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A Summative Program Evaluation of Online and Hybrid Military Professional Development Courses

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COLLEGE OF EDUCATION

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2016

Abstract

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MA, Webster University, 1990

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Doctoral Study Submitted in Partial Fulfillment

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Abstract

Instructors at a U.S. Military School transitioned traditional courses used for professional development (PD) of military and civilian personnel to fully online and hybrid formats that combine online and face-to-face instruction. No evaluation of student satisfaction or instructor experiences during the transition has been conducted. The purpose of this sequential mixed methods summative program evaluation was to evaluate hybrid and online delivery of 2 PD courses by analyzing student satisfaction data and instructor experiences. This study was grounded in Knowles, Holton, and Swanson's adult learning theory and Anderson's and Salmon's online learning theories. Data from 96 course evaluations from students who completed traditional, online, and hybrid versions of the PD courses, and interviews with 4 instructors who taught the courses were analyzed. Kruskal-Wallis analyses of variance tests were used to examine student satisfaction ratings for significant differences. Student satisfaction narrative and instructor interview data were analyzed using thematic analysis and axial coding to find themes. There were no significant differences in student satisfaction ratings among course delivery methods. The courses were not relevant to jobs, contained little interaction, and identified technology challenges as common themes in the student comments and the instructor interviews. Based on the findings of this study, an evaluation report was drafted with recommendations to incorporate job-related activities, interactive teaching strategies, and technology orientation sessions for future course transitions. This endeavor may contribute to positive social change by informing military officials and faculty to guide future course transitions from traditional to online and hybrid delivery.

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Dedication

This program evaluation study is dedicated to the loving memory of my father, Dr. Filomeno Flores. His unwavering support and pride of my accomplishments continue to inspire and encourage me. I also dedicate this study to my mother, who constantly stood by his side and took care of our family. She continues to be our family's biggest cheerleader and encourager.

I also dedicate this effort to my husband, Robert Goerke, and my children, Ashley and Alex, who have been with me every step of this journey listening to my hopes, dreams, and frustrations. Their support sustained me through this journey of discovery.

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My deepest appreciation goes to my committee chair, Dr. Delmus Williams, who encouraged, mentored, and guided me to achieve this educational milestone. I am also deeply grateful for my committee members, Dr. Mary Batiuk and Dr. Mary Howe. I also wish to acknowledge the faculty, instructors and students who were directly or indirectly involved in this effort.

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Section 1: The Problem

The Local Problem

Because of declining budgets and reduced personnel resources, senior military officials are encouraging the use of online technologies to provide cost effective solutions for military professional development (Air Education and Command [AETC], 2013; Naval Education and Training Command [NETC], 2013; U.S. Army Training and Doctrine Command [TRADOC], 2011). Military course providers are transitioning traditional courses used for professional development to fully online and hybrid formats that combine online and face-to-face instruction. However, little comparative research has been published that addresses the viability of online courses as a replacement for traditional professional development courses offered by the armed forces. It is critical that military instructors develop and deliver online courses that are based on sound, research-driven practices. To address that need, I evaluated the transition of two military professional development courses from traditional delivery to online and hybrid delivery.

Definition of the Problem

The commanders of all three military education and training commands published concept documents outlining future strategic visions and plans for military education and training (AETC, 2013; NETC, 2013; TRADOC, 2011). TRADOC officials highlighted the importance of using collaborative learning, tailored instruction, and the use of technology to engage learners in the U.S. Army Learning Concept for 2015 (TRADOC, 2011). TRADOC officials also outlined the Army's plans to use technology as a key enabler in providing adaptive learning throughout a soldier's or civilian employee's

career. Similarly, senior leaders at the NETC officials sought to leverage technology to tailor learning experiences for its diverse learner population and provide education and training throughout the learner's military career (NETC, 2013). Finally, in their vision for learning transformation AETC officials focused on implementing adaptive learning experiences, a continuum of learning, and accessibility, and highlighted technology as a critical element (AETC, 2013).

Consistent with the services' visions, instructors at the Military School (a pseudonym), a major provider of military professional development courses, initiated the development of online versions of two traditional courses in 2011. Course 1 (a pseudonym) transitioned to a fully online course, and Course 2 (a pseudonym) transitioned into a hybrid course that combined face-to-face classroom instruction with online coursework. These courses are currently a part of professional development programs for military officers and management-level civilians selected to assume midlevel leadership roles in base organizations.

From 2009 to 2011, the Military School instructors offered these courses exclusively as two-week traditional courses for male and female military and civilian personnel who were assuming midlevel management responsibilities. The students temporarily relocated to the Military School from their home military bases to complete the courses. The first week focused on general leadership and management topics including doctrine, leadership and management principles, and critical thinking skills and their applications. The second week included specific topics such as military personnel support, manpower and organization operations, and civilian personnel support. The

Military School offered the courses 2-5 times a year to classes ranging in size from 10-25 students.

Beginning in 2012, the Military School instructors piloted online and hybrid versions of these courses. Course 1 instructors transitioned the entire course to online delivery. Course 2 instructors combined 40 hours of online coursework prerequisites addressing general leadership topics normally covered during the first week of the traditional course with one week of traditional face-to-face classroom instruction at the Military School that covered the job-specific leadership topics previously covered during the second week of the traditional course.

As part of the school's course administration procedures, the Military School instructors have been collecting and archiving student satisfaction data for both of the courses under examination since 2007 using a summative End of Course Evaluation (EOCE: see Appendix B). Military School instructors continue to administer the same EOCE to students taking the online and hybrid version of both courses under examination. However, Military School personnel have not conducted formal comparative analyses of student satisfaction data as courses were transitioned from traditional to online and hybrid course delivery. The collection of these survey data for both courses as they transitioned to different delivery methods presented an opportunity to compare student satisfaction data from two courses offered in traditional, hybrid, and fully online versions. In addition, Military School personnel have not captured or analyzed instructors' reflections on their experiences as they transitioned their courses from traditional to online and hybrid course delivery.

Because Military School personnel have not conducted comparative analyses of student satisfaction data or examined instructor experiences, senior Military School leaders were concerned that current and future transition efforts are not based on sound, research-driven practices. The problem addressed in this study was the need to examine student satisfaction and instructor experiences before and after courses transition from traditional delivery to online and hybrid delivery. The purpose of this study was to evaluate hybrid and online delivery of two Military School courses by analyzing student satisfaction data before and after the course transitions from traditional delivery, and examining the experiences of instructors as they transitioned the two courses. Particular attention was given to the four areas of most concern to Military School senior leaders, faculty, and support staff: course mission accomplishment, course instruction, course management, and course value.

Rationale

Evidence of the Problem at the Local Level

In 2013, the Secretary of Defense severely restricted funding for Department of Defense (DoD) military and civilian travel (United States Department of Defense, 2013), leading to an immediate reduction in the funding available for student travel to attend professional development courses (Air Force Education Requirements Board, 2013). Because of these funding shortages, instructors at the Military School, a major source of military professional development courses, are increasingly turning to online instruction to meet professional development education requirements for its constituents.

A database of EOCE results exists for all of the past courses offered by the Military School. However, Military School personnel have not conducted formal analyses comparing student satisfaction data or examined instructor experiences from courses that transitioned from traditional to hybrid and online course formats using research-driven methods. Military School stakeholders have expressed an interest in having student satisfaction data examined from courses that have transitioned from traditional to online and hybrid delivery to inform future transition efforts (personal communication, February 6, 2013). They have also expressed an interest in the examination of instructor experiences during course transitions. Accordingly, approval for the study by the Military School's senior leaders was given for this study. The findings may be used to guide future Military School course transitions from traditional to hybrid and online delivery.

Evidence of the Problem from the Professional Literature

Professional development is essential for the growth and progression of military personnel and civilian employees and for the profession of arms in general. Periodic leadership education is critical to meet the ever-changing needs of individuals charged with leading organizations that address the important mission of national security and the organizations they serve. Formal education is an essential part of professional development. Practitioners, supervisors, senior leadership, and, ultimately, both the employing and educational institutions share the responsibility for providing optimal professional development opportunities (Roberts, 2007). For military personnel and civilian employees working for the military, keeping up with professional development is particularly challenging when stationed overseas or when deployed to remote locations.

Current literature reported the growth and continued improvement of online delivery methods for military education and training. Since 1997, the Advance Distributed Learning System (ADLS) has been used by military educators to successfully deliver distance education courses to millions of service members around the globe (United States General Accounting Office, 2003). Web-based technologies have made the DoD's ADLS vision of anytime, anywhere training a reality (United States General Accounting Office, 2003). Lenahan-Bernard (2012) described successful Army implementation of distributed learning using online technologies. Bonk and Dennen (2005) investigated the use of online gaming technologies for military training and education. Artino's (2008) study involving students at a military service academy yielded valuable information by correlating task value, self-efficacy, and instructional quality with student satisfaction with an online leadership development course.

However, results generated by comparative research of professional development courses offered in multiple delivery modes is sparse and inconclusive. Chamberlain and Taylor (2011) found no significant differences in examiner accuracy and consistency when comparing face-to-face and online instruction. Hauser et al. (2010) similarly found no significant differences in after school program leader knowledge gains when comparing face-to-face instruction and two variations of online instruction. Both of Donavant's (2009a, 2009b) research studies indicated no significant differences in learning outcomes when comparing traditional and online professional development courses for police officers. Artino's (2010) examination of the relationship between military students' personal factors and their preference for a specific instructional format

is the only study of military education available that compared traditional and online programs, and it focused on student characteristics rather than on either student satisfaction or instructor experiences and is outside of the scope of this study.

The purpose of this study was to evaluate the efficacy of hybrid and online delivery of two military professional development courses by analyzing student satisfaction data and the experiences of instructors during the transition. I compared student satisfaction data collected before and after the two courses were transitioned from traditional to online and hybrid delivery. I interviewed the instructors who transitioned these two courses from traditional delivery to hybrid and online delivery, and used interview data to add depth to my evaluation.

Definition of Terms

Hybrid course: A course that blends online and face-to-face instruction (Allen & Seaman, 2013).

Online course: A course where most or all of the content is delivered online. There are typically no face-to-face meetings when this format is used (Allen & Seaman, 2013).

Traditional course: A course that is delivered without the use of online technology (Allen & Seaman, 2013). It is synchronous instruction, offered face-to-face in person in a physical classroom where the students and instructors are present simultaneously.

