting and implementing changes in educational settings and for health care professionals. These researchers supported the use of this genre for reporting research related to educating health care professionals.

The goal in designing the project was to produce a document that would be the basis for implementing an ongoing program to improve professional development. The field of implementation research has addressed how to improve the ability of institutions to implement organizational change based on research. Peters, Adam, Alonge, Agyepong, and Tran (2013) described the importance of presenting the research results in a format that supports implementation by connecting them to actionable activities. Neta et al.

(2015) emphasized the importance of the recommendations report including a description of the planning component of the research in addition to the methodology, evaluation, and long-term outcomes. The components of the policy recommendation report I prepared for the college addressed each of these critical areas.

For insight into improving the implementation of research recommendations, I used normalization process theory (NPT). Murray et al. (2010) developed NPT as a structure for developing and implementing complex interventions. The developers of NPT suggested that policy recommendations be construed as routine work (Murray et al., 2010). When recommendations are turned into routine work, the effort becomes normalized. According to Murray et al., "The components needed for normalization include coherence, cognitive participants, collective action, and reflexive monitoring" (p. 63). The recommendations report addressed each of these components through a coherent plan for improving compliance and satisfaction with the professional development program. Cognitive participation and collective action were addressed in the planning phase of the project when the chairs and directors of the departments assigned specific responsibilities and tasks related to conducting the study, and later, to project implementation. Reflexive monitoring was addressed in the long-term recommendations for continuous quality improvement. The college created a subcommittee consisting of department chairs and representatives from human resources tasked with designing a 5-year plan for improving professional development. The objective of the subcommittee was that the policy recommendation report resulting from the study would be incorporated into the 5-year continuous quality improvement (CQI) plan. The CQI

approach to organizational change was selected because it integrates worker and management perspectives into the planning and implementation phases of training and professional development. The goal of CQI is to design and implement an atmosphere that fosters cooperation among management and workers (Clark, Silvester, & Knowles, 2013). The CQI approach is consistent with the college's commitment to improving the quality of the professional development program offered to adjunct faculty members and supported by the results of the study related to increasing faculty input. Solomons, and Spross (2011) described the effective use of CQI for overcoming barriers to organizational change. O'Neill et al. (2011) noted that ongoing data collection and quantifiable benchmarks are essential components of an effective CQI plan. The policy recommendations report presented to the college describes methods for ongoing data collection to measure progress toward specific quantifiable benchmarks. O'Neill et al. described key features of CQI plans that are essential for identifying, designing, and reporting on CQI projects. Key features include effective use of data and knowledge of local conditions. The policy recommendations report includes a mechanism, as part of the CQI plan, for continued data collection and re-evaluation of the impact of change within the organization. The policy recommendations report will serve as part of the college's CQI plan to use data collected during professional development activities to improve adjunct faculty compliance and satisfaction. Incorporating the recommendations into the CQI allowed for the normalization of the professional development improvement process.

Implementation

Project Description

The project implementation involved preparing a policy recommendations report that was incorporated into the college's continuous quality improvement plan for professional development. The policy recommendations report (Appendix A) included an executive summary and complete description of the study including a review of the literature, methodology, and findings. The report also included short and long term recommendations for improving adjunct faculty compliance and satisfaction with the professional development program. The results of the study revealed two short-term recommendations that were implemented within weeks of concluding the study. These recommendations were to make the professional development workshop accessible online after the workshop's conclusion and to incorporate faculty input into the selection of professional development topics. These recommendations have begun to change the role of the workshop instructor to one of facilitator. The long-term recommendations require additional investigation and resources. These recommendations are related to experimenting with different online modalities and technologies such as synchronous workshops and simulations. They will continue to be part of the college's ongoing efforts to improve the professional development program.

Potential Resources and Existing Supports

Potential resources necessary for implementing the short-term recommendations included obtaining access to each program's web page, personnel with the ability to post materials online, and relevant professional development and training materials. The

contractual arrangement with the professional development facilitator makes the college the owner of the workshop materials and gives it the ability to post them online. Existing supports included access to the Internet, computer hardware, and software applications, and the availability of faculty technical training offered by information technology personnel. The resources necessary for implementing the short-term recommendations are currently available at the college.

Potential Barriers

There were no barriers to implementing the short-term recommendations. Potential barriers to implementing the long-term recommendations include the need to identify additional resources to investigate appropriate delivery methods for each of the three programs represented in this study; health care administration, community health, and nursing. The constant evolution of computer technology and issues related to expanding in-house capacity, or contracting with outside developers must be addressed prior to implementing substantial changes in the use of technology for professional development. Overcoming barriers to implementing the long-term recommendations are addressed in the CQI plan.

Proposal for Implementation and Timetable

Implementation of the project involved several steps. The first step involved meeting with the chairs of each department and representatives from human resources and the information technology departments to determine the format of the project deliverables. The next steps involved developing a recommendations report, conducting a presentation of the study for the college's administration and planning the

implementation of the short-term recommendations. In the beginning of July 2014 a meeting was held with the PGS chair to determine the formats for the recommendations report and presentation. The chair provided an outline for the recommendations report and presentation that would be incorporated into the continuous quality improvement plan for the college. I completed the recommendations report and forwarded it to the department chairs on July 15, 2014. The presentation of the study was conducted at the college on July 25, 2014. On July 31, 2014 I attended a meeting held with the workshop facilitator and representatives from the information technology department to plan implementation of the short-term recommendations. The project facilitator and the college's administration will continue to monitor the program and make adjustments based on evaluation of data from future professional development programs.

The goal of the implementation plan for the short-term recommendations was to have each one fully implemented by the end of the Fall term in 2014. These recommendations were fully implemented by December 2014. Adjunct faculty in all three programs now have online access to materials for professional development workshops presented in September and October 2014 and an electronic drop box has received ten requests for workshops on specific topics. The workshops presented since September 2014 have used the workshop evaluation survey to collect data for future study of the impact of the policy changes. The CQI plan for the college has been revised to reflect implementation of the long-term recommendations included in the report. The five-year plan includes funding for additional research on alternative delivery methods for professional development tied to other policy and program changes. The availability

of this funding is based on plans for expanding the nursing program and increasing admission rates in the other health care programs. The short-term recommendations have been fully implemented while the long-term recommendations remain part of the CQI plan to improve professional development.

Roles and Responsibilities of Student and Others

The department chairs and I were jointly responsible for identifying the areas addressed in the presentation and the recommendations report. I was responsible for completing the recommendations report and conducting the presentation. The workshop facilitator was responsible for arranging the venue for the presentation and sending invitations to the participants, which included selected faculty, representatives from the human resources department and others. Implementation of recommendations is the responsibility of the workshop facilitator with the assistance of representatives from the information technology department and the college's administration.

Project Evaluation

The evaluation plan will be implemented by an independent reviewer who will serve as a nonbiased external evaluator. The college has included funding for this position as part of the CQI program. This approach is supported by Spaulding (2008) who described the importance of an independent evaluation to inform decision-making and for continuous quality management. The evaluator will be responsible for reviewing the project goals and objectives, developing methodology for the program evaluation and reporting the results to key stakeholders. Key stakeholders include the program chairs, human resource director and adjunct faculty participating in professional development.

The evaluation will be outcomes based. The outcomes measured will be adjunct compliance and satisfaction with the professional development program based on participation and responses to satisfaction surveys completed after each workshop or other activity. The overall goals of the project were to improve adjunct faculty compliance and satisfaction based on the findings of the study.

Implications Including Social Change

Local Community

The findings of project will contribute to the local community because improving adjunct faculty members' compliance and satisfaction with professional development has been associated with improving overall worker satisfaction and retention. The relationship between faculty compliance and satisfaction with professional development and improving overall satisfaction and retention was demonstrated by research conducted by Cleary et al. (2011), Cody et al. (2011), and Notarianni et al. (2009). In addition, participation and satisfaction with professional development is associated with decreasing adjunct isolation (Dolan, 2011; West, 2010). By reducing professional isolation, effective professional development contributes to better trained faculty and better student outcomes. Improving student outcomes positively impacts communities.

Far-Reaching

The potential far-reaching impact of the project is related to the use of technology to improve student outcomes. In the larger context of higher education, the use of distance learning technology will continue to be transforming. The expansion of online professional development is essential for creating local, national, and global networks of

health educators. Direct and indirect costs currently associated with traditional professional development may be greatly reduced through the use of computer technology. Online professional development could potentially expand and enhance professional training available in rural, poor and other underserved communities world-wide. Because this is a limited study and centered in a specific context, the results are not intended to be generalized to other settings. However, the findings support additional research related to online professional development and may be of use to other colleges and universities that are attempting to improve compliance and satisfaction with professional development among adjunct faculty members.

Conclusion

The intent of this project study was to increase levels of compliance and satisfaction among adjunct faculty members. This project tested assumptions about adult learners, the concepts of self-directed learning, and connectivity in a local setting by comparing the impact of an alternative delivery method on compliance and satisfaction with a professional development workshop. It is anticipated, that the results of this project study may support the application of theories related to adult learning, self-directed learning, and connectivity to professional development for adjunct faculty members in other settings.

Section 4: Reflections and Conclusions

Introduction

In the following section, I describe the project's strengths and address its limitations. I describe what I learned through the planning and implementation of the project study related to leadership and social change. I also provide an assessment of what I have learned as a scholar, practitioner, and leader.

Project Strengths

The strength of this project was that it precipitated actions that directly addressed adjunct faculty participation and satisfaction. The study resulted in a policy recommendations report that described actions that use existing resources. These measures were implemented 3 months after the study ended. The policy recommendation report also included measures that have the potential to improve adjunct faculty satisfaction and participation, which require further investigation and resources. These long-term recommendations were incorporated into the local college's ongoing continuous quality improvement plan.

The rationale for the recommendations related to facilitating access to professional development resources and incorporating faculty input into topic selection is that workshop participants specifically identified these areas as contributing to their satisfaction with the professional development workshop. Additionally, the rationale for implementing these specific recommendations was that they require only minimal additional resources and no further investigation. The rationale for the long-term recommendations was the need to develop a diverse and responsive professional

development program that takes advantage of current and future technology. Therefore, the report also includes two recommendations that became part of the college's continuous quality improvement program. The recommendations are consistent with the theory of andragogy, as well as the concepts of self-directed learning and connectivism. The project's recommendations to increase access to professional development materials and incorporate faculty in the selection of topics are suitable for adult learners and support self-directed learning. Enhancing connectivity through technology is addressed by the long-term recommendations.

Faculty Input and Access

The recommendations included in the report are consistent with the theory of andragogy and the concepts of self-directed learning and connectivity. The report recommendations for making resources available to faculty online and increasing faculty input into the design of professional development programs are compatible with Knowles's assumptions about adult learners (Knowles, 1975). The recommendations are also consistent with research conducted by Sang (2010) related to self-directed learning and the need for the locus of control to be within the adult learner. The recommendations take advantage of characteristics of self-directed learners as described by Sang, such as independence, self-discipline, and self-confidence. The recommendations encourage faculty support through ongoing access to professional development resources.

This approach to faculty support and development was found to be successful. Barnes, White, Winstanley, and Reed (2013) found that making professional development resources available following training was helpful for adjunct faculty and

increased participation in faculty development. In addition, Kellam, MacDonald, Archibald, and Puddester (2012) described the effectiveness of faculty having ongoing access to videotaped materials for professional development for improving work satisfaction. Another example of the importance of ongoing access to professional development resources was demonstrated by Shaw, Long, Chopra, and Kerfoot (2011). Shaw et al. used an on online delivery method to reinforce information and skills that had been introduced in a traditional professional development program. These researchers found that participant satisfaction and retention of important information were greatly improved with ongoing access to resources. Goldman (2010) discussed the advantages of online professional development and noted the importance of universal access to resources that support learning. These researchers demonstrated that this approach to faculty support and development is effective for increasing adjunct satisfaction.

Changing the role of the workshop instructor to one of facilitator is essential to implementing the report's recommendations because it supports the view of adjunct faculty as self-directed learners capable of active participation in designing professional development activities. Lesley (2008) suggested that professional development designers must be prepared to serve adult learners who operate well in a facilitative style of instruction that changes the role of the instructor to that of facilitator. Cook and Steinert (2013) found that professional development was most successful when it addressed a relevant need as defined by participating faculty. Bunton et al. (2012), in a study of medical school faculty, found that input into professional development programs positively impacted workplace satisfaction. Levene and Boulware (2014) found that

collecting data from faculty through interviews and questionnaires revealed themes for topics that improved the quality of the professional development program. Shifting the role of the workshop instructor to that of facilitator encourages adjunct faculty participation in the development of professional development activities that are responsive to their needs.

The recommendation to include faculty input in the design and delivery of professional development is also supported by the concept of connectivism. Key to connectivism is establishing reciprocal relationships among adjunct faculty and the facilitator. It is important to connect the adjunct faculty member to a community that facilitates learning while also feeding the network with information. The project's goal of establishing a learning community that is part of a wider network of professionals is consistent with research conducted by Bridges et al. (2011). These researchers demonstrated that faculty members became more participative when their colleagues used a training model that incorporated their experience. Varela (2012) found that in-service programs that lacked faculty participation in the design of professional development had lower levels of compliance than those that involved faculty. Professional development programs that do not acknowledge and incorporate faculty experience discourage the active participation needed to establish learning communities.

The narrow focus and limited scope of the study challenge its external validity and generalizability. The small sample means that the findings cannot be applied to adjunct faculty members who do not share the characteristics of the workshop participants. The findings of the study may not be replicated in other settings.

Recommendations for Remediation of Limitations

In order to remediate the limitations previously described, additional research is recommended that will determine whether the findings of the original study are replicated. Another possible remediation would be to conduct a meta-analysis of research related to online professional development. An additional limitation of the study was that it only examined an asynchronous online professional development experience, whereas there are a variety of distance learning techniques and technologies. Remediation of this limitation would require further research that uses alternate technologies and strategies.

Alternative Delivery Methods

The project's recommendations to examine the impact of alternative delivery methods was intended to address the study's limitations related to only examining the impact of an asynchronous online delivery method that relied on a videotaped presentation, downloadable documents, and a discussion board. There are several single and combined delivery methods used for online professional development that were not addressed by this study; therefore, the project includes a recommendation for exploring alternative delivery methods that use various computer technologies as part of the college's continuing improvement plan. The need to explore alternative delivery methods is supported by recent research. Cooper and Johnson (2013) described the use of Web 2.0 technologies and social media to create a constructivist approach to innovative professional learning. Klein, Niebuhr, and D'Alessandro (2013) concluded that the challenges of faculty development related to expense and distance can be overcome with

the use of social media. The report I prepared recommended that the college explore the use of these technologies to enhance connectivity.

Several researchers have described the use of video and simulation technology to enhance online professional development. Scott and Scott (2010) described the wide-ranging use of multimodal, varied technologies to advance the professional development of communities of adult learners. Rogers (2011) described the use of simulations to conduct multiuser professional development programs with virtual environments to enhance health care education. Roger's research demonstrated that immersive multiuser virtual environments combine effective learning strategies with comprehensive learning materials. This combination creates a virtual clinical experience within an immersive setting. Another alternative method of online delivery that deserves further exploration is the use of synchronous applications. Marsh and Mitchell (2014) explored the role of video in professional development online delivery alone or combined with asynchronous delivery methods. Marsh and Mitchell found that video technology used synchronously and asynchronously can extend the quality of professional development. Tomlinson et al. (2013) explored the use of teleconferencing applications to facilitate synchronous professional development. Tomlinson et al. found that synchronous learning technologies enable distance learning opportunities that produce comparable learning outcomes to traditional models of professional development. Virtual environments, video, and simulation technology enrich online professional development by providing realistic and safe environments for exploration and experimentation.

Blended methods of delivery that combine online and on-campus professional development activities have also demonstrated promising results. Hodges and Cady (2013) explored the impact of a 2 year, blended-format delivery method on a professional development program. The method used for their research involved online synchronous, online asynchronous, and face-to-face delivery. Hodges and Cady found that this professional development model supported the development of a community of practitioners among teachers who participated in the program. The recommendations report advises the college to explore the use of blended methods to improve compliance and satisfaction with the professional development program.

An alternative method for addressing this problem may be to compare the impact of synchronous, simulated, and hybrid methods of delivery on compliance and satisfaction. Another alternative method for addressing low levels of participation and satisfaction with professional development might be a qualitative approach that would involve focus groups and unstructured interviews with adjunct faculty members. Finally, the college could investigate professional development strategies used by other higher education institutions to determine if other approaches, such as outsourcing professional development activities, have a positive effect on compliance and satisfaction with professional development.

Scholarship

Through the planning and implementation of this project study, I learned how to design and implement a quantitative analysis that addressed a local problem. The challenge I faced was meeting the standards necessary for conducting empirical research

while protecting the interests of the local institution. This project study has strengthened my scholastic abilities by requiring that I identify a local problem, conduct a comprehensive literature review, and apply theoretical perspectives in a higher education setting. The exhaustive literature reviews required for the project study contributed to my level of expertise in the areas of adult learning, self-directed learning, connectivism, and technology. The project study also required that I design a quantitative study, conduct several statistical tests, and interpret and report the findings in a policy recommendations report.

Project Development and Evaluation

This project study required the completion of several tasks associated with project development. These tasks included developing goals and objectives in conjunction with the college's administration, preparing an implementation plan, and conducting research as part of a larger evaluation program. The project study required that I negotiate with my community partners to ensure that the academic requirements of the project study were addressed along with my research interests and those of the college. The project study was developed over 3 years and often required adjustments related to deliverables. Unanticipated delays required flexibility and ongoing communication among the key individuals involved.

Leadership and Change

As a psychologist and educator, I view leadership in terms of acquiring and demonstrating specific traits. Traits of a good leader include intelligence, willingness to take risks, adapting to changing circumstances, general self-efficacy, and

conscientiousness. The project study challenged me intellectually by requiring the exploration and application of theories related to adult learning and educational technology. The project study required that I use all my knowledge of learning, applied research and project coordination. The project study challenged my ability to develop and maintain positive working relationships with the key individuals and local advisors throughout its planning and implementation. The traits of self-efficacy and conscientiousness were needed in order to ensure that the completed project was comprehensive, was ethical, and adequately addressed the local problem. The project study contributed to my development as a leader because it required that I use educational and psychological theory and empirical data to address institutional practices at the college in a practical and efficient manner.

Analysis of Self as Scholar

In order to progress from student to scholar, it was necessary to think independently and creatively about a local problem. The process of independent knowledge creation was a determining factor for my transition from student to scholar. Reviewing scholarly literature was also an important aspect of my transition from student to scholar. The practical application of research techniques in the design, implementation, and data analysis and reporting of the results of the project study all contributed to my scholastic growth.

Through the planning and implementation of this project study I learned how to design and execute a quantitative analysis that addressed a local problem. I also learned the importance of prioritizing the many tasks associated with project development. As a

psychologist and educator, I was able to acquire and exercise many important traits associated with leadership and project development. As a practitioner in higher education, I found that this project study expanded my knowledge of the relationship between professional development and overall satisfaction among adjunct faculty members. I also learned how to negotiate with my community partners to ensure that the academic requirements of the project study were addressed along with the research interests of the college.