Significance of the Study

The purpose of this study was to evaluate hybrid and online delivery of two Military School courses after they transitioned from traditional delivery by analyzing student satisfaction data and examining the experiences of instructors as they transitioned the two courses. The results of this study may provide insight into more effective ways to transition courses from traditional to hybrid and online delivery. The study may also add to the sparse body of comparative research literature addressing civilian and military professional development education, while, at the same time, offering senior military leaders, faculty, and support staff insights from comparisons made in a military education setting.

Research Questions

Researchers have found that the use of hybrid and online courses are an acceptable substitute for traditional courses. However, in a military education setting, only one researcher has conducted a comparative analysis between traditional and online courses in an undergraduate military degree-granting institution. Furthermore, there are no such studies that addressed the transition from traditional to hybrid and online course formats in military professional development courses. To date, personnel at the Military School, a provider of military professional development courses, have not formally analyzed based on instructor experiences and student satisfaction data from courses that have transitioned from traditional to hybrid and online course formats.

The problem addressed in this study was the need to examine student satisfaction and instructor experiences before and after courses are transitioned from traditional to

online and hybrid course delivery. The purpose of this study was to evaluate hybrid and online delivery of two military professional development courses by analyzing student satisfaction data and the experiences of instructors during the transition.

The following research questions guided the study.

RQ1: Is there a significant difference in student satisfaction after the Military School's Course 1 and Course 2 transitioned from traditional delivery to online and hybrid delivery?

$H_0$1: There is no significant difference in student satisfaction after the Military School's Course 1 and Course 2 transitioned from traditional delivery to online and hybrid delivery.

$H_1$1: There is a significant difference in student satisfaction when the Military School's Course 1 and Course 2 transitioned from traditional delivery to online and hybrid delivery.

RQ2: What are the Military School students' perceptions of the traditional, online, and hybrid versions of Course 1 and Course 2?

RQ3: What are the Military School instructors' experiences as they transitioned Course 1 and Course 2 from traditional delivery to online and hybrid delivery formats?

Review of Literature

Theoretical Foundation

Adult learning theory. Knowles et al.'s (2011) theory of adult learning provided the theoretical foundation for examining student satisfaction in traditional, online, and

hybrid courses. In computer-based instruction, Knowles et al.'s adult learner characteristics of self-direction and self-motivation are critical to successful course completion.

Self-direction was described as when a person matures beyond a dependence on others to directing his or her own activities, to include participating in learning opportunities (Knowles et al., 2011). Online instruction, especially asynchronous activities, requires the learner to be self-directed because activities are not monitored by an instructor in real time and are conducted at the learner's own pace. Instructional modules must be designed to account for this autonomy, and, therefore, must be learner-centered and encourage a high degree of self-direction. The design and support of learning modules must take into account the online student's degree of self-direction (Knowles et al., 2011). The online portion of the courses that were studied consist of modules that required students to complete 80% of the coursework asynchronously. This study examined differences in student satisfaction data for traditional, online, and hybrid courses. It was anticipated that student satisfaction might be higher for the online and hybrid courses based on a greater opportunity for self-direction.

Because of the high percentage of asynchronous activities in the courses being studied, self-motivation is also critical to student success. Self-motivation is when adults are motivated to learn by internal factors rather than external ones (Knowles et al., 2011). As such, adults, whether motivated by an interest in personal development, the prospect of financial gain, or professional advancement, will most likely choose to engage in a future learning opportunity. Students in the research sample were transitioning from

working level to management level positions and were required to successfully complete the courses being studied for both professional advancement and financial gain. Wlodkowski (2008) described this conditioned propensity as a deep social value and force. Similarly, Mott (as cited by Wlodkowski, 2008) pointed out that adults are more prone to choose learning opportunities that are relevant to their jobs.

The students who took the courses under examination in a hybrid or online format might have initially experienced a set-back in self-motivation because of the new learning environment. Mitchell and Honore (2007) stated that it might take time for students unfamiliar with the virtual learning environment to develop positive attitudes and high motivation levels. Negative attitudes and low motivation levels may initially have a negative effect on student satisfaction ratings. After many years of primary and secondary education in traditional classrooms, the adult learner might initially be hesitant to embrace the online learning environment and require a higher degree of encouragement from the instructor and staff.

Artino (2008) concluded that motivation about a learning activity and instructor quality were related to student satisfaction. This study examined differences in student satisfaction data for traditional, online, and hybrid courses. It was anticipated that student satisfaction may be lower for initial offerings of the online and hybrid courses than the traditional courses because of initial course design and instructor inexperience issues. However, it was also anticipated that student satisfaction may improve over time for subsequent offerings as course designers mature the content, and when instructors become more experienced in using the course technology.

Online learning theory. Anderson (2008) stated that, while adult learning theories such as Knowles et al. (2011)'s continue to apply to online learning, technology introduces new challenges such as online community building and virtual interaction in the absence of physical social cues. Palloff and Pratt (2000) went so far as to state that instructors must abdicate "our tried and true techniques that may have served us well in the face-to-face classroom in favor of experimentation with new technologies and assumptions" (p. 7). Salmon (2011) postulated that creating a sense of community online is vastly different than managing group dynamics in the face-to-face classroom.

To address these challenges, Knowles et al. (2011) emphasized the importance of aligning several factors including self-direction to create successful computer-based instruction. Anderson's (2008) theory of online learning focused on learner interactions with other learners, the instructor, and the content covered in the course, suggesting that successful online learning depended on at least one of these types of interactions operating at a high level. In Salmon's (2011) theory, learning-centered e-moderators who emphasized collaborative learning and community building replaced content-centered instructors in the online classroom.

The purpose of this study was to evaluate hybrid and online delivery of two military professional development courses by analyzing student satisfaction data and the experiences of instructors during the transition. I used these theories to guide the literature review, the research design and data analysis in Section 2, and the resultant project. The results of this study inform instructors about the use of flexible learning options in a variety of situations to more effectively meet student educational needs.

Review of the Broader Problem

I limited the search for current literature in military education and training to research articles that addressed United States military education and training programs published between the years 2008-2014 that were available in full text online from scholarly peer reviewed journals. I conducted a multidisciplinary ProQuest and EbscoHost search of 17 databases and found 18 relevant research studies using the following search terms: *military education, military training, military professional development, military continuing education, and military professional continuing education*. The researchers addressed the entire continuum of learning for the DoD's military members (officer and enlisted) and civilians from initial entry-level training to postgraduate education.

I also conducted a search on recent comparative research examining nonmilitary courses delivered in multiple formats available in full text online covering the same period. A multidisciplinary ProQuest and EbscoHost search of 14 databases yielded 34 relevant research articles using the following search terms: *online, hybrid, blended, traditional, resident, face-to-face, compare*. The researchers compared learning outcomes, student satisfaction and perceptions, as well as instructor experiences and perceptions. Learning experiences included courses offered by universities, colleges, and other professional development training organizations.

Use of technology in military education and training. As mentioned previously, the success of all three services' education and training initiatives depend on how effectively they use technology. Therefore, a key topic addressed in this literature

search was the question of whether or not technology has been successfully incorporated into military education and training settings. Recent research supports the services' expectations for the use of technology within training programs. Successful technology use ranged from the delivery of self-paced courses via online learning management systems (Artino, 2008, 2009a, 2009b, 2010; Artino & Jones, 2012; Artino & Stephens, 2009; Barker & Brooks, 2005; Schmidt & Mott, 2012; Sitzmann, Brown, Ely, Kraiger, & Wisher, 2009) to the use of artificial intelligence to create an intelligent tutoring system for military simulation-based training (Bratt, 2009).

Technology has also enabled military members and civilian employees stationed overseas and deployed to remote locations to keep up with education and training requirements. The ADLS has successfully delivered distance education courses to millions of service members around the globe (United States General Accounting Office, 2003). For instance, in their study of deployed surgical team members with no access to online instruction and no ability to travel to a traditional training site, Schulman et al. (2012) validated the efficacy of a mobile learning module comprised of a multimedia presentation delivered using an iPod Touch. In another example, Sostek (2012) described the use of mobile training modules hosted on an iPhone 4 to supplement hands-on training for Patriot missile crews and provides just-in-time training when crew members are in the field.

Despite these positive outcomes, military instructors must proceed cautiously in their use of technology for educational purposes. Bell and Federman (2014), Emerson and MacKay (2011), and Simonson (2000) cautioned against an overemphasis on the use

of technology as opposed to content, and they stressed the importance of first understanding the learning objectives of the course and instructional needs of the learner.

Comparative research in military education and training. While there has been a modest amount of recent research that generally supports the use of technology in military education and training settings, there has been very little recent research comparing traditional course delivery with hybrid and online course delivery. I only found one article in this literature review that compared levels of acceptance of online and traditional courses in this context. Artino (2010) examined the relationship between military students' personal factors and their choice of instructional format. Even here, the focus placed on student characteristics rather than student satisfaction in the areas of course mission accomplishment, course management, course instruction, and course value put it beyond the scope of my study. Because recent comparative literature in military education and training was lacking, the search was broadened to include research conducted in civilian education settings.

Comparative research in civilian education and training. In civilian education settings, a number of researchers have conducted comparative research comparing student satisfaction in traditional, hybrid, and online classroom settings. Results from 20 comparative studies were mixed. Only three studies (Bayliss & Warden, 2011; DiRienzo & Lilly, 2014; York, 2008) found no significant differences in student perceptions about the efficacy of traditional, online, and hybrid courses, the civilian equivalent to course mission accomplishment. The remainder of the comparative studies reported both

favorable and unfavorable perceptions of hybrid and online courses when compared with those offered face-to-face.

In the area of course management, flexibility and convenience of courses offered in the hybrid and online instructional formats were consistently identified in recent comparative studies as a contributor to favorable student perceptions. Lam and Bordia (2008) identified instructional design as a top consideration in generating positive perceptions among graduate students taking an online course. Modular designs enabled students to view course information on demand and multiple times to reinforce important concepts in the content areas covered (Lam & Bordia, 2008). Instructional design was also identified by Artino (2008) as the strongest contributor to overall student satisfaction with online courses. Artino also found that students were more satisfied with online learning tasks if they were perceived to be interesting, useful, and important. Business professionals, police officers, and undergraduate students identified flexibility and convenience as the things they liked most about hybrid and online education (Kim, Bonk, & Oh, 2008; Donavant, 2009a, 2009b; Kirtman, 2009). An online course was also shown to enable students hindered by physical constraints to take a hybrid course (Sherrill & Truong, 2010).