Analysis of Self as Practitioner

As a practitioner in higher education this study expanded my knowledge of the relationship between professional development and overall satisfaction among adjunct faculty members. As an adjunct faculty member it was enlightening to see the importance of connectivity and networking. In addition, as someone who designs and conducts professional development programs for adjunct and full-time faculty, the project study raised my awareness of the variety of methods available for online professional development in the health care field.

Analysis of Self as Project Developer

This project study demonstrated that project development requires the identification of specific goals and objectives that can be further subdivided into specific tasks. This project study also emphasized the importance of building a trusting relationship with the college's administration and workshop facilitator. Completion of the project study required rescinding control over certain elements of the project such as data collection. In order to sustain my objectivity as an investigator and the integrity of the

study, it was necessary to trust the facilitator to conduct the workshops and collect data based on a plan approved by all the parties involved.

The Project's Potential Impact on Social Change

By addressing low levels of compliance and satisfaction among adjunct faculty members this project makes an important contribution to the field of higher education. Effective professional development is important because of the growing number of adjunct faculty in higher education. Professional development programs are essential since they provide opportunities for the dissemination of important information, skills development and networking with other faculty and staff. The findings of this project study show that an online delivery method does not diminish, and may improve, dissemination of important information, skills development, and networking. Networking is important for decreasing professional isolation among adjunct faculty members. This project study was also important because the findings support the use of professional development to build professional networks. Professional networks can be sources for best practices in higher education instruction. The information disseminated locally, nationally and globally, supported by empirical educational and psychological research, presents the potential for using technology to improve health care education and student outcomes in many different settings.

Implications, Applications, and Directions for Future Research

The implications of this project study are important for the field of health care where the unequal distribution of human and other resources is frequent. This project study supports the application of current technology for lifelong learning provided

through effective professional development. Also the project study demonstrated that an asynchronous workshop, available online, allowed for flexible delivery and distributed learning that is important for health care disciplines where workers with multiple responsibilities are common The findings of the study imply that an online delivery method can address reasons for nonparticipation identified by adjunct faculty logistical issues, such as timing and the centralized location of professional development programs. The project study has implications for future research including examining the impact of different types of distance learning technology, such as simulations and hybrids, on participation and satisfaction with professional development. The impact of various levels of interactivity and connectivity should be explored to determine whether technology driven delivery methods can encourage and strengthen adjunct faculty interaction and communication as well as satisfaction and compliance.

Conclusion

The project study successfully addressed a local problem of low levels of compliance and satisfaction with the professional development program among adjunct faculty members through the application of adult learning theory and analysis of empirical data. Weaknesses of the study include its narrow focus and limited scope. Possible remediation includes additional research in other settings and conducting meta-analyses of research related to online professional development. Another limitation of the study was that it only examined an asynchronous online professional development experience while there are a variety of distance learning techniques and technologies. Additional research comparing the impact of synchronous, simulated and hybrid methods

of delivery is needed. By addressing low levels of compliance and satisfaction among adjunct faculty members this project makes an important contribution to the field of higher education. Professional development programs provide opportunities for the dissemination of important information, skills development and networking with other faculty members and staff. The implications of this study are important for evolving the field of health care because the findings support the use of existing technology for lifelong learning provided through effective professional development.

References

American Federation of Teachers, Higher Education. (2010). A national survey of part-time and adjunct faculty. *American Academic, 2*, 1-15. Retrieved from http://aasrc.org/aasrj/index.php/aasrj/index

Ball, S. J. (2012). *Policies and policy making in education: Exploration in sociology*. London, England: Routledge.

Barksdale, D. J., Woodley, L., Page, J. B., Bernhardt, J., Kowlowitz, V., & Oermann, M. H. (2011). Faculty development: Doing more with less. *Journal of Continuing Education in Nursing, 42,* 537-544. doi:10.3928/00220124-20110301-01

Barnes, M., White, E., Winstanley, J., & Reed, R. (2013). Clinical supervision and continuing professional development for midwives in Queensland, Australia: Findings from an online survey. *Focus on Health Professional Education: A Multi-Disciplinary Journal, 14*, 1-2. Retrieved from http://www.limenetwork.net.au/content/focus-health-professional-education-multi-disciplinary-journal

Baumgartner, L. (2001). An update on transformational learning. *New Directions for Adult and Continuing Education, 89*, 15-24. doi:10.1177/1541344606295318

Beaver, A. (2009). Teachers as learners: Implications of adult education for professional development. *Journal of College Teaching & Learning, 6*, 25-30. Retrieved from http://journals.cluteonline.com

Betts, K. (2009). Online human touch (OHT) training and support: A conceptual framework to increase faculty engagement, connectivity, and retention in online

education. *Journal of Online Learning and Teaching, 5*(1), 29-48. Retrieved from http://jolt.merlot.org

Boitshwarelo, B. (2011). Proposing an integrated research framework for connectivism: Utilizing theoretical synergies. *International Review of Research in Open and Distance Learning, 1*(12), 61-179. Retrieved from http://www.academia.edu

Bollinger, D., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education, 30*(1), 103-116. Retrieved from http://cohortresearch.wiki.westga.edu

Boulos, M., Hetherington, L., & Wheeler, S. (2007). Second Life: An overview of the potential of 3-D virtual worlds in medical and health education. *Health Information Library Journal*, *24*, 233–245. doi:10.1111/j.1471-1842.2007.00733

Bridges, D. R., Davidson, R. A., Odegard, P., Maki, I. V., & Tomkowiak, J. (2011). Interprofessional collaboration: Three best practice models of interprofessional education. *Medical Education Online*, *16*(1), 1-10. doi:10.3402/meo.v16i0.6035

Brownson, R. C., Colditz, G. A., & Proctor, E. C. (2012). *Dissemination and implementation research in health: Translating science to practice*. New York, NY: Oxford University Press

Bunton, S. A., Corrice, A. M., Pollart, S. M., Novielli, K. D., Williams, V. N., Morrison, L. A., ... Fox, S. (2012). Predictors of workplace satisfaction for U.S. medical school faculty in an era of change and challenge. *Academic Medicine*, *87*(5), 574-581. doi:10.1186/1472-6920-14-21

Canada, D., Pigott, T., Polanin, J., Valentine, J. C., & Williams, R. (2013). Outcome reporting bias in education. *Educational Researcher, 11,* 18-22. doi:0013189x13507104

Carroll, C., Booth, A., Papaioannou, D., Sutton, A., & Wong, R. (2009). UK health-care professionals' experience of online learning techniques: A systematic review of qualitative data. *Journal of Continuing Education in the Health Professions*, *29*, 235-241. doi:10.1002/chp.20041

Cherney, A., Povey, J., Head, B., Boreham, P., & Fergusen, M. (2012). What influences the utilization of educational research by policy and practitioners? The perspectives of academic educational researchers. *International Journal of Educational Research*, *56*, 23-34. doi:10.1016/j.ijer.2012.08.001

Clark, D. M., Silvester, K., & Knowles, S. (2013). Lean management systems: Creating a culture of continuous quality improvement. *Journal of Clinical Pathology*, *66*(8), 638-643. Retrieved from: http://ajcp.ascpjournals.org/

Cleary, M., Horsfal, J., O'Hara-Aarons, M., Jackson, D., & Hunt, G. E. (2011). The views of mental health nurses on continuing professional development. *Journal of Clinical Nursing*, *23,* 3561-3566. doi:10.1111/j.1365-2702.2011.03745.x

Cody, S., Ferguson, M., & Desbrow, B. (2011). Exploratory investigation of factors affecting workforce satisfaction. *Nutrition and Dietetics, 68*(3), 195-200. doi:10.1111/j.1747-0080.2011.01533.x

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York, NY: Academic Press.

Cook, A., & Steinert, Y. (2013). Online learning for faculty development: A review of the literature. *Med Teach*, *35*(11). doi:10.3109/0142159X.2013.827328

Cooper, T., & Johnson, C. (2013). Web 2.0 tools for constructivist online professional development. In. J. Herrington et al. (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2013* (pp. 1923-1926). Chesapeake, VA: AACE.

Craik, G. L. (1840). *Pursuit of knowledge under difficulties: Its pleasures and rewards*. New York, NY: Harper & Brothers Publishers. Retrieved from http://catalog.hathitrust.org

Creswell, J. (2012). *Educational research: Planning conducting, and evaluating qualitative and quantitative research*. Boston, MA: Pearson Education Inc.

Dolan, V. (2011).The isolation of online adjunct faculty and its impact on their performance. *International Review of Research in Open and Distance Learning 12*, 62-77. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/793

Donavant, B. (2009). The new, modern practice of adult education online instruction in a continuing professional education setting. *Adult Education Quarterly, 59*, 227-245. doi:10.1177/0741713609331546

Einarson, E., Moen, A., Kolberg, R., Flingtorp, G., & Linnerud, E. (2009*).Connecting health and humans; Interactive eLearning - a safe place to practice.* Proceedings of the 10th International Congress on Nursing Informatics: Studies in health technology and informatics. Washington, DC. Retrieved from http://www.editlib.org/noaccess/39412/

Ellias, I. (2010). An investigation into the participation and attitudes of dental technicians in Wales towards continuing professional development. *Vital, 7*(5), 29-33. doi:10.1038/vital1285

Englebardt, S. P., & Nelson, R. (2002). *Health informatics: An interdisciplinary approach.* St. Louis, MO: Mosby.

Erickson, A., Noonan, P. M., & McCall, Z. (2012).Effectiveness of online professional development for rural special educators. *Rural Special Education Quarterly, 31*(1), 22-32. doi:10.1038/vital1285

Evans, B., Snooks, H., Howson, H., & Davies, M. (2013). How hard can it be to include research evidence and evaluation in local health policy implementation? Results from a mixed methods study. *Implementation Science, 8*(7), 47-52 doi:10.1186/1748-5908-8-41

Fish, W., & Gill, P. (2009). Perception of online instruction. *Turkish Journal of Educational Technology, 8*(3), 51-63. Retrieved from http://www.tojet.net

Fleming, D. E., Artis, A. B., & Hawes, J. M. (2014). Technology perceptions in employees' use of self-directed learning. *Journal of Services Marketing*, *28*(1), 5-6. Retrieved from http://www.emeraldinsight.com

Forbes, M., Hickey, M., & White, J. (2010). Adjunct faculty development: Reported needs and innovative solutions. *Journal of Professional Nursing, 26*, 116-124. Retrieved from http://www.adelphi.edu

Gill, A. (2007). Education and development-learning and professional development -- never too old to learn. *British Journal of Nursing, 16*, 1084-1088. Retrieved from http://europepmc.org

Goldman, S. R. (2010). Professional development in a digital age: Issues and challenges for standards-based reform. *Digital Education Review*, *2*, 19-46. Retrieved from http://greav.ub.edu/der/index.php/der/article/viewArticle/35.

Gray, D. (2013). Doing research in the real world. London, England: Sage Publications

Hagedorn, L. S. (2000). Conceptualizing faculty job satisfaction: Components, theories, and outcomes. *New Directions for Institutional Research, 7*, 5–20. doi:10.1002/ir.10501

Hatem, D., Barret, S. V., Hewson, M., Steele, D., Puwono, U., & Smith, R. (2007).Teaching the medical interview: Methods and key learning issues in a faculty development course. *Journal of General Internal Medicine. 22*(12), 1718-1724. Retrieved from http://www.springer.com/medicine/internal/journal

Henschke, J. (2011). Considerations regarding the future of andragogy. *Adult Learning, 22*, 34-37. doi:10.1177/104515951102200109

Hodges, T. E., & Cady, J. (2013). Blended-format professional development and the emergence of communities of practice. *Mathematics Education Research Journal, 25*(2), 299-316. doi:10.1007/s13394-012-0065-0

Houle, C. (1961). *The inquiring mind*. Madison, University of Wisconsin Press. Retrieved from http://aeq.sagepub.com/content/13/2/122.extract

Kabilan, M., Adlina, W., & Embi, M. (2011). Online collaboration of English language teachers for meaningful professional development experiences. *English Teaching: Practice & Critique, 10,* 94-115. Retrieved from http://education.waikato.ac.nz

Kangiser, A. (2011). What 'Value-Added Deliverables' Means Today. *Online*, *35*(1), 20-24. Retrieved from: https://www.questia.com/magazine/1G1-247634450/what-value-added-deliverables-means-today.

Kellam, H., MacDonald, C. J., Archibald, D., & Puddester, D. (2012). Designing Digital Video to Support Learner Outcomes: A Study in an Online Learning Resource for Healthcare Professionals and Students. *International Journal of Online Pedagogy and Course Design, 2*(3), 78-85.doi:10.4018/ijopcd.2012070104

Kleijnen, J., Dolmans, D., Willems, J., & Hout, H. (2013). Teachers' conceptions of quality and organizational values in higher education: Compliance or enhancement? *Assessment and Evaluation in Higher Education*, *38*(2), 152-166. Retrieved from http://www.tandfonline.com

Klein, M., Niebuhr, V., & D'Alessandro, D. (2013). Innovative Online Faculty Development Utilizing the Power of Social Media. *Academic Pediatrics, 13*(6), 135-148. doi:10.1016/j.acap.2013.07.005.

Knowles, M. (1973). *The adult learner: A neglected species*. Houston, TX: Gulf. Retrieved from http://files.eric.ed.gov/fulltext/ED084368.pdf

Knowles, M. (1975). *Self-Directed learning: A guide for learners and teachers*. Englewood Cliffs, NJ: Prentice Hall.

Krautscheid, L., Kaakinen, J., & Warner, J. (2008).Clinical faculty development: Using simulation to demonstrate and practice clinical teaching. *Journal of Nursing Education, 47*(9), 431-434. Retrieved from http://www.healio.com/nursing/journals/jne

Ladhani, Z., Chhatwal, J., Vyas, R., Iqbal, M., Tan, C., & Diserens, D. (2011). Online role-playing for faculty development. *Clinical Teacher, 8*(1), 31-36. doi:10.111/j1743X2010

Lesley, J. (2008). In search of autonomy. *Distance Learning, 5*, 87-91. Retrieved from http://www.infoagepub.com/distance-learning

Levene, J., & Boulware, D. D. (2014). Sustaining Innovation through Online Professional Development: A Design Approach. In M. Searson & M. Ochoa (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2014* (pp. 2901-2906). Chesapeake, VA: AACE. Retrieved from: http://www.editlib.org/p/131241/

Lodico, M., Spaulding, D., & Voegtle, K. (2010). Methods in Educational Research: From Theory to Practice, 2nd Edition. San Francisco, CA: Jossey-Bass.

Marsh, B., & Mitchell, N. (2014). The role of video in teacher professional development. *Teacher Development*, *18*(3), 403-417. doi:10.1080/13664531003696543

McInerney, D. M. (2007). Theory, research, and teaching: A 25-year retrospective. *International Journal of Experimental Educational Psychology*, 25, 585-599. doi:10.1080/01443410500344670

McIntosh, K., & Ginther, A. (2013). Writing research reports. *The Companion to Language Assessment*, *11*, 1418-1430. doi:10.1002/9781118411.wbcla101

Miles, M., & Woods, M. P. (2014). Collaborative development of enterprise policy: A process model for developing evidence-based policy recommendations using community focused strategic conversations and SERVQUAL. *International Journal of Public Sector Management*, *27*(3), 174-189. doi:101108/IJPSM-09-2012-0121

Moon, J., Passmore, C., Reiser, B. J., & Michaels, S. (2013). Beyond comparisons of online versus face-to-face PD commentary in response to Fishman et al., "Comparing the Impact of Online and Face-to-Face Professional Development in the Context of Curriculum Implementation". *Journal of Teacher Education*, *65*(2), 172-176. doi:10.1177/0022487113511497

Mukhopadhya, S. (2011). Lifelong learning in obstetrics and gynecology: How theory can influence clinical practice. *Journal of Obstetrics and Gynecology*, *31*(6), 476-479. doi:10.3109/01443615.2011.587050

Murray, E., Treweek, S., Pope, C., Mcfarlane, A., Ballini, L., & Dorwick, C. (2010). Normalization process theory: a framework for developing, evaluating and implementing complex interventions. *BMC Medicine*, *8* (17), 63. doi/ref/10.2105/AJPH.2014.302206

Neimeyer, G., Taylor, J., Zemansky, M., & Rothke, S. (2013). Do mandates matter? The impact of continuing education mandates on participation in continuing

professional development activities. *Professional Psychology: Research & Practice, 44*(2), 105-111. Retrieved from http://www.apa.org

Neta, G., Glasgow, R. E., Carpenter, C. R., Grimshaw, J. M., Rabin, B. A., Fernandez, M. E., & Brownson, R. (2015). A framework for enhancing the value of research for dissemination and implementation. *American Journal of Public Health*, *105*(1), 49-57. doi:10.2105/AJPH.2014.302206

Notarianni, M., Curry-Lourenco, K., Barham, P., & Palmer, K. (2009). Engaging learners across generations: The progressive professional development model. *The Journal of Continuing Education in Nursing, 40*, 261-266. doi:10.3928/00220124-20121101-54

Olofsson, A., & Lindberg, J. (2011). On the issue of teachers' professional development in an online learning community as technology enhanced learning. *US-China Education Review, 7*, 1016-1022. Retrieved from http://www.pedag.umu.se

O'Neill, S. M., Hempel, S., Lim, Y. W., Danz, M. S., Foy, R., Suttorp, M. J., ...& Rubenstein, L. V. (2011). Identifying continuous quality improvement publications: what makes an improvement intervention 'CQI'?. *BMJ Quality & Safety, 22*(2), 1011-1019. doi:10.1136/bmjqs.2010.050880.

Palmer, R., Samson, R., Triantis, M., & Mullen, I. D. (2011). Development and evaluation of a web-based breast cancer cultural competency course for primary health care providers. *BMC Medical Education, 11,* 37-48.doi:10.1186/1472-6920-11-59

Peters, D. H., Adam, T., Alonge, O., Agyepong, A. I., & Tran, N. (2013). Implementation research: what it is and how to do it. *BMJ*. 28 doi:10.1136/bmj.f6753.

Quinney, K., Smith, S., & Galbraith, Q. (2010). Bridging the gap: Self-directed staff technology training. *Information Technology & Libraries, 29*, 205-213. Retrieved from http://teachingadultsksu.wikispaces.com

Rao, D. (2014). *Scientific report writing and presentation*. National Academy of Agricultural Research Management. Retrieved from: http://www.kishikosh.egrath.ac

Robinson, B. (2008). Using distance education and ICT to improve access, equity and the quality in rural teachers' professional development in Western China. *International Review of Research in Open and Distance Learning, 9*, 1-17. Retrieved from http://www.irrodl.org

Rogers, L. (2011). Developing simulations in multi-user virtual environments to enhance healthcare education. *British Journal of Educational Technology, 42*, 608–615. doi:10.1111/j.1467-8535.2010.01057.x

Ryan, M. (2011). *Handbook of U.S. labor statistics 2011: Employment, earnings, prices, productivity, and other labor data.* Chicago, IL: Bernan Press.