In contrast, poor course and instructional design practices were identified by researchers as contributing to unfavorable student satisfaction in online and hybrid courses. Researchers found that replicating classroom lectures by posting notes online or employing noninteractive online lecturing techniques detracted from the quality of distance education courses (Arbaugh et al., 2009; Bernard et al., 2004; Steinbronn &

Merideth, 2007). A perceived increase in workload for online and hybrid courses also lowered student satisfaction (Adams, 2013; Lim et al., 2008; Napier, Dekhane, & Smith, 2011). Finally, course technology challenges, computer availability, and Internet access issues negatively affected student satisfaction with online and hybrid courses (Diaz & Entonado, 2009; Donavant, 2009a, 2009b; Napier et al., 2011; Sherrill & Truong, 2010). Starr-Glass (2013) reported that deployed military students noted that technical issues detracted from the learning experience.

Poorly designed student-student interaction learning opportunities, or a lack thereof, also contributed to negative student perceptions. Arbaugh et al. (2009) reported lower student satisfaction ratings across various business disciplines for online courses due to a lack of peer interaction. In both studies, Donavant (2009a, 2009b) reported that a lack of peer interaction in a police professional development course offered online was the element most disliked by the students. Kirtman (2009) similarly reported negative comments from graduate students pursuing an online master's degree in education due to perceived lower peer interactions. One student in Kirtman's study commented that, "at times you have questions that you don't know you have until someone else in class asks them" (p. 110). Rabe-Hemp and Woollen (2009) tied significantly lower peer interactions with lower student satisfaction ratings for an online criminal justice course.

When considering course instruction, the quality of instructor-to-student interaction was found by researchers to be critical to student perceptions of hybrid and online courses. Lam and Bordia (2008) identified student-instructor interactions as the most important contributing factor to positive student perceptions of an online course "to

actively share, explore, and discuss ideas and insights" (p.136) and "build confidence in their ability to understand key concepts" (p.136). Castle and McGuire (2010) correlated the highest levels of student-instructor interaction ratings with the highest levels of student satisfaction in hybrid and online courses. In a study conducted by Lim, Kim, Chen, and Ryder (2008), hybrid and online students reported that higher quality interactions with their professors contributed to higher course satisfaction ratings when compared with those of students taking the traditional version of the same course. Napier, et al. (2011) also identified student interactions with the professor as contributing to positive student perceptions of a hybrid computer course. Horspoole and Lange (2012) found students in both traditional and online courses perceived that they enjoyed high quality communication with their instructors. Young and Duncan (2014) similarly found that there was a connection between higher course satisfaction levels and higher student-instructor interactions, though their study found higher satisfaction levels among those enrolled in traditional courses.

In a study comparing a traditional version of a course and two online versions of the same course, Nichols (2011) found that fewer students were satisfied with the online version of the course because it minimized instructor involvement. Donavant (2009a, 2009b) and Hale, Mirakian, and Day (2009) reported that a lack of student-facilitator interaction detracted from the perceived quality of an online course. Artino (2009a) suggested that a higher level of online instructor support was necessary to overcome low student critical thinking skills and student procrastination.

Instructor experiences. Because of the critical role that the instructor plays in students' perceptions of online and hybrid courses, recent comparative literature examining instructor experiences when teaching in a hybrid or online environment were analyzed. Five studies addressed various elements of teaching in traditional, hybrid, and online learning environments. Steinbronn and Merideth (2008) found that instructors perceived a high amount of transferability from traditional to online instructional methods that already incorporated technology to some degree to include student-to-student electronic discussions (i.e. chat forums, social media) and email communication with instructors. However, they found that lectures and hands-on student activities such as practical lab work, student presentations, and collaborative student projects used in traditional courses transferred less well to courses offered online. Diaz and Entonado (2009) found no significant difference in the perceived roles of teachers in online and traditional courses. Similarly, Cragg, Dunning, and Ellis (2008) reported that similar interactional techniques were used by professors teaching traditional and online courses.

Napier et al. (2011) identified a number of success factors and challenges instructors experienced when transitioning courses to a hybrid delivery mode. Most notably, striking the right balance between traditional and online elements was identified as both a success factor and a challenge. Similarly, Lam and Bordia (2008) reported that instructors cited personal interactions and student support as the keys to online learning success.

Implications

Research identified in the literature review highlighted the need for a program evaluation comparing hybrid and online course delivery in military professional development courses. Recent studies have confirmed the successful use of technology to deliver military education and training. However, there was little comparative research evaluating the transition from traditional to hybrid and online delivery formats in a military setting. A review of comparative research in civilian settings established possible parameters for evaluating course transitions from traditional to hybrid and online delivery formats. In particular, course design, quality of student-to-student interactions, and quality of instructor-to-student interactions can be used to evaluate course transitions.

The findings of this program evaluation study were summarized in an evaluation report, the project for this study. In the report, I provide Military School stakeholders including the commander, dean, department chairs, and instructors with information to guide future traditional course transitions to hybrid or online delivery formats. In the first phase of the study, archival student satisfaction ratings from the instructors' traditional courses were compared with posttransition ratings of hybrid and online delivery formats in the areas of mission accomplishment, course instruction, course management, and course value. During the second phase of the study, Military School course instructors were asked to participate in interviews to examine their experiences while transitioning their courses from traditional to hybrid and online delivery formats. All four instructor participants agreed to and completed the interviews.

Summary

Although there have been recent studies validating the use of technology in a military education setting (Artino, 2009a, 2009b, 2010; Artino & Jones, 2012; Artino & Stephens, 2009; Brown et al., 2009; Schmidt & Mott, 2012; Sitzmann et al., 2009, Sostak, 2012), Artino (2010) is the only researcher who has conducted a comparative analysis between traditional and online courses in a military setting. However, researchers examining other education and training programs have produced results that are promising, indicating that the use of hybrid and online courses are an acceptable substitute for traditional courses (Arbaugh et al., 2009; Bayliss & Warden, 2011; Bell & Federman, 2014; Castle & McGuire, 2010; Cao & Sakchutchawan, 2011; Chamberlain & Taylor, 2011; Diaz & Entonado, 2009; Donavant, 2009a, 2009b; Hauser et al.; 2010; Kirtman, 2009; Napier et al., 2011; Sherrill & Truong, 2010; Young & Duncan, 2014). If similar validation can be demonstrated in a military setting, online and hybrid courses may make more training and education available to military members worldwide at an affordable cost to the armed services. Section 2 includes details of the methodology used in comparing student satisfaction data and documenting instructor experiences during the transition of two Military School professional development courses previously offered in a traditional format to online and hybrid versions. In Section 3, I provide details of the evaluation report produced in this study to include a literature review and evaluation plan. I also outline the implications drawn from the evaluation report and how it may affect social change, assist the Military School stakeholders, and influence the development of military education. Section 4 contains a summary of conclusions, the evaluation report's

strengths and weaknesses, implications for the Military School and military education, recommendations for future research, and reflections on what I learned as a result of conducting the study.

Section 2: The Methodology

Introduction

Budget shortfalls and personnel reductions in the military have driven senior military leaders to turn to online learning solutions for professional development. Financial constraints mean that deployed and overseas military members and civilian employees have a more difficult time taking traditional professional development courses offered stateside that are essential to their career progression. As a result of these budget cuts and personnel reductions, military traditional professional development courses are rapidly being transitioned to the online learning environment.

Although there have been a number of recent studies comparing the relative effectiveness of online and traditional instructional methods at universities and colleges (Arbaugh et al., 2009; Bayliss & Warden, 2011; Bell & Federman, 2014; Castle & McGuire, 2010; Chamberlain & Taylor, 2011; Diaz & Entonado, 2009; Donavant, 2009a, 2009b; Hauser et al.; 2010; Kirtman, 2009; Napier et al., 2011; Sherrill & Truong, 2010; Young & Duncan, 2014), similar research is lacking in a military setting. Furthermore, recent research comparing the value of online and traditional instruction for military professional development courses is nonexistent. Severe resource constraints are driving the military to rapidly transition courses to formats that allow them to be offered at distance (United States Department of Defense, 2013), and research-based information about how best to make the transition from traditional to online and hybrid formats in a military setting is vital to inform future military professional development programs.

To date, the Military School has not conducted formal comparative analyses of student satisfaction data as courses were transitioned from a traditional format to online and hybrid delivery. In addition, the Military School has not captured or analyzed instructors' reflections on their experiences as they made these transitions. Therefore, there is a concern that current and future transition efforts are not based on sound, research-driven evaluations of practice in these schools. The problem addressed in this study was the need to examine student satisfaction data and instructor experiences before, during, and after courses are transitioned from traditional delivery to online and hybrid delivery. The following research questions were used to guide the study.

RQ1: Is there a significant difference in student satisfaction after the Military School's Course 1 and Course 2 transitioned from traditional delivery to online and hybrid delivery?

$H_0$1: There is no significant difference in student satisfaction after the Military School's Course 1 and Course 2 transitioned from traditional delivery to online and hybrid delivery.

$\underline{H}_1$1: There is a significant difference in student satisfaction when the Military School's Course 1 and Course 2 transitioned from traditional delivery to online and hybrid delivery.

RQ2: What are Military School students' perceptions of the traditional, online, and hybrid versions of Course 1 and Course 2?

RQ3: What are the Military School instructors' experiences as they transitioned the Military School's Course 1 and Course 2 from traditional delivery to online and hybrid delivery?

Mixed Methods Design and Approach

The purpose of this study was to evaluate hybrid and online delivery of two military professional development courses by analyzing student satisfaction data and the experiences of instructors during the transition. The Military School transitioned Course 1 to a fully online course and Course 2 to a hybrid format combining both traditional and online elements. I conducted a mixed methods summative program evaluation study of both course transitions using a sequential data collection and analysis approach. First, I conducted the quantitative portion by comparing archival numerical EOCE student satisfaction data from the traditional versions of Course 1 and Course 2 with archival numerical EOCE student satisfaction data from the online and hybrid versions of these courses. After the quantitative analysis was completed, I conducted interviews with the instructors teaching the courses and analyzed these resulting data along with student narrative data from the EOCE to identify themes using the axial coding strategy. Finally, I triangulated the findings from both portions of the study to determine areas of noteworthy data convergence or divergence.

Program Evaluation versus Traditional Research

Spaulding (2008) highlighted three major differences that set apart program evaluations from traditional research. The first difference is the relationship between the evaluator and the group being studied. Traditional research places importance on the

objectivity of a researcher and suggests a level of separation from the group being studied. In a program evaluation, a client-evaluator relationship dictates the objectives and conduct of the study. In the case of this study, stakeholders at the Military School have requested this research be done and have a major stake in the conclusions reached.