Sandelowski, M., & Leeman, J. (2012). Writing usable qualitative health research findings. *Qualitative Health Research, 22*(10), 240-255. doi:10.1177/1049732312450368

Sandford, B., Belcher, A., Gregory, G., & Frisbee, R. L. (2007). A national assessment of perceived instructional needs for professional development of part-time technical

and occupational education faculty in the community colleges in the U.S. *Journal of Career and Technical Education, 23*, 97-108. Retrieved from http://scholar.lib.vt.edu

Sang, C. (2010). Applications of andragogy in multi-disciplined teaching and learning. *Journal of Adult Education, 39*, 25-3. Retrieved from https://www.mpaea.org

Scott, D. E., & Scott, S. (2010). Innovations in the use of technology and teacher professional development. In J. Lindberg, & A. Olofsson (Eds.) *Online Learning Communities and Teacher Professional Development: Methods for Improved Education Delivery* (pp. 169-189). Hershey, PA: Information Science Reference. doi:10.4018/978-1-60566-780-5.ch010

Shaw, T., Long, A., Chopra, S., & Kerfoot, B. P. (2011). Impact on clinical behavior of face-to-face continuing medical education blended with online spaced education: A randomized controlled trial. *Journal of Continuing. Education of Health Professionals*, *31*, 103–108. doi:10.1002/chp.20113

Solomons, N. M., & Spross, J. A. (2011). Evidence-based practice barriers and facilitators from a continuous quality improvement perspective: an integrative review. *Journal of Nursing Management*, *19*(1), 109-120. Retrieved from http://www.researchgate.net/publication/227828916

Southernwood, J. (2008). Distance learning: The future of continuing professional development. *Community Practitioner, 81*(10), 21-23. Retrieved from http://www.redorbit.com

Spaulding, D. (2008). *Program evaluation in practice: Core concepts and examples for discussion and analysis*. San Francisco, CA: Jossey-Bass.

Steinert, Y., McLeod, P. J., Boillat, M., Meterissian, S., Elizov, M., & Macdonald, M. E. (2009). Faculty development: A field of dreams*? Medical Education, 43*, 42–49. doi:10.1111/j.1365-2923.2008.03246.x

Swanson, K., & Kayler, M. (2010). Faculty development and adult learning: A model for transforming higher education. *International Journal for the Scholarship of Teaching & Learning, 4*, 1-6. Retrieved from http://digitalcommons.georgiasouthern.edu

Tomlinson, J., Shaw, T., Munro, A., Johnson, R., Madden, D. L., Phillips, R., & McGregor, D. (2013). How does tele-learning compare with other forms of education delivery? A systematic review of tele-learning educational outcomes for health professionals. *New South Wales Public Health Bulletin, 24*(2), 70-75. doi.org/10.1071/NB12076

U.S. Office of Budget and Management (2011). *Customer survey training follow-up.* Retrieved from: www.whitehouse.gov/omb

Varela, A. (2012). Three major sins of professional development: How can we make it better? *Education Digest, 78*(4), 17-20. Retrieved from http://www.eddigest.com

West, E. (2010). Managing adjunct professors: Strategies for improved performance. *Academy of Educational Leadership Journal, 14*, 21-36. Retrieved from http://educationdigest.

Wheeldon, J. (2011). Visualizing the future of research on post-secondary correctional education: Designs, data, and deliverables. *Journal of Correctional Education*, *62*(2), 94-115.

Wisdom, J. P., Cavaleri, M. A., Onwuegbuzie, A. J., & Green C. A. (2012). Methological reporting in qualitative, quantitative, and mixed method in health services research. *Health Services Research, 47,* 721-745. doi:10.111/j.1475-6773.2011.01344x

Appendix A: Policy Recommendations Report and Presentation

Improving Adjunct Faculty Compliance and Satisfaction with Professional Development

Executive Summary

The problem addressed by this report is low levels of adjunct faculty compliance and satisfaction with the professional development program at the college. In 2014 this college participated in a study of the impact of an alternative delivery method on adjunct faculty compliance and satisfaction with a professional development workshop. The key research question addressed was whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop. As the investigator I used archival data, provided by the college, to conduct a true experiment that compared participants in an online workshop (the experimental group) with participants in an on campus workshop (control group). I conducted a chi-square analysis and found that compliance was significantly higher for participants in the online professional development workshop compared to those who participated in a traditional on campus workshop. An analysis of variance showed that overall satisfaction was higher for the participants in the online workshop compared to those who participated in the on campus workshop. The project resulting from the study is the policy recommendations report. The report summarizes the study and presents recommendations for improving adjunct compliance and satisfaction with the professional development program. The recommended actions include increasing adjunct faculty access to professional development materials and incorporating faculty input into

the design and planning of professional development workshops. Other suggestions require continued evaluation of the use of alternative delivery methods. Those recommendations would become part of the college's continuous quality improvement plan. Implementation of these recommendations will require ongoing data collection and program evaluation.

Policy Recommendations Report

Improving Adjunct Faculty Compliance and Satisfaction with Professional Development

This report is the result of a study I conducted that compared compliance and satisfaction with a professional development workshop among adjunct faculty teaching in the healthcare administration, community health, and nursing programs. The study was conducted in 2014 following a series of planning meetings with representatives of the college's administration and the department chairs. I used archival data from professional development workshops held on campus and online to determine if an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop. This report includes recommendations for actions that can be implemented within six months and recommendations that will become part of the college's continuing quality improvement plan. The recommendations in this report are consistent with theories and research related to adult learning and online professional development (Bollinger & Wasilik, 2009, Boitshwarelo, 2011, Gill, 2007, Knowles, 1975). The next section of this report is a summary of the theoretical base of

the study and evidence supporting the use of alternative delivery methods to improve adjunct faculty member compliance and satisfaction with professional development.

Research and Literature Review

I conducted a review of literature related to adult learning and professional development. I also reviewed research related to adjunct faculty compliance and satisfaction. The literature review revealed three theoretical perspectives that were applicable to this project. These theoretical perspectives included andragogy, the concepts of self-directed learning, and connectivism. The theory of andragogy states that adults and children learn differently (Knowles, 1973). The concept of self-directed learning focuses on the learner taking responsibility, with or without guidance, for identifying learning needs, goals, and resources (Fleming, 2014). The concept of connectivity focuses on new methods of learning and networking in the digital age (Boitshwarelo, 2011). These theoretical perspectives are applicable to this project because adjunct faculty are adult learners who are able to direct their own learning activities and benefit from their accumulated experience. Adjunct faculty members are motivated to fulfill their social and professional roles and have experience functioning in the digital environment. One of the goals of professional development is to facilitate scholarship by creating forums for reciprocal relationships among adjunct faculty therefore the theory of connectivity was also applicable to this project. The literature review showed that andragogy, self-directed learning, and connectivity are related to adult learning and professional development.

The literature review revealed evidence that faculty compliance with professional development may be affected by the method of delivery. Ladhani et al. (2011) discovered higher levels of faculty participation for an online professional development program than they found for similar programs presented on campus. Steinert et al. (2009) reported that faculty members had higher levels of participation in professional development programs that added to personal and professional growth, were relevant to job performance, and offered the opportunity to network with colleagues. Varela (2012) revealed compliance with professional development was lower when the program involved a non-program specific approach and when in-service programs were not related the daily classroom practices. The barriers to participation in professional development identified by Ellias (2010) were consistent with the college's observations about adjunct nonparticipation in professional development. Ellias discovered that time constraints, course suitability, geographical location and costs related to travel were all substantial factors deterring participation in professional development. These researchers have demonstrated that that professional development can be impacted by the method of delivery.

The literature review revealed evidence that faculty satisfaction with professional development may also be affected by the method of delivery. Betts (2009) discovered that higher levels of satisfaction with training were positively correlated with adjunct faculty retention. Fish and Gill (2009) described the positive impact of satisfaction with professional development on course development. Bollinger and Wasilik (2009) found that satisfaction with professional development was positively correlated with overall

satisfaction for adjunct faculty members who teach online courses. Cleary et al. (2011) reported that clinical nursing faculty reported high levels of satisfaction with work-based and clinically focused professional development. Erickson et al. (2012) described several areas where asynchronous online professional development increased satisfaction. Participant satisfaction was associated with developing meaningful, collaborative relationships with colleagues and convenience. Cody et al. (2011) identified professional development as a factor that affects overall workforce satisfaction by. The literature review also showed that online technology could be used to impart important skills for health care providers. The usefulness of online professional development for continuously improving clinical skills and practice has been confirmed through research conducted by Gill (2007) and Palmer et al. (2011). These researchers have demonstrated that delivery method can impact faculty satisfaction with professional development.

The literature review revealed a variety of technological applications used for professional development. Virtual environments can also provide important training opportunities online. Boulos et al. (2007) demonstrated the successful use of virtual environments for professional development of health administration faculty at Children's Memorial Hospital in Chicago, Illinois. Krautscheid et al. (2008) demonstrated the successful use of simulation to provide professional development to health care faculty. Hybrid models have also been successfully used to train health care workers (Barksdale et al., 2011). The availability of a wide range of hardware and software applications offers opportunities and challenges for improving professional development. These opportunities and challenges require further investigation by the college.

Methodology

The research methodology was a quantitative study. I analyzed adjunct faculty members' compliance and satisfaction with the professional development workshop they attended using archival participation data. I also used archival data from the Workshop Evaluation Survey. Random assignment of the participants by the workshop facilitator allowed me to draw conclusions about whether a causal relationship existed between the independent variable (delivery method) and dependent variables (compliance and satisfaction).