The second difference is the differing foci of program evaluations and traditional research (Spaulding, 2008). Results from traditional research are provided to the research community for possible application or to increase knowledge about a particular topic. In traditional research, generalizing findings to a wider population, and contributing to the body of literature are priorities. In contrast, determining the client's needs is the priority in a program evaluation. While the results of this program evaluation might contribute to the sparse research literature comparing online and face to face course delivery, the purpose of this study is to evaluate the transition of two Military School courses from traditional classroom delivery to hybrid and online delivery for stakeholders at the Military School. The results of this study may be used by Military School senior leaders and educators to guide future transitions.

The third difference is the pace of change resulting from program evaluations and traditional research. Findings from traditional research might not be immediately incorporated into practice at specific local settings because of the differences in populations, environments, and other contextually-driven factors. Program evaluations are tailored for a client's particular setting and are expected to result in rapid changes in practice (Spaulding, 2008). In fact, it is expected that, if a need for change is discovered during the evaluation, it will be addressed before the evaluation is complete. The pace of

course transitions at the Military School requires rapid incorporation of study results. The military budget and manning environment is not projected to improve for the next few years. Stakeholders at the Military School need actionable research results to help guide future course transitions from resident to online or hybrid instruction.

Type of Program Evaluation

Spaulding (2008) described a summative program evaluation as one that provides the results and analysis to the client after the research effort. The project for this study is an evaluation report that includes findings based on the triangulation of qualitative and quantitative analyses and recommendations for future course transitions.

- This evaluation employed a goals-based approach using the following program evaluation goals that were developed in concert with the Military School stakeholders: Examine instructor experiences while teaching traditional, online, and hybrid military leadership professional development courses.
- Compare student satisfaction data between resident, online, and hybrid military leadership professional development courses.

Setting and Sample

I conducted this mixed methods program evaluation at the Military School, a provider of military professional development courses. The two courses under examination are part of leadership professional development programs for midcareer officers and midlevel management civilians working for the DoD, the population of this study. Prior to 2012, the courses were offered once a year as two-week traditional courses

at the Military School. Both courses are intended to prepare male and female military and civilian personnel to lead midlevel military organizations.

Twenty-four students graduated from Course 1 in 2010 from the last traditional classroom course offering before it transitioned to an online course. In 2012, the online version replaced both weeks of traditional instruction with 8 weeks of online course work. Nine students graduated from the initial offering of the online version and completed the end of course evaluation. In 2013, four students graduated from the second offering of the online version and completed the end of course evaluation. Eleven students graduated from Course 2 in 2010 from the last traditional classroom course offering. In 2013, this course was transitioned to a hybrid format that combined 4 weeks of prerequisite online course work with 5 days of traditional classroom instruction at the Military School. Sixteen students graduated from the first hybrid class and completed course evaluations. The purpose of this study was to evaluate hybrid and online delivery of these two military professional development courses by analyzing student satisfaction data generated from these classes and the experiences of instructors during the transition. Convenience sampling is appropriate when the results are primarily required for decision-making (Lodico, Spaulding, & Voegtle, 2010).

For the quantitative portion of the study, I analyzed 96 course evaluations from course offerings in 2010 immediately preceding the transitions, and 2012-2013 course data from course offerings shortly after the transition from traditional to online and hybrid formats. This sample included male and female military and civilian students who took these leadership professional development courses offered at the Military School

who are midlevel managers and who were required to complete this training shortly after assuming their positions.

The research sample included military and civilian students who had participated in either traditional, online, or hybrid courses. Because the EOCE was taken anonymously, it was not possible to distinguish between military and civilian respondents. Therefore, I reviewed recent research in traditional and online educational settings to see if this external factor was going to affect the results of this study. In a military education setting, Barker and Brooks (2005) and Schmidt and Mott (2012) concluded that online training was effective for both military and civilian learners. Researchers also found that both mobile learning (Schulman et al., 2012) and traditional classroom learning (Hammermeister, Pickering, & Ohlson, 2009) were effective for both military personnel and civilians. In a civilian university environment, Fall, Kelly and Christen (2011) found no significant differences in motivation to learn between military and civilian students when taking online courses. Starr-Glass (2014) also found no significant differences in values and concerns expressed relating to experiences in online courses between military and nonmilitary online students.

For the qualitative portion of the study, I interviewed four Military School civilian instructors who taught the traditional, hybrid, and online versions of the courses under examination. Three of the four instructors taught the courses when they were offered exclusively in a traditional format at the Military School. This sample was consistent with samples from similar studies examining student and instructor experiences during course

transitions from traditional to online and hybrid instruction (Cragg et al., 2008; Lam & Bordia, 2008; Nichols, 2011; York, 2008).

Protection of participant rights is imperative for any research study. For the quantitative portion of the study, I used archival student satisfaction data from 2010-2013 EOCE for the courses under examination. The Military School faculty administered the EOCE online with raw data going directly to the Military School's institutional effectiveness personnel. All responses were anonymous, and instructors did not have access to raw data. The Military School's institutional effectiveness personnel provided summary reports to the course instructors with aggregated responses by question. There was no identifying information in the summary reports that could be traced to the individual respondent. No analysis had previously been conducted beyond a tabulation of responses.

For the qualitative portion of the study, I gained approval from Walden University's Institutional Review Board (IRB), the DoD's IRB and the Military School senior leadership prior to interacting with instructor participants. I provided each instructor participant with an interview package containing the Walden University IRB approval (04-07-15-0266353), military IRB approval, and Military School approval letters, cover letter, IRB approved consent form, and interview questions (see Appendix C). All agreed to participate.

The cover letter emphasized the voluntary nature of the interviews, the anonymity of their responses, and data protection procedures. The instructor participants were notified that their participation was voluntary and that they could cease participation at

any time during data collection without consequence. The instructor participants were notified about anonymity and that their identities would be protected by eliminating any identifying information and using participant pseudonyms. The instructor participants were also told that interview data would be kept in a locked filing cabinet at my home with all keys to the cabinet in my possession and that it would not be shared with anyone.

Data Collection Strategies

Role of the Researcher

I am a course director in a department of the Military School, and there is a potential for researcher bias. However, I have no affiliation with the courses under study. I have taught both online and traditional courses at the Military School for the past five years, but I have not taught either of the courses under study. Nor have I had any of the students who participated in these courses take any of the courses that I teach. I am not the supervisor nor am I in the management hierarchy of any of the instructors responsible for the courses under study. To minimize potential research bias, I have not, nor will I, begin working with, supervising, or socializing with any of the students or instructors except during formal Military School events. This sequential mixed methods program evaluation was conducted to better understand the experiences of instructors and students involved with courses transitioning from traditional to online or hybrid instruction. Research results may also inform future course transitions. As part of the Walden IRB process, I gained approval for the study from the Military School's Commander and Dean.

Quantitative Sequence

Archival numerical and narrative student satisfaction data for the courses under study were collected and provided by the Military School's institutional effectiveness personnel. Lodico et al. (2010) defined a preestablished instrument as one that was developed by someone other than the researcher conducting a study, that was piloted previously, and that used standard measures for collecting data. The Military School has EOCE (see Appendix B) to collect student course satisfaction data for all traditional, online, and hybrid courses. It has been used for the courses under examination since 2009. The Military School's institutional effectiveness personnel review and validate the instrument annually. There are nine Likert scaled statements in the areas of course mission accomplishment, course management, course instruction, and course value (see Appendix B). At the completion of each Military School course, instructors provide a link to the online EOCE ask the students to complete the evaluation. Traditional classroom students are asked to complete the EOCE prior to departing the classroom. Hybrid and online students are given three days to complete the EOCE online. It typically takes 10-15 minutes for a student to complete this assessment. Students are asked to rate the nine statements included as *strongly agree*, *agree*, *slightly agree*, *slightly disagree*, *disagree*, and *strongly disagree*. Students are also asked to provide narrative comments explaining their ratings.

The Military School's institutional effectiveness personnel collect the data, assimilate the results, and provide summary reports that consist of aggregated data by statement to Military School course instructors. The information in the summary report is

not traceable to individual respondents. The Military School defines a successful course as one in which at least 90% of the respondents *strongly agree*, *agree*, or *slightly agree* that the course mission was accomplished, the instructor delivered the course content very effectively, the course was managed very effectively, and the course was deemed by students to be highly valuable in their professional career development. Archival raw data, which included student numerical ratings and narrative comments, used in this evaluation study were provided by the Military School's Institutional Effectiveness office, and will be made available at the request of future researchers.

Qualitative Sequence

Student narrative data collection. I obtained archival student satisfaction narrative data from Military School's institutional effectiveness personnel to analyze and address the second research question which was to ascertain the perceptions of students in traditional, hybrid and online versions of the courses in this study. In addition to the numerical student satisfaction ratings, students also provided narrative comments anonymously while completing the EOCE. Student narrative comments were collected and assimilated by Military School institutional effectiveness personnel and provided in a summary report to the course instructors after the traditional, online, and hybrid versions of Course 1 and Course 2. The information in the summary report was not traceable to individual respondents.

Instructor interview data collection. I collected instructor narrative data using the interview questions attached in this report as Appendix C. These questions were based on a questionnaire developed by Chester (2012) who examined instructor

experiences while transitioning to online instruction in another setting. I modified the interview questions to capture the Military School instructors' experiences while undergoing the transition from traditional to online instruction. Three Military School instructors with doctorates reviewed the interview questions and made suggestions for improvement. These suggestions were incorporated into the interview guide as appropriate in order to fully address the third research question which was used to examine instructor experiences during the course transitions.

The study was approved by the Military School Commander and Dean and Walden University's Institutional Review Board, after which I obtained the email addresses of the four military leadership course instructors from the Dean and contacted them via email, providing them with an interview package containing the Walden IRB and Military School approval letters, a cover letter explaining the purpose and nature of the study, the IRB approved consent form, and the interview questions (see Appendix C). The cover letter emphasized the voluntary nature of the interviews, measures to be taken to protect the anonymity of their responses, and data protection procedures. All four instructors agreed to participate, and I collected their consent forms via email or in person. I scheduled a 60-minute interview with each instructor at a time that did not impact their work or personal schedules.

I conducted four separate 60-minute interviews with the four instructor participants in the Military School's guest speaker office, a location that was secluded and outside of the instructors' work centers, but convenient to minimize disruption to the instructor participants' schedules. At the beginning of each interview, I secured

permission from each instructor participant to record the interview as back up to the written notes taken during the course of these conversations. The tape recorder during Participant 2's interview malfunctioned. However, sufficient notes were taken during the interview to transcribe Participant 2's responses. Participant 2 was also given an opportunity to review and make changes to the transcribed results.