The population selected by the college consisted of all adjunct faculty members at the college. A convenience sample of 80 adjunct faculty members from the health care administration, nursing and community health programs were randomly assigned to the experimental or the control group. The professional development workshop was delivered under two conditions: online via the internet (experimental group) and in a traditional classroom on campus (control group). Of the 80 adjunct faculty members invited to participate in professional development, 69 attended one of the workshops.

Compliance data were analyzed by comparing participation rates for the online and on campus workshop attendees. Participation was based on the number of adjunct instructors who attended a workshop. The Workshop Evaluation Survey was used to measure overall participant satisfaction. I conducted a chi-square analysis to test the hypothesis that an alternative delivery method would yield higher levels of compliance than a traditional professional development workshop. I conducted an ANOVA to test the hypothesis that an alternative method of delivery would yield higher levels of satisfaction

than a traditional professional development workshop. This study combined program evaluation techniques and research methodology to produce this policy recommendations report. A discussion of the findings and recommendations resulting from the study follows.

Findings

The results of the chi-square analysis indicated that the online workshop had higher levels of compliance than the traditional workshop, the difference in compliance for the two workshops was statistically significant. The results from the ANOVA indicated that an alternative delivery method yielded higher levels of satisfaction than a traditional workshop. The following is a summary of the demographics of the study participants.

Teaching experience. The workshop participants were experienced educators. The majority of workshop participants reported teaching in higher education for between 1 and 10 years. Most of the participants reported teaching at the local college between 1 and 3 years. Table A1 summarizes the number of years participants reported teaching in higher education. Table A2 depicts the number of years participants reported teaching at this college.

Table A1

Years Teaching in Higher Education by Group

	Online		On campus		Total	
	N	%	*N*	%	*N*	%
less than 1 year	5	13%	2	7%	7	10%
between 1 and 3 years	15	38%	13	43%	28	41%
between 3 and 10 years	9	23%	8	27%	17	25%
Over 10 years	9	23%	7	23%	16	23%
No response	1	3%	0	0%	1	1%
Total	39		30		69	100%

Table A2

	Online		On campus		Total	
	N	%	*N*	%	*N*	%
less than 1 year	5	13%	3	10%	8	12%
between 1 and 3 years	20	51%	17	57%	37	54%
between 3 and 10 years	6	15%	5	17%	11	16%
Over 10 years	7	18%	5	17%	13	19%
No response	1	3%	0	0%	0	0%
Total	39		30		69	100%

Age, gender, race, and ethnicity. The majority of workshop participants were between 22 and 49 years of age. Table 3 shows the distribution of the participants by age.

Table A3

Workshop Participants by Age

Age	21 or younger		22-49		50-65		Over 66		No response		Total	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Online	0	0%	22	54%	10	56%	5	71%	1	67%	39	57%
On campus	0	0%	19	46%	8	44%	2	29%	1	33%	30	43%
Total	0		41		18		7		2		69	100%

The majority of workshop participants were male (57%). Table A4 summarizes the participants by gender.

Table A4

Gender Distribution of Workshop Participants

	Male		Female		No response		Total	
	n	%	*n*	%	*n*	%	*n*	%
Online	15	42%	23	74%	1	33%	39	57%
On campus	21	58%	8	26%	1	67%	30	43%
Total	36		31		2		69	100%

Most workshop participants were White, European American, non-Hispanic (33%), followed by Black, African or Caribbean American, non-Hispanic (32%), Latino American, Hispanic (22%), Asian American or Asian (3%) and 10% of workshop participants reported other or no response to the question. Table A5 shows the race and ethnicity of the participants.

Table A5

Racial and Ethnic Distribution of Workshop Participants

	Online		On Campus		Total	
	n	%	n	%	n	%
White, European American – Non Hispanic	9	23%	14	47%	23	33%
Black, African or Caribbean American – Non-Hispanic	11	28%	11	37%	22	32%
Latino American, Hispanic	8	21%	3	10%	11	16%
Asian or Asian American	0	0%	2	7%	2	3%
Other or No response	11	28%	0	0%	11	16%
Total	39		30		69	100%

Hours spent teaching. All of the workshop participants were adjunct instructors. The mean for the number of hours workshop participants spent teaching college courses was 6.84. Some workshop participants reported currently teaching no classes while the maximum number of hours spent teaching was 16.

Descriptive Statistics for Hours Spent Teaching

Mean	6.848
Standard error	0.396
Median	6.500
Mode	6.000
Standard deviation	3.291
Range	16
Minimum	0
Maximum	16
Count	69
Confidence level (95.0%)	0.790673532

Research Questions

The first research question addressed by the study was whether an alternative delivery method would yield higher levels of compliance than a traditional professional development workshop. Compliance was measured based on participation in the workshop that the adjunct faculty member was invited to attend. Table A6 depicts compliance data for each delivery method. Online participants had higher levels of compliance (98%) than on campus participants (75%).

Table A6

Workshop Compliance: Invited Compared to Actual Attendees

	Invited	Attended	%
Online	40	39	98
On campus	40	30	75
Total	80	69	86

A chi-square analysis found that compliance was significantly higher for the online participants than it was for the on campus participants, X^2 (1, N = 69) = 8.538, p < .01, therefore the null hypothesis was rejected. The alternative hypothesis that an alternative delivery method would yield higher levels of compliance than a traditional professional development workshop was accepted.

The second research question addressed by the study was whether an alternative method of delivery would yield higher levels of satisfaction than a traditional professional development workshop. A one-way ANOVA found that overall satisfaction was significantly higher for participants in the online workshop compared to participants in the on campus workshop, F(4, 64) = 2.974, p < .05. These findings allowed for the rejection of the null hypothesis and acceptance of the alternative hypothesis that an alternative delivery method would yield higher levels of satisfaction than a traditional professional development workshop. Table A7 includes descriptive statistics for overall satisfaction by workshop.

Table A7

Descriptive Statistics for Overall Satisfaction by Workshop

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Strongly Agree	12	1.42	.515	.149	1.09	1.74
Agree	40	1.30	.464	.073	1.15	1.45
Undecided	1	2.00	.	.	.	.
Disagree	11	1.73	.467	.141	1.41	2.04
Strongly Disagree	5	1.80	.447	.200	1.24	2.36
Total	69	1.43	.499	.060	1.31	1.55

Table A8 includes a summary of the one-way ANOVA findings for overall satisfaction by type of workshop attended. The results indicate that the control and experimental group varied significantly on overall satisfaction.

Table A8

Analysis of Variance for Overall Satisfaction by Workshop

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.658	4	.665	2.974	.026
Within Groups	14.298	64	.223		
Total	16.957	68			

Recommendations for Improving Compliance and Satisfaction

The findings of the study supported the use of alternative delivery methods to improve compliance and satisfaction. As a result of the study the college has adopted the goal of increasing the use of online delivery methods to improve adjunct compliance and satisfaction with the professional development program. The recommendations described in this report are intended to support the college's efforts to improve adjunct compliance and satisfaction with its professional development program through the use of available resources, exploration of innovative technology and ongoing data collection and re-evaluation. This report includes recommendations that can be implemented within six months. It also includes recommendations that will be incorporated into the college's continuous quality improvement plan. The following is a description of actions that have the potential to improve adjunct faculty compliance and satisfaction with the professional development program.

Short-Term Recommendations

There are two recommendations that can be implemented within six months. Both of these recommendations are consistent with the theories of andragogy and self-directed learning. In addition they address the components of professional development that researchers have shown positively impact adjunct satisfaction (Dolan, 2011, Lesley, 2008, West, 2010). These researchers advocated changing the role of the instructor to one of facilitator by giving adjunct faculty more independence and influence over the professional development program.

The first recommendation is to utilize available resources to provide adjunct faculty access to professional development materials. Facilitating access to professional development resources such as presentations, audio and video-taped lectures, and sample documents reinforces training and encourages faculty to apply what they have been learned during professional development. The second recommendation, developing a method for incorporating adjunct input, allows the workshop facilitator to design professional development programs which address training and other needs that are identified by adjunct faculty members.

Resources and Barriers

There are minimal obstacles to implementing these recommendations. The college has the personnel and technology infrastructure needed to implement both of these recommendations. The college has legal ownership of, and access to all materials related to the professional development program and can post these items to a web-page or distribute information through emails to adjuncts. An electronic drop box can also be linked to the college's web page to accept suggestions from adjunct faculty. It is anticipated that the short-term recommendations will be implemented within six months because of the availability of all needed resources.

Implementation Timetable

The goal of the implementation plan for the short-term recommendations is to have each one fully implemented by the end of the Fall term in 2014. Adjunct faculty in all three programs will have online access to materials for professional development workshops presented in September and October 2014 and an electronic drop box will be

linked to the College's webpage to receive requests for workshops on specific topics. The workshop facilitator and representatives from the information technology department have assumed responsibility for implementing these recommendations. The workshop facilitator will monitor the use of the webpage link and resources by adjunct faculty.

Long-Term Recommendations

Long-term recommendations are those that would be incorporated into the college's continuous quality improvement program. The recommendations that will become part of the CQI plan include increasing the options available to faculty for completing the professional development requirement and exploring alternative delivery methods such as the use of simulations, synchronous application and sharing resources with other organizations. Exploring alternative delivery methods are consistent with the research findings of Boulos et al. (2007), Krautscheid et al. (2008) and Barksdale et al. (2011). These actions require additional resources and further investigation.