I transcribed the interview responses within 24 hours of each interview on my password protected laptop and noted emergent themes in my research notes after each interview. I stored all of the electronic and written research notes, interview raw data, transcribed results, and coded analyses in a locked file cabinet in my home office. I am in sole possession of all keys to the locked file cabinet.

Data Analysis

For the quantitative portion of this study, I analyzed Likert scaled student satisfaction data from 96 student EOCE using STATDISK 11.1.0. Descriptive statistics such as mean, median, mode, standard deviation, and frequency distributions were calculated for four EOCE statements pertaining to the areas of most concern to the Military School's stakeholders: course mission accomplishment, course instruction, course management, and course value. I used STATDISK 11.1.0 to analyze data distributions and determined that these data were not normally distributed. As a result, I conducted nonparametric Kruskal-Wallis analysis of the variance tests that Triola (2012) prescribed to compare data from three samples for nonnormal distributions. I set the probability level to 0.05, the typical value set by educational researchers (Lodico et al., 2010). The findings of the quantitative portion of the study addressed the first research

question which was to determine whether or not there were significant differences in student satisfaction for traditional, online, and hybrid versions of Course 1 and Course 2.

For the qualitative portion of the study, I examined qualitative student satisfaction data and instructor participant interview data using axial coding methods that is by grouping qualitative data into categories or themes, as prescribed by Merriam (2009). I examined these data initially using the categories that are of most concern to the Military School stakeholders: course mission accomplishment, course instruction, course management, and course value. Findings from analysis of the student satisfaction narrative data addressed the second research question which was designed to ascertain perceptions of the traditional, online, and hybrid versions of Course 1 and Course 2. Findings from analysis of the instructor interview data addressed the third research question which was to examine instructor experiences during the transition of Course 1 and Course 2 from traditional to online and hybrid delivery.

To determine validity and trustworthiness of qualitative data, Lodico et al. (2010) recommended conducting a peer review of the coded data sets and having participants check their transcripts for accuracy. Both approaches were used in this study. A Military School faculty member with a doctorate and expertise and experience in using qualitative research methods completed a peer review of the coded student narrative data and instructor participant interview transcripts. This faculty member was not affiliated with the courses under examination and was not in the supervisory chain of the interviewed instructors. With the permission of the instructor participants, I provided the coded

transcripts with no identifying data to this peer reviewer. No additional changes to the interview guide were recommended by the peer reviewer.

I emailed a copy of each interview transcript (transcript review) to the individual instructor participants to have them check the accuracy of their transcript, and I gave them one week to email changes to me prior to finalizing these narrative data. Participant 3 made minor grammatical edits and provided additional detail to the transcription of the interview for interview questions 2, 3, 5, and 9. The revised transcript was used in the qualitative analysis of this study. Participants 1, 2, and 4 made no changes to their transcripts. It must be noted that transcript review limits the findings of this study because review only pertains to the interview transcriptions and not to quality of the findings.

I used triangulation as a final method to ensure credibility of the quantitative and qualitative analyses. Cohen and Crabtree (2008) defined triangulation as "using multiple data sources in an investigation to produce understanding" (Triangulation section para. 1). I used methods triangulation which, according to Patton is "checking out the consistency of findings generated by different data collection methods" (p. 1193). Creswell (2009) recommended a number of data analysis approaches when converging different data sets in a mixed methods research design.

I selected the triangulation approach which based the analysis on multiple levels of data that were collected using quantitative and qualitative methods (Creswell, 2009). Student and instructor data sets comprised the multiple levels. The student satisfaction archival data set was collected using a survey that collected both quantitative and

qualitative data. Permission to use the data set was granted as part of the IRB process by the Military School Commander and Dean. The instructor experiential data set was collected using semistructured interviews and provided additional support for a qualitative analysis.

Limitations

A key assumption upon which this study is based was that all four instructors were available and willing to conduct the interviews, and this proved to be true. A second assumption was that the course mission and learning objectives for the courses when transitioning from tradition classroom delivery to hybrid and online course delivery did not significantly change. Only one instructor participant commented that course objectives changed during the transitions.

The quality of the archival data could have been a limitation for this study. Until approval was granted by the Walden IRB to begin working with these data, the full impact of this limitation was not known. Another limitation was the fact that only four instructors taught the courses under examination. Had multiple instructors opted to not be interviewed, their refusal would have had a significate impact on the study. However, all four instructors consented to participate and completed the interview so this did not prove to be a problem. A possible third limitation of the study was researcher bias because I am a course director in the Military School. However, as mentioned previously, I work in a separate department from where the courses under examination are managed, and I do not have social or supervisory relationships with any of the instructors or students of the courses under examination. A fourth limitation identified in the design of the study was

the potential influence of the military hierarchy to provide results that support the use of technology in the classroom because resources have already been devoted to this course of action. Again, this did not prove to be a problem.

Lodico et al. (2010) highlight a number of limitations associated with mixed methods research. The first limitation is the complex nature of using both quantitative and qualitative methodologies. A second limitation is the difficulty of mixing the results into coherent research findings and conclusions. A third is the potential for overemphasizing one type of data over another which could skew potentially valuable research results. For this study's exploratory mixed methods design, qualitative instructor interview data collection and analysis is preeminent with student satisfaction quantitative data analysis adding depth to the findings.

I chose to limit the scope of this program evaluation to two courses (See previous comments). There were four other Military School courses that transitioned from traditional to hybrid or online instructional formats in the same timeframe. However, the two courses under examination provided the largest sample. This delimitation was intended to minimize the impact of potential extraneous variables by keeping the courses within the same department of the Military School. The students attending both courses were from two military career fields, and the instructors being interviewed taught both courses. Extending the study to the other four courses would introduce different course content, vary the student career fields and involve different sets of instructors.

Data Analysis Results

Quantitative Findings

The quantitative analysis was conducted to answer the following research question:

RQ1: Is there a significant difference in student satisfaction after the Military School's Course 1 and Course 2 transitioned from traditional delivery to online and hybrid delivery?

$H_0$1: There is no significant difference in student satisfaction after the Military School's Course 1 and Course 2 transitioned from traditional delivery to online and hybrid delivery.

$H_1$1: There is a significant difference in student satisfaction when the Military School's Course 1 and Course 2 transitioned from traditional delivery to online and hybrid delivery.

The Military School's Institutional Effectiveness Office collected student satisfaction data for the pretransition traditional Course 1 and Course 2, and posttransition traditional, online, and hybrid courses using the End of Course Evaluation at Appendix B. Students responded to their degree of agreement to course evaluation statements. Responses ranged from *strongly agree* to *strongly disagree*.

I translated the responses into numerical values ranging from 6 for *strongly agree* to 1 for *strongly disagree*. I used STATDISK 11.1.0 to conduct quantitative descriptive and inferential statistical analyses comparing student satisfaction ratings between the pretransition traditional versions of the courses, and the posttransition online and hybrid

courses. The findings were presented for Course 1 and Course 2 in the areas of most concern to the military school stakeholders, mission accomplishment, course instruction, course management, and course value.

Course 1. In 2012, the traditional version of Course 1 was divided into two online courses. The first online portion, the basic skills course, covered the fundamentals of leading a midlevel military organization. The second online portion, the Specialized Skills 1 Course (a pseudonym), covered specific topics from the second week of the original course. Twenty-three students completed the pretransition traditional Course 1 in 2010 and the End of Course Evaluation. Thirteen students completed the posttransition online Specialized Skills 1 Course in 2012 and 2013, and the End of Course Evaluation. The results were combined to develop a viable sample size for analysis. Thirty-two students completed the online Basic Skills Course and the End of Course Evaluation in 2012. All students were from the first specialized career field under examination.

In 2013, students taking the Basic Skills End of Course Evaluation were drawn from a mix of midlevel managers working in the two specialized career fields under examination. The students took the survey anonymously online and the results were aggregated to insure anonymity. Therefore, it was not possible to determine a breakout of responses from the students by career field.

Mission accomplishment. Military School institutional effectiveness personnel define mission accomplishment as achieving course objectives which are contained in the course mission statement (Personal communication, May 18, 2016). As shown in Table 1, all of the responses met the Military School's criteria of *slightly agree* or higher to the

statement “Based on the mission statement above, I believe the course accomplished its mission.”

Table 1

Course 1 Mission Accomplishment Student Response Frequencies

Course	Delivery Mode	Strongly Agree	Agree	Slightly Agree
Course 1	Traditional	10	12	1
Basic Skills Course	Online	16	13	3
Specialized Skills 1 Course	Online	6	7	0

I found no significant differences among the three course means for student satisfaction of mission accomplishment. Means for the three courses are shown in Table 10. I used STATDISK 11.1.0 to examine data distributions and conduct one-way analyses of variance. The data were not normally distributed. Therefore, I used nonparametric Kruskal-Wallis tests to determine whether there were significant differences among the three course means. The *p* value was set at .05. The differences were not significant, H (2, N = 68) = .072, p = .96. Therefore, the null hypothesis could not be rejected. This finding supports recent research comparing online and traditional instructional formats of a graduate nurse anesthesia course. Palmer, O’Donnell, and Henker (2014) found that even though the online course student satisfaction mean for the accomplishment of course objectives was higher than the traditional course mean, the difference was not statistically significant. The same was true in this study.

Table 2

Course 1 Mission Accomplishment Descriptive Statistics

Course	Delivery Mode	*n*	*M*	*SD*
Course 1	Traditional	23	5.391	0.583
Basic Skills Course	Online	32	5.406	0.665
Specialized Skills 1 Course	Online	13	5.462	0.519

Course instruction. Student satisfaction ratings in the area of instructor effectiveness are shown in Table 3. All of the responses met the Military School's criteria of *slightly agree* or higher to the statement "Instruction during this course was delivered effectively."

Table 3

Course 1 Course Instruction Student Response Frequencies

Course	Delivery Mode	Strongly Agree	Agree	Slightly Agree
Course 1	Traditional	8	13	2
Basic Skills Course	Online	17	14	1
Specialized Skills 1 Course	Online	8	5	0

I found no significant differences among the three course means for student satisfaction of instructor effectiveness. Means for the three courses are shown in Table 4. I used STATDISK 11.1.0 to examine data distributions and conduct one-way analysis of variance testing. The data were not normally distributed. Therefore, I used nonparametric Kruskal-Wallis tests to determine whether there were significant differences among the

three course means. The *p* value was set at .05. The differences were not significant, $H(2, N = 68) = 2.674$, $p = .26$. The null hypothesis could not be rejected.