Resources and Barriers

The-long-term recommendations are based on the growing number of options available for professional development. Implementation would require the college to investigate the fiscal and professional impact of different delivery methods on each health care program. These variations might include hybrids that involve on campus and online presentations and activities, partnering with other higher education institutions to share resources or utilizing training, and faculty development forums available via the Internet. An obstacle to implementing this recommendation may be financial limitations. The sophisticated software and hardware needed for advanced applications varies in cost,

technological and training requirements. Various delivery methods will need to be evaluated to determine their impact on adjunct compliance and satisfaction. Implementing this recommendation would require a detailed cost/benefit analysis to determine feasibility. Conducting the feasibility study would become part of the ongoing quality improvement program for the college. The CQI plan for the college will be revised to reflect implementation of the long-term recommendations. The college's five-year CQI plan will also include funding for additional evaluation of the professional development program. The availability of this funding is based on plans for expanding the nursing program and increasing admission rates in the other health care programs.

Data Collection and Re-evaluation

Ongoing data collection and re-evaluation are key component of implementation. The ongoing collection of compliance and satisfaction data will ensure that the professional development program continues to be responsive to the needs of adjunct faculty at the college. All workshops presented after September 2014 will use the Workshop Evaluation Survey so that data from subsequent workshops can be compared to determine the impact of these policy changes.

Conclusion

A quantitative study was designed to determine whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop. The findings of the study indicated that compliance was significantly higher for attendees of the online workshop. The findings also showed that satisfaction was significantly higher for attendees of the online workshop. This report

used evidence from a review of related literature and the findings of the study to develop recommendations for improving adjunct faculty compliance and satisfaction with the professional development program. The report includes short-term recommendations which can be implemented without additional resources. It also describes long-term recommendations which require additional resources and further investigation. The report recommends on-going evaluation of data resulting from professional development workshops to determine the impact of policy and program changes on adjunct faculty compliance and satisfaction.

Presentation

The following slides were used in a presentation for administrative senior staff

Use of an Alterative Delivery Method to Improve Adjunct Faculty Compliance and Satisfaction with Professional Development

Elizabeth Pete

Purpose of the Study

The purpose of the study was to determine if an alternative delivery method (online) would increase compliance and satisfaction among adjunct faculty members with the professional development program.

Theoretical Foundation

The theoretical foundations of this study include:

- Theory of andragogy
  - States that adults and children learn differently (Knowles, 1973).
- The concept of self-directed learning
  - Focuses on the learner taking responsibility, with or without guidance, for identifying their learning needs, goals, and resources (Fleming, 2014).
- The concept of connectivism
  - Focuses on new methods of learning in the digital age (Boitshwarelo, 2011)

The Problem

This college participated in a study of the impact of an alternative delivery method on adjunct faculty compliance and satisfaction with a professional development workshop.

Two problems were addressed by this study:

1. Low levels of compliance with the professional development program among adjunct faculty
2. Low levels of satisfaction with the professional development program among adjunct faculty

The Hypotheses

The hypotheses being tested by the study

1. An alternative delivery method will yield higher levels of compliance than a traditional professional development workshop.
2. An alternative delivery method will yield higher levels of satisfaction than a traditional professional development workshop

The Methodology

Subjects

- The participants were adjunct faculty members working in the health are administration, community health and nursing programs from both campuses.

Conditions

- Online participants (experimental group) received a workshop on grading rubrics online while on campus participants (control group attended a comparable workshop on campus.

The Methodology

Data Collection

Archival data, provided by the workshop facilitator was used to conduct a true experiment.

- Compliance was based on attending the workshop.
- A satisfaction survey developed by OMB was used to measure satisfaction

Data Analysis

Statistical tests were used to determine whether an alternative delivery method yielded higher levels of compliance and satisfaction than a traditional delivery method. Data analysis included:

- A chi-square analysis to compare compliance for each group.
- An analysis of variance to compare overall satisfaction for each group.

Findings

Compliance

More adjuncts attended the on line workshop than the on campus workshop.

Satisfaction

Adjuncts who attended the on line workshop reported higher levels of overall satisfaction with the workshop

The Policy Recommendation Report

- The project resulting from this study was the policy recommendation report on which this presentation is based.
- The policy recommendation report included two sets of recommendations based on the findings of the study and supported by research.
- The recommendations are designated as short-term or long-term depending on the timeframe and resources needed for implementation.

Short-term Recommendations

Recommendations for improving adjunct compliance and satisfaction within 6 months included:

1. Increasing adjunct faculty access to professional development materials and
2. incorporating faculty input into the design and planning of professional development workshops.

These recommendations do not require further investigation or additional resources.

Long-term Recommendations

Recommendations for improving adjunct compliance and satisfaction that will be incorporated into the college's continuous quality improvement plan include:

1. increasing the options available to faculty for completing the professional development requirement and
2. exploring alternative delivery methods such as the use of simulations, synchronous application and sharing resources with other organizations

These recommendations require further investigation and additional resources to implement.

Data Collection and Re-evaluation

- Ongoing data collection and re-evaluation are key components are needed to ensure that the professional development program continues to be responsive to the needs of adjunct faculty at the college.
- All workshops presented after September 2014 will use the Workshop Evaluation Survey so that data from subsequent workshops can be compared to determine the impact of policy and program changes.

Summary

- A quantitative study was conducted to determine whether an alternative delivery method would yield higher levels of compliance and satisfaction than a traditional professional development workshop.
- The findings of the study indicated that compliance was significantly higher for attendees of the online workshop and that satisfaction was significantly higher for attendees of the online workshop.
- The study resulted in a policy recommendations report with specific actions for improving adjunct faculty compliance and satisfaction with professional development.

References

Fleming, D. E., Artis, A. B., & Hawes, J. M. (2014). Technology perceptions in employees' use of self-directed learning. *Journal of Services Marketing*, 28(1), 5-6. Retrieved from http://www.emeraldinsight.com

Boitshwarelo, B. (2011). Proposing an integrated research framework for connectivism: Utilizing theoretical synergies. *International Review of Research in Open and Distance Learning*, 1(12), 61-179. Retrieved from http://www.academia.edu

Knowles, M. (1973). The adult learner: A neglected species. Houston, TX: Gulf. Retrieved from http://files.eric.ed.gov/fulltext/ED084368.pdf

References

Barksdale, D. J., Woodley, L., Page, J. B., Bernhardt, J., Kowlowitz, V., & Oermann, M. H. (2011). Faculty development: Doing more with less. *The Journal of Continuing Education in Nursing, 42,* 537-544. doi:10.3928/00220124-20110301-01

Betts, K. (2009). Online human touch (OHT) training & support: A conceptual framework to increase faculty engagement, connectivity, and retention in online education. *Journal of Online Learning and Teaching, 5*(1), 29-48. Retrieved from http://jolt.merlot.org

Boitshwarelo, B. (2011). Proposing an integrated research framework for connectivism: Utilizing theoretical synergies. International Review of Research in Open and Distance Learning, 12(1), 161-179. Retrieved from http://www.academia.edu

Bollinger, D., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education, 30*(1), 103-116. Retrieved from http://cohortresearch.wiki.westga.edu

Boulos, M., Hetherington L., & Wheeler S. (2007). Second Life: An overview of the potential of 3-D virtual worlds in medical and health education. *Health Information Library Journal*, *24*, 233–245. doi:10.1111/j.1471-1842.2007.00733

Cleary, M., Horsfal, J., O'Hara-Aarons, M., Jackson, D., & Hunt, G.E. (2011). The views of mental health nurses on continuing professional development. *Journal of Clinical Nursing*, *23,* 3561-3566. doi:10.1111/j.1365-2702.2011.03745.x

Cody, S., Ferguson, M., & Desbrow, B. (2011). Exploratory investigation of factors affecting workforce satisfaction. *Nutrition and Dietetics, 68*(3), 195-200. doi:10.1111/j.1747-0080.2011.01533.x

Dolan, V. (2011). The isolation of online adjunct faculty and its impact on their performance. *International Review of Research in Open and Distance Learning 12*, 62-77. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/793

Ellias, I. (2010). An investigation into the participation and attitudes of dental technicians in Wales towards continuing professional development. *Vital, 7*(5), 29-33. doi:10.1038/vital1285

Erickson, A., Noonan, P. M., & McCall, Z. (2012). Effectiveness of online professional development for rural special educators. *Rural Special Education Quarterly, 31*(1), 22-32. doi:10.1038/vital1285

Fish, W., & Gill, P. (2009). Perception of online instruction. *Turkish Journal of Educational Technology, 8*(3), 51-63. Retrieved from http://www.tojet.net

Fleming, D. E., Artis, A. B., & Hawes, J. M. (2014). Technology perceptions in employees' use of self-directed learning. *Journal of Services Marketing*, *28*(1), 5-6. Retrieved from http://www.emeraldinsight.com

Gill, A. (2007). Education and development-learning and professional development -- never too old to learn. *British Journal of Nursing, 16*, 1084-1088. Retrieved from http://europepmc.org

Knowles, M. (1973).*The adult learner: A neglected species*. Houston, TX: Gulf. Retrieved from http://files.eric.ed.gov/fulltext/ED084368.pdf

Knowles, M. (1975). *Self-Directed learning: A guide for learners and teachers*. Englewood Cliffs, NJ: Prentice Hall.