This finding supports research comparing student satisfaction means of instructor effectiveness for online and traditional instructional formats. In a recent study comparing online and traditional formats of a sociology course, Driscoll, Jicha, Hunt, Tichavsky, and Thompson (2014) found that there were no significant differences in student ratings of instructor effectiveness. Palmer et al. (2014) found that student satisfaction ratings of instructor effectiveness did not significantly differ in a graduate nurse anesthesia course offered in online and traditional formats. Hale et al. (2009) reported student satisfaction ratings in a pharmacology course of instructor effectiveness did not significantly differ for online and traditional course versions.

Table 4

Course 1 Course Instruction Descriptive Statistics

Course	Delivery Mode	*n*	*M*	*SD*
Course 1	Traditional	23	5.261	0.619
Basic Skills Course	Online	32	5.500	0.568
Specialized Skills 1 Course	Online	13	5.615	0.506

Course management. Student satisfaction ratings in the area of course management are shown in Table 5. All except one of the responses met the Military School's criteria of *slightly agree* or higher to the statement "The course was managed very effectively by the course director."

Table 5

Course 1 Course Management Student Response Frequencies

Course	Delivery Mode	Strongly Agree	Agree	Slightly Agree	SlightlyDisagree
Course 1	Traditional	8	13	2	0
Basic Skills Course	Online	17	14	1	1
Specialized Skills 1 Course	Online	8	5	0	0

I found no significant differences among the three course means for student satisfaction of course management. Means for the three courses are shown in Table 6. I used STATDISK 11.1.0 to examine data distributions and conduct one-way analysis of variance testing. The data were not normally distributed. Therefore, I used nonparametric Kruskal-Wallis tests to determine whether there were significant differences among the three course means. The *p* value was set at .05. The differences were not significant, $H(2, N = 68) = .605$, $p = .74$. The null hypothesis could not be rejected.

This finding supports research comparing student satisfaction means of course management for online and traditional instructional formats. Driscoll et al. (2014) found that student satisfaction ratings of course management did not significantly differ in a sociology course offered in online and traditional formats. In a recent study comparing online and traditional formats of a graduate nurse anesthesia course, Palmer et al. (2014) reported there were no significant differences in student ratings of course management. In a continuing education course for university personnel preparing to assist visually impaired students, Kim, Lee, and Skellenger (2012) reported student satisfaction ratings of course management did not significantly differ for online and on-campus versions.

Table 6

Course 1 Course Management Descriptive Statistics

Course	Delivery Mode	*n*	*M*	*SD*
Course 1	Traditional	23	5.652	0.573
Basic Skills Course	Online	32	5.688	0.535
Specialized Skills 1 Course	Online	13	5.846	0.376

Course value. Student satisfaction ratings in the area of course value are shown in Table 7. All except one of the responses met the Military School's criteria of *slightly agree* or higher to the statement "The education received was highly valuable to my professional career development."

Table 7

Course 1 Course Value Student Response Frequencies

Course	Delivery Mode	Strongly Agree	Agree	Slightly Agree	Slightly Disagree
Course 1	Traditional	12	11	0	0
Basic Skills Course	Online	16	14	1	1
Specialized Skills 1 Course	Online	6	7	0	0

STATDISK 11.1.0 was used to conduct descriptive statistical analyses. As shown in Table 8 the course value student satisfaction means for both the online Basic Skills Course and the online Specialized Skills 1 Course were lower than the mean for the traditional Course 1. These findings were consistent with research comparing student satisfaction of courses offered in online and traditional formats.

I found no significant differences among the three course means for student satisfaction of course value. Means for the three course are shown in Table 8. I used STATDISK 11.1.0 to examine data distributions and conduct one-way analysis of variance testing. The data were not normally distributed. Therefore, I used nonparametric Kruskal-Wallis tests to determine whether there were significant differences among the three course means. The p value was set at .05. The differences were not significant, H (2, N = 68) = .133, p = .936. The null hypothesis could not be rejected. These results do not support the assertions made in Section 1 based on Knowles et al.'s adult learning theory of self-direction and self-motivation in an online course setting. However, they support prior research findings of no significant differences in student satisfaction between online and traditional courses (Bayliss & Warden, 2011; DiRienzo & Lilly, 2014; York, 2008).

Table 8

Course 1 Course Value Descriptive Statistics

Course	Delivery Mode	*n*	*M*	*SD*
Course 1	Traditional	23	5.522	0.511
Basic Skills Course	Online	32	5.406	0.712
Specialized Skills 1 Course	Online	13	5.462	0.519

Course 2. In 2013, the traditional Course 2 was divided into an online course and a traditional course. The first online portion, the Basic Skills Course, covered the fundamentals of leading a midlevel military organization. The second traditional portion, the Specialized Skills 2 Course (a pseudonym), covered specific topics from the second

week of the original course. Twelve students completed the pretransition Course 2 End of Course Evaluation after completing the traditional course. One of the respondents erroneously took the evaluation after completing a different, unrelated course. Because the results were aggregated and the students took the evaluation anonymously, it was not possible to delete this respondent's results.

Twenty-three students completed the posttransition 2013 Basic Skills Course End of Course Evaluation after completing the online prerequisite course. The results were from a mix of students from the two different career fields under examination. Because the results were aggregated and the students took the survey anonymously online, it was not possible to determine a breakout of responses by career field. Sixteen students completed the 2013 Specialized Skills 2 End of Course Evaluation after completing the traditional track course. All students were from the second career field under examination.

Mission accomplishment. As shown in Table 9, all of the student satisfaction ratings were within the Military School's standard of *slightly agree* or higher to the statement "Based on the mission statement above, I believe the course accomplished its mission."

Table 9

Course 2 Mission Accomplishment Student Response Frequencies

Course	Delivery Mode	Strongly Agree	Agree	Slightly Agree
Course 1	Traditional	5	7	0
Basic Skills Course	Online	11	9	3
Specialized Skills 2 Course	Traditional	10	5	1

I found no significant differences among the three course means for student satisfaction with mission accomplishment. Means for the three course are shown in Table 10. I used STATDISK 11.1.0 to examine data distributions and conduct one-way analysis of variance testing. The data were not normally distributed, Therefore, I used nonparametric Kruskal-Wallis tests to determine whether there were significant differences among the three course means. The *p* value was set at .05. The differences were not significant, H (2, N = 51) = .892, p = .640. Therefore, the null hypothesis could not be rejected.

Table 10

Course 2 Mission Accomplishment Descriptive Statistics

Course	Delivery Mode	n	*M*	*SD*
Course 2	Traditional	12	5.417	0.515
Basic Skills Course	Online	23	5.348	0.714
Specialized Skills 2 Course	Traditional	16	5.563	0.629

Course instruction. Student satisfaction ratings in the area of instructor effectiveness are shown in Table 11. All of the responses met the Military School's standard of *slightly agree* or higher to the statement "Instruction during this course was delivered effectively."

Table 11

Course 2 Course Instruction Student Response Frequencies

Course	Delivery Mode	Strongly Agree	Agree	Slightly Agree
Course 2	Traditional	5	7	0
Basic Skills Course	Online	12	10	1
Specialized Skills 2 Course	Traditional	9	7	0

I found no significant differences among the three course means for student satisfaction of instructor effectiveness. The means for all three course are shown in Table 12. I used STATDISK 11.1.0 to examine data distributions and tested for one way analysis of variance. The data were not normally distributed; therefore, I used nonparametric Kruskal-Wallis tests to determine whether there were significant differences among the three course means. The *p* value was set at .05. The differences were not significant, H (2, N = 51) = .412, p = .814. The null hypothesis could not be rejected. These findings do not support Adam's (2013) research comparing traditional and hybrid versions of a physical therapy course which found significant differences when comparing student satisfaction of hybrid and traditional instructors.

Table 12

Course 2 Course Instruction Descriptive Statistics

Course	Delivery Mode	*n*	*M*	*SD*
Course 2	Traditional	12	5.417	0.515
Basic Skills Course	Online	23	5.478	0.593
Specialized Skills 2 Course	Traditional	16	5.563	0.512

Course management. Student satisfaction ratings in the area of course management are shown in Table 13. All except one of the responses met the Military School's standard of *slightly agree* or higher to the statement "The course was managed very effectively by the course director."

Table 13

Course 2 Course Management Student Response Frequencies

Course	Delivery Mode	Strongly Agree	Agree	Slightly Agree	SlightlyDisagree
Course 2	Traditional	8	4	0	0
Basic Skills Course	Online	16	6	0	1
Specialized Skills 2 Course	Traditional	10	6	0	0

I found no significant differences among the three course means for student satisfaction of course management. The means for all three courses are shown in Table 14. I used STATDISK 11.1.0 to examine data distributions and conduct one way analyses of variance. The data were not normally distributed, Therefore, I used nonparametric Kruskal-Wallis tests to determine whether there were significant differences among the

three course means. The *p* value was set at .05. The differences were not significant, *H* (2, *N* = 51) = .085, *p* = .958. Therefore, the null hypothesis could not be rejected.

Table 14

Course 2 Course Management Descriptive Statistics

Course	Delivery Mode	*n*	*M*	*SD*
Course 2	Traditional	12	5.667	0.492
Basic Skills Course	Online	23	5.652	0.573
Specialized Skills 2 Course	Traditional	16	5.625	0.500

Course value. Student satisfaction ratings in the area of course value are shown in Table 15. All except one of the responses met the Military School's standard of *slightly agree* or higher to the statement "The education received was highly valuable to my professional career development."

Table 15

Course 2 Course Value Student Response Frequencies

Course	Delivery Mode	Strongly Agree	Agree	Slightly Agree	SlightlyDisagree
Course 2	Traditional	8	4	0	0
Basic Skills Course	Online	10	11	1	1
Specialized Skills 2 Course	Traditional	11	5	0	0

Student satisfaction means relating to students' perceptions of the value of the course for all three courses are shown in Table 16. After conducting inferential statistical analyses, I found no significant differences among the three course means. I used STATDISK 11.1.0 to examine data distributions and conduct one way analyses of

variance. The data were not normally distributed. Therefore, I used nonparametric Kruskal-Wallis tests to determine whether there were significant differences among the three course means. The *p* value was set at .05. The differences were not significant, *H* (2, *N* = 51) = .2.752, *p* = .253. The null hypothesis could not be rejected. This finding was consistent with York's (2008) findings of no significant differences when comparing hybrid and traditional formats of a social work course.

In contrast, significant differences were found in three research studies that compared course student satisfaction of hybrid and traditional course formats. Wiechowski and Washburn (2014) found that students' satisfaction ratings for hybrid courses were significantly higher than traditional versions of finance and economic courses. Adams (2012) also reported significantly higher course student satisfaction ratings for a hybrid physical therapy course than the traditional version. In a wellness course, Lim et al. (2008) found that student satisfaction was significantly higher for a format that combined online and traditional instruction when compared to the traditional version of the course.

Table 16

Course 2 Course Value Descriptive Statistics

Course	Delivery Mode	*n*	*M*	*SD*
Course 2	Traditional	12	5.667	0.492
Basic Skills Course	Online	23	5.304	0.712
Specialized Skills 2 Course	Traditional	16	5.688	0.519

Qualitative Findings

The following research questions provided focus for the qualitative portion of this program evaluation.

RQ2: What are Military School students' perceptions of the traditional, online, and hybrid versions of Course 1 and Course 2?

RQ3: What are the Military School instructors' experiences as they transitioned the Military School's Course 1 and Course 2 from traditional delivery to online and hybrid delivery?

Student perceptions. The student satisfaction data set provided by the Military School institutional effectiveness personnel included narrative student comments to open-ended questions associated with each survey item. I used Merriam's (2009) qualitative data analysis method to examine data from traditional, online, and hybrid versions of Course 1 and Course 2. I reviewed the data set iteratively and axial coded student responses that were relevant to the research question. Codes that appeared to be related or similar were subsequently grouped into categories. I organized the findings for each course by mission accomplishment, course instruction, course management, and course value, the areas of most concern to the Military School stakeholders.

I provided the coded data set to a Military School faculty member with a doctorate and experience with qualitative research methods for peer review. This faculty member also had experience with traditional, hybrid, and online instruction, and was not affiliated with any of the courses under study. No additional changes to the coded student satisfaction qualitative data set were recommended by this peer reviewer.

Course 1. I examined Course 1 student satisfaction qualitative data from 2012 and 2013. In 2012, the 2-week traditional Course 1 was transitioned to the online Basic Skills Course and online Specialized Skills 1 Course. Students were required to take the online Basic Skills Course before taking the online Specialized Skills Course. In 2013, the online Basic Skills Course was offered to students as a prerequisite for both the online Specialized Skills 1 Course and Specialized Skills 2 Course. I was unable to separate responses by type of follow-on course. Therefore, the Online Basic Skills student responses were included in both the Course 1 and Course 2 analyses.

Mission accomplishment. In response to the End of Course Evaluation question "Why do you feel the course did or did not accomplish its mission?" students identified relevance to job for the pretransition traditional Course 1 and posttransition online Basic Skills Course, and work distractions, interaction, and instructor quality for the posttransition online Basic Skills and Specialized Skills 1 courses. Sample responses are shown in Table 17 with minor edits to protect the anonymity of the respondents and instructor participants.

Table 17

Course 1 Mission Accomplishment Student Responses

Category	Sample responses
Traditional Course 1	
Relevance to job	We were taught critical elements we need as...leaders. This helps me to do a better job. There were some [areas] that I feel weren't relevant to us as [leaders]. Not enough meat on the actual programs we are responsible for. Provided tools on areas...to perform the duties.
Online Basic Skills Course	
Relevance to job	Talked about all the important issues for a (leader). Great tools offered for new (leaders). Provided the tools and methodology to accomplish a (leader's) duties and responsibilities. It made me think differently about my job.
Work distractions	It's hard to stay focused (with) distractions (and) while doing normal duties throughout the day. I would have been more engaged had I been away from my office. Very hard to stop what you are doing in the middle of the day and have an uninterrupted webinar)…too many distractions.
Interaction	Interaction with peers was great. Networking. Weekly class sessions that were interactive.
Online Specialized Skills 1 Course	
Instructor quality	The instructors made the difference. The instructors were great. Great instructors.

The theoretical framework established in Section 1 was supported by this study's categories of relevance to job, level of interaction, and instructor quality. Multiple comments in all three courses tying course mission accomplishment with the course's relevance to students' jobs were consistent with research conducted by Knowles et al.

(2011) and Mott (as cited by Wlodkowski, 2008). Both researchers theorized that adults are more prone to choose learning opportunities that are relevant to their jobs (Knowles et al., 2011; Wlodkowski, 2008). Anderson's (2008) research emphasizing the importance of establishing a high level of student interactions with each other and with their instructors in an online learning environment was supported by positive perceptions of course mission accomplishment attributed to interaction in the online Basic Skills Course. Salmon's (2011) online learning theory was supported by a trend of positive student comments in the online Specialized Skills 1 Course tying instructor quality to successful course mission accomplishment. He argued that high quality instructors known as e-moderators were critical for success in the online classroom (Salmon, 2011).

Course instruction. In student responses to the End of Course Evaluation question "Why do you feel the instruction for this course was or was not delivered effectively," What were the best area(s) of instruction," and "What area(s) of instruction do you consider to be least effective?" I found the categories of relevance to job and instructor quality in the pretransition traditional Course 1, and relevance to job, instructor quality, level of interaction, and webinar quality for the posttransition online Basic Skills and Specialized Skills 1 courses. Sample responses are shown in Table 18. Minor rewording was used to protect the anonymity of the respondents and instructor participants, and distinguish between course instructors and guest lecturers. Defense Connect Online (DCO), a version of Adobe Connect used by the military, was the webinar system used during the online Basic Skills and Specialized Skills 1 courses.

Table 18

Course 1 Course Instruction Student Responses

Category	Sample responses
Traditional Course 1	
Relevance to job	Most helpful in enabling me to do my job better. Key to our position. Best prepared briefers with…details for our duties. (Guest lecturer) failed to relate to the responsibilities of the (job). (Guest lecturer's) presentation was not applicable to the (job).
Instructor quality	All instructors were professional and knowledgeable. (Guest lecturer) was unable to answer specific questions. (Guest lecturer) was not appropriate for the topic. Insulting (guest lecturer).
Online Basic Skills Course	
Relevance to job	Important part of managing. These were the duties that new (leaders) would most benefit from. Applied directly to many of the issues I face.
Instructor quality	Instructors were always engaging and on point. Responsive to student inputs. (Instructors got) students to use critical thinking and analysis. (Instructor) was great! Enjoyed instructor. I liked the use of different instructors.
Interaction	Allowed for interaction, not only with the instructors/facilitators, but also with students. Instructors were engaging.
Webinar quality	DCO medium was sometimes difficult. The DCOs were easy to follow. I think typing in conversation (during webinars) is time consuming and a lot can be lost in translation.

(table continues)

Category	Sample responses
Online Specialized Skills 1 Course	
Instructor quality	The instructors made the difference. Strong, competent, and committed facilitators. The instructors were always available during and after the weekly webinars. The instructors were interactive with the groups. (The instructor) kept the motivation going.

The category of instructor quality in all three courses supported the theoretical framework offered in Section 1 and recent research results. Salmon's (2011) online learning theory was supported by a student comments tying high instructor quality to successful online course instruction. Central to Salmon's theory was the critical role of high quality instructors (e-moderators) for success in the online classroom. Nichols (2011) found that positive student perceptions of traditional and online instruction result when the teaching is done by knowledgeable, insightful, and personable instructors.

The category of interaction in the Basic Skills Course supported the theoretical framework established in Section 1 and research that compared traditional and online instruction. Diaz and Entonado (2009) reported positive student comments pertaining to interaction in both traditional and online versions graduate course. In a study of online continuing education courses in law enforcement, students identified the lack of instructor-student interaction as the thing they disliked most in online education and why they preferred traditional instruction modes (Donavant, 2009a, 2009b). In Kirtman's (2008) study, students commented on the lack of peer interactions as notably different when comparing online and in-class instruction. Lam and Bordia (2008) reported that

students in their study preferred more student-instructor interaction in an online class to overcome the challenge of not being collocated.

Course management. In student responses to the End of Course Evaluation question "Why do you believe the course was or was not managed effectively by the course director?" I found the categories of student support and content management for the pretransition traditional Course 1, and student support and instructor quality for the posttransition online Basic Skills and Specialized Skills 1 courses. Sample responses are shown in Table 19.

Table 19

Course 1 Course Management Student Responses

Category	Sample responses
Traditional Course 1	
Student support	Anytime we had an issue, they were all over it trying to get it resolved. I was very impressed by the assistance received. If you had a question or problem they were willing and ready to take care of it for you.
Content management	Should have coordinated instruction better to ensure no duplication. Review the material before release. Should review slides to ensure all areas were covered.
Online Basic Skills Course	
Student support	Always available to help and answer questions. Everyone was so understanding and did all they could to help us. When there was a technical issue (course director) found a way around it.
Online Specialized Skills 1 Course	
Instructor quality	Kept us focused and on track. Strong influence and motivator. Available all the time. Lessons were well explained and

	discussions were on point. Instructor made the difference.

Student responses in the category of student support were consistent with qualitative research studies investigating student satisfaction of traditional, hybrid, and online courses. Napier et al.'s (2011) research identified student support as critical to the successful transition of a traditional computer course to hybrid instruction. Lam and Bordia (2008) similarly concluded that student support was essential for online courses.

Course value. In student responses to the End of Course Evaluation question "Why do you feel the education you received was or was not highly valuable to your professional career development?" I found the categories of relevance to job for the pretransition traditional Course 1, and relevance to job and acquisition of new information for the posttransition online Basic Skills and Specialized Skills 1 courses. Sample responses are shown in Table 20.

Table 20

Course 1 Course Value Student Responses

Category	Sample responses
Traditional Course 1	
Relevance to job	Helps me to do my job better. Good direction to be able to guide our sections. Gave us the foundation necessary to do our jobs. Received many resources/tools to take back to workforce.
Online Basic Skills Course	
Relevance to job	Made ask the right questions to learn about my (organization). Gave you the tools, tips and tricks of the trade. Better perspective of our job.
Online Specialized Skills 1 Course	

Acquisition of new information	Introduced me to different perspectives. Learned some new things. Gave new reference materials. Given me a lot more tools.

The categories found in this study of relevance to job and acquisition of new information supported the theoretical framework established in Section 1 and research comparing traditional and online courses. Multiple comments in the pretransition tradition Course 1 and posttransition online Specialized Skills 1 Course tying course value with the relevance to students' jobs were consistent with research conducted by Knowles et al. (2011) and Mott (as cited by Wlodkowski, 2008). Both researchers theorized that adults are more prone to choose learning opportunities that are relevant to their jobs (Knowles et al., 2011; Wlodkowski, 2008). Nichols (2011) reported education student comments from both traditional and online course students valuing the relevance of course information to teaching. In the same vein, law enforcement students who took traditional and online continuing education courses valued traditional hands-on training over online education, particularly for new recruits (Donavant, 2009a, 2009b).