Krautscheid, L., Kaakinen, J., & Warner, J. (2008). Clinical faculty development: Using simulation to demonstrate and practice clinical teaching. *Journal of Nursing Education 47*(9), 431-434. Retrieved from http://europepmc.org/abstract/med/18792712

Ladhani, Z., Chhatwal, J., Vyas, R., Iqbal, M., Tan, C., & Diserens, D. (2011). Online role-playing for faculty development. *Clinical Teacher 8*(1), 31-36. doi:10.111/j1743X2010

Lesley J. (2008). In search of autonomy. *Distance Learning, 5*, 87-91. Retrieved from http://oro.open.ac.uk

Palmer, R., Samson, R., Triantis, M., & Mullen, I. D. (2011). Development and evaluation of a web-based breast cancer cultural competency course for primary health care providers. *BMC Medical Education 11,* 37-48. doi:10.1186/1472-6920-11-59

Steinert, Y., McLeod, P. J., Boillat, M., Meterissian, S., Elizov, M., & Macdonald, M. E. (2009). Faculty development: A field of dreams*? Medical Education, 43*, 42–49. doi:10.1111/j.1365-2923.2008.03246.x

Varela, A. (2012). Three major sins of professional development: How can we make it better? *Education Digest, 78* (4), 17-20. Retrieved from http://www.eddigest.com

West, E. (2010). Managing adjunct professors: Strategies for improved performance. *Academy of Educational Leadership Journal, 14*, 21-36. Retrieved from

http://educationdigest

Appendix B: Workshop Survey

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Quality and Usefulness of Workshop					
I was satisfied with the overall quality of this workshop.	☐	☐	☐	☐	☐
I was satisfied with the quality of information presented.	☐	☐	☐	☐	☐
I was satisfied with the quality of workshop materials.	☐	☐	☐	☐	☐
I was satisfied with the workshop facilitator.	☐	☐	☐	☐	☐
The workshop was relevant to my work as an instructor.	☐	☐	☐	☐	☐
I was satisfied with the level of communication with the facilitator and other participants	☐	☐	☐	☐	☐
The material presented during the workshop will be useful for the courses I teach.	☐	☐	☐	☐	☐
The workshop enhanced my skills in the topic area.	☐	☐	☐	☐	☐
The workshop will allow me to better serve my students.	☐	☐	☐	☐	☐
The workshop was relevant to my career.	☐	☐	☐	☐	☐
I would recommend this workshop to a colleague	☐	☐	☐	☐	☐
I would take additional training presented in this format.	☐	☐	☐	☐	☐
I would share information I received from this workshop with others.	☐	☐	☐	☐	☐
Use of a computer and/or the Internet is a regular part of my employment responsibilities?	☐	☐	☐	☐	☐

Use of a computer and/or the Internet is a regular part of my recreational and/or entertainment activities	☐	☐	☐	☐	☐

What about this workshop was most useful in supporting your work as an adjunct instructor?

How can PGS improve its faculty development program?

Adjunct Characteristics

How many hours per week do you spent teaching college courses:

Race/Ethnicity – Please select one	White, European American – non Hispanic ☐	Black, African or Caribbean American – non-Hispanic ☐	Latino American, Hispanic ☐	Asian American Asian ☐	Other or no response ☐
Highest level of education achieved- Please select one	Bachelor's Degree ☐	Master's Degree ☐	Doctorate ☐	Other ☐ Specify:	
Gender - Please select one	Female ☐	Male ☐	No response ☐		
Age – Please select one	21 or younger ☐	22- 49 ☐	50-65 ☐	Over 65 ☐	No response ☐

Teaching Experience

How many years have you been teaching in higher education settings?	less than 1 year ☐	between 1 and 3 years ☐	between 3 and 10 years ☐	Over 10 years ☐

Appendix C: Deliverables and Data Usage Agreements

Date March 15, 2014

Project Title: The Impact of Online Professional Development on Adjunct Faculty Compliance and Satisfaction with a Professional Development Workshop

Institutional Sponsor: [redacted] College – School of Professional Development
Community Partners:

Name	**Title**	**Role**
[redacted]	Department Chair	Study Oversight
[redacted]	Director Human Resources	Study Oversight
[redacted]	FD Coordinator_____	Workshop Facilitator
[redacted]	Continuous Quality Improvement	Implementing Recommendations___

Problem Statement: The problem addressed by this project study is low levels of adjunct faculty compliance and satisfaction with the professional development program at [redacted] College. The study will be used to determine whether an online delivery method will improve adjunct faculty compliance and satisfaction with a professional development workshop.

Anticipated Outcome: A research study, using archived data collected during online and on campus professional development workshops, will be conducted to determine the impact of an alternative delivery method on adjunct faculty participation and satisfaction for the community health, nursing and health care administration programs, The research results will be used to develop recommendations for improving professional development which will be incorporated into the college's continuous quality improvement plan.
Deliverables: The researcher has agreed to provide the following deliverables to the sponsor.

Deliverables	Delivery Date
Project Study Recommendations Report • Executive Summary • Recommendations Report describing: • Literature Review • Concepts measured and methodology • Profile of workshop participants • Summary of study results • Recommendations for improving compliance and satisfaction	August 30, 2014

Project Study Research Presentation • Power point Presentation describing: • Concepts measured and methodology • Profile of workshop participants • Summary of study results • Recommendations for improving compliance and satisfaction	August 30, 2014

Check below if this project involves:
☐Non-Disclosure Agreement (attach copy of agreement to this form)
☐Loan of equipment, materials, documents
☒ Sharing data – Describe
The researcher will received archived data that includes de-identified surveys and participation data for professional development workshops.

Signatures: We agree to the deliverables listed above:
Project Sponsor: [redacted] Date March 15, 2014
Researcher; Elizabeth Pete Date March 15, 2014

DATA USE AGREEMENT

This Data Use Agreement between Elizabeth Pete and [redacted] College effective as of 4/1/2014 is entered into by and between Elizabeth Pete and [redacted] College. The purpose of this Agreement is to provide Data Recipient with access to a Limited Data Set ("LDS") for use in research in accord with the HIPAA and FERPA Regulations.

1. Definitions. Unless otherwise specified in this Agreement, all capitalized terms used in this Agreement not otherwise defined have the meaning established for purposes of the "HIPAA Regulations" codified at Title 45 parts 160 through 164 of the United States Code of Federal Regulations, as amended from time to time.

2. Preparation of the LDS. [redacted] shall prepare and furnish to Data Recipient a LDS in accord with any applicable HIPAA or FERPA Regulations

3. Data Fields in the LDS. No direct identifiers such as names may be included in the Limited Data Set (LDS). In preparing the LDS, [redacted] shall include the **data fields specified as follows**, which are the minimum necessary to accomplish the research:

   - Number of attendees at workshop
   - Completed Satisfaction Surveys

4. Responsibilities of Data Recipient. Data Recipient agrees to:

   a. Use or disclose the LDS only as permitted by this Agreement or as required by law;

   b. Use appropriate safeguards to prevent use or disclosure of the LDS other than as permitted by this Agreement or required by law;

   c. Report to Data Provider any use or disclosure of the LDS of which it becomes aware that is not permitted by this Agreement or required by law;

   d. Require any of its subcontractors or agents that receive or have access to the LDS to agree to the same restrictions and conditions on the use and/or disclosure of the LDS that apply to Data Recipient under this Agreement; and

   e. Not use the information in the LDS to identify or contact the individuals who are data subjects.

5. Permitted Uses and Disclosures of the LDS. Data Recipient may use and/or disclose the LDS for its Research activities only.

6. Term and Termination.

   a. Term. The term of this Agreement shall commence as of the Effective Date and shall continue for so long as Data Recipient retains the LDS, unless sooner terminated as set forth in this Agreement.

   b. Termination by Data Recipient. Data Recipient may terminate this agreement at any time by notifying the Data Provider and returning or destroying the LDS.

   c. Termination by Data Provider. Data Provider may terminate this agreement at any time by providing thirty (30) days prior written notice to Data Recipient.

   d. For Breach. Data Provider shall provide written notice to Data Recipient within ten (10) days of any determination that Data Recipient has breached a material term of this Agreement. Data Provider shall afford Data Recipient an opportunity to cure said alleged material breach upon mutually agreeable terms. Failure to agree on mutually agreeable terms for cure within thirty (30) days shall be grounds for the immediate termination of this Agreement by Data Provider.

   e. Effect of Termination. Sections 1, 4, 5, 6(e) and 7 of this Agreement shall survive any termination of this Agreement under subsections c or d.

7. Miscellaneous.

   a. Change in Law. The parties agree to negotiate in good faith to amend this Agreement to comport with changes in federal law that materially alter either or both parties' obligations under this Agreement. Provided however, that if the parties are unable to agree to mutually acceptable amendment(s) by the compliance date of the change in applicable law or regulations, either Party may terminate this Agreement as provided in section 6.

   b. Construction of Terms. The terms of this Agreement shall be construed to give effect to applicable federal interpretative guidance regarding the HIPAA Regulations.

   c. No Third Party Beneficiaries. Nothing in this Agreement shall confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

d. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

e. Headings. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf.

DATA PROVIDER	**DATA RECIPIENT**
Signed: [redacted]	Signed: *Elizabeth Pete*
Print Name: [redacted]	Print Name: Elizabeth Pete
Print Title: Institutional Review Board	Print Title: Researcher

[redacted] College
Institutional Review Committee

April 27, 2014

RE: Letter of Cooperation

Dear Elizabeth Pete:
Based on my review of your research proposal, I give permission for you to conduct the study entitled "The Impact of Online Professional Development on Adjunct Faculty Compliance and Satisfaction with a Professional Development Workshop at [redacted] College". As part of this study, I authorize you receive de-identified surveys completed during professional development workshops conducted by the college. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include forwarding the de-identified completed surveys and reporting the number of attendees for specific professional development workshops. We reserve the right to withdraw from the study at any time if our circumstances change.
I confirm that I am authorized to approve research in this setting.
I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB and [redacted] College.

Sincerely,
[redacted]

September 12, 2012

To: [redacted]
From: Kassandra Smith – Assistant Director - Publications
Att: [redacted]
Re: Form Approved OMB NO. 0930-0197 Exp. Date 01/31/2016
Survey—Training Follow-up
Public Domain Notice