Course 2. The 2013 online Basic Skills Course was offered to students as a prerequisite for both the online Specialized Skills 1 Course and Specialized Skills 2 Course. I was unable to separate responses by type of follow-on course. Therefore, the Online Basic Skills student responses were included in both the Course 1 and Course analyses.

Mission accomplishment. When responding to the End of Course Evaluation question "Why do you feel the course did or did not accomplish its mission?," students

often cited relevance to job and work distractions and interactions with colleagues in the posttransition online Basic Skills and Specialized Skills 2 courses as being important to their views of all three courses. Sample responses are shown in Table 21.

Table 21

Course 2 Mission Accomplishment Student Responses

Category	Sample responses
Traditional Course 1	
Relevance to job	It provides an overview of (job) responsibilities. Provided information needed to complete our jobs. Time might have been better served discussing leadership.
Online Basic Skills Course	
Relevance to job	Great tools offered for new (leaders). Provided the tools and methodology to accomplish a (leader's) duties and responsibilities. It made me think differently about my job.
Work distractions	It's hard to stay focused (with) distractions (and) while doing normal duties throughout the day. I would have been more engaged had I been away from my office. Very hard to stop what you are doing in the middle of the day and have an uninterrupted (webinar)…too many distractions.
Traditional Specialized Skills 2 Course	
Relevance to job	Getting the leadership view of current challenges, Gave me a great overview and reinforcement of my duties. Great course for someone like me that has experience in the field, but not at the (new job).

The theoretical framework established in Section 1 was supported by this study's categories of relevance to job and interaction. Multiple comments in all three courses tying course mission accomplishment with the course's relevance to students' jobs were consistent with research conducted by Knowles et al. (2011) and Mott (as cited by Wlodkowski, 2008). Both researchers theorized that adults are more prone to choose learning opportunities that are relevant to their jobs (Knowles et al., 2011; Wlodkowski, 2008). In the online Basic Skills Course, Anderson's (2008) research emphasizing the importance of high levels of interaction in online courses was also supported by reports from students of positive perceptions of course mission accomplishment.

Course instruction. In student responses to the End of Course Evaluation question "Why do you feel the instruction for this course was or was not delivered effectively?," I found that instructor quality for all three courses, and relevance to job and webinar quality in the posttransition online Basic Skills Course were deemed important. Sample responses are shown in Table 22.

Table 22

Course 2 Course Instruction Student Responses

Category	Sample responses
Traditional Course 1	
Instructor quality	Instructors demonstrated professionalism and appeared well versed in areas. Excellent instructors. Instructor was not a subject matter expert. (Instructor) was not knowledgeable in some areas. Good mix of presenters.
Online Basic Skills Course	
Instructor quality	(Instructor) was great! Enjoyed instructor. I liked the use of different instructors. Relevance to job Important part of managing. These were the areas that new (leaders) would most benefit from. Applied directly to many of the issues I face.
Webinar quality	It seemed like I (overseas student) was always missing something if I missed a DCO meeting. The DCOs were easy to follow. I think typing in conversation (during webinars) is time consuming and a lot can be lost in translation.
Traditional Specialized Skills 2 Course	
Instructor quality	Presenters were well varied for subject matter. Great mix between powerpoints, lectures, taskers. Various mediums used in delivery helped reiterate the points.

Findings of the importance of instructor quality in all three courses, and relevance to job in the Basic Skills Course supported the theoretical framework established in Section 1 and research comparing traditional and online courses. Salmon's (2011) online learning theory was supported by multiple student comments tying instructor quality to the capacity of the course to accomplish its mission. Central to Salmon's theory was the

concept of high quality instructors who encouraged interaction in the online classroom. In a study conducted by Nichols (2011), education students identified the importance of instructor quality. The category of relevance to job in the Basic Skills Course supported the theoretical framework established in Section 1 of Knowles et al. (2011) and Mott (as cited by Wlodkowski, 2008). Both authors concluded that adults are more prone to choose learning opportunities that are relevant to their jobs.

Course management. In student responses to the End of Course Evaluation question "Why do you believe the course was or was not managed effectively by the course director?," I found the categories of content management, student support, and time management. Sample responses are shown in Table 23.

Table 23

Course 2 Course Management Student Responses

Category	Sample responses
Traditional Course 1	
Content management	Managed very well considering the amount of material. Many in the weeds discussion. Provided appropriate subject.
Online Basic Skills Course	
Student support	Always available to help and answer questions. Everyone was so understanding and did all they could to help us. When there was a technical issue (course director) found a way around it.
Traditional Specialized Skills 2 Course	
Time management	Everything was kept on time. It ran on time. (Instructor) did a good job keeping the course on track. He kept us on time and on track.

Student responses in the category of student support were consistent with qualitative research studies investigating student satisfaction with traditional, hybrid, and online courses. Napier et al.'s (2011) research identified student support as critical to the successful transition of a traditional computer course to hybrid instruction. Lam and Bordia (2008) similarly reported student support as essential for online courses.

Course value. In student responses to the End of Course Evaluation question "Why do you feel the education you received was or was not highly valuable to your professional career development?," the category of relevance to job was found in all three courses. Sample responses are shown in Table 24.

Table 24

Course 2 Course Value Student Responses

Category	Sample responses
Traditional Course 1	
Relevance to job	Materials reinforced practice applications utilized on a daily basis. Learned many aspects of the business I am now in. Shared (job) experiences and solutions is invaluable.
Online Basic Skills Course	
Relevance to job	Gave you the tools, tips and tricks of the trade. Better perspective of our job. It helped me in building my confidence as a leader.
Traditional Specialized Skills 2 Course	
Relevance to job	Everything learned is applicable in the field. What I have learned I feel I can bring back to my programs and use. I honestly believe this course will guide me in running my (organization) better.

The theoretical framework established in Section 1 was supported by this study's categories of relevance to job and interaction. Multiple comments in all three courses tying course value with the course's relevance to students' jobs were consistent with research conducted by Knowles et al. (2011) and Mott (as cited by Wlodkowski, 2008). Both researchers theorized that adults are more prone to choose learning opportunities that are relevant to their jobs.

Emergent student perception themes. I found three emergent themes spanning across courses and areas. Course relevance to job duties, roles, and responsibilities influenced student perceptions of the two pretransition traditional courses, and

posttransition online, and hybrid course formats. Instructors exhibiting characteristics of professionalism and expertise generated positive perceptions of students taking the courses under study. For the posttransition online and hybrid course formats, there were positive student satisfaction responses when there was a high degree of student interaction with instructors and peers. There was a notable lack of student responses pertaining to interaction for the pretransition traditional Course 1 and Course 2 in the areas of mission accomplishment, course instruction, course management, and course value.

Instructor experiences. I conducted interviews with four Military School faculty members who taught Course 1 and Course 2 to better understand their experiences when making the transition. Two out of the four instructor participants taught the courses prior to the course transitions. The other two were hired during the course transitions. All four instructors taught the courses after they transitioned to hybrid and online delivery. Prior to the interviews, all instructor participants voluntarily accepted the invitation to participate and signed the consent form. All are civilians employed by the military. Table 25 provides additional participant demographic information.

Table 25

Instructor Participant Demographics

Instructor	Gender	# of Years Teaching	# of Years Teaching Online	# of Online Courses Taught
P1	Male	30	7	2
P2	Female	10	1	6
P3	Male	15	1	2
P4	Female	20	2	2

I interviewed all four instructor participants, and transcribed their responses within 24 hours of each interview. At the beginning of each interview, I secured permission from each instructor participant to tape record the interview as back up to the written notes taken during the course of these conversations. The tape recorder malfunctioned during P2's interview but, sufficient notes were taken during the interview to reconstruct P2's responses. P2 was then given an opportunity to review and make changes to the transcribed results to insure accuracy. All interview data and transcripts were kept on my password protected personal laptop.

After the interviews were completed, I emailed a copy of each transcript to the individual instructor participants to have them check for accuracy of their transcript, and gave them one week to email changes to me prior to finalizing these narrative data. P3 made minor grammatical edits and provided additional detail to the transcription of the interview for interview questions 2, 3, 5, and 9. The revised transcript was used in the qualitative analysis of this study. P1, P2, and P4 made no changes to their transcripts.

I used Merriam's (2009) qualitative data analysis method to examine the instructor interview transcripts (p. 175-193). I reviewed the data set iteratively and coded instructor participant responses that were relevant to each research question. Codes that appeared to be related or similar were subsequently grouped into categories. With the permission of the instructor participants, I provided the coded transcripts with no identifying data to a Military School faculty member with a doctorate for peer review. This faculty member has experience with qualitative research methods, traditional instruction, and online instruction at the Military School. Furthermore, the faculty

member was not affiliated with the courses being studied, or in the supervisory chain of the interviewed instructors. No additional changes to the coded transcripts were recommended by the peer reviewer.

I developed initial categories based on interview questions that yielded relevant responses that were aligned with the research question. Responses shared by two or more of the four instructor participants were included in the analysis. Categories were noted and tied to relevant research literature.

Challenges. Acclimating to online technology, instructors identified establishing instructor-student interaction, and redesigning the content as challenges that had to be addressed when they transitioned to teaching online. Instructor participants were also asked how they addressed the challenges. A sample of instructor participant responses to Question 2 in the interview guide (Appendix C) are shown in Table 26. Responses to other interview questions were considered if the instructor participant identified an experience as a challenge.

Table 26

Instructor Challenges

Category	Sample responses
Technology	Initially it was (me and the students) getting use to technology (P1). Having the (technology) orientation sessions (P1). The instructor can work the facilitation and interacting with the students and the producer worked problems with one student or a couple of students that were having challenges (P1). Making sure there were instructions online if (students) are having computer issues (P2). Not being able to see the students with the technology that we have (P3). Technology is great when it works, but when it fails having a backup is a challenge (P3).
Interaction	Getting students engaged (P1, P3). Try to engage the students at least every 3-5 minutes (in a webinar) with some sort of activity (P1). Keeping it more of a facilitation than instruction (P1). You have defined a new way, approach of engaging students (P2). We had to come up with unique icebreakers to get people talking (P2).
Course design	Cutting down the amount of material that you would typically teach in a resident classroom (P1). We had to organize it well (P1). Making sure that the areas that needed to be covered…was friendly…for the students to interact and move through the curriculum (P2). Translating and communicating what you actually want the students to do…that can be a challenge (P2).

Comments about the need to overcome technology challenges were prominent in this study, and these responses supported recent qualitative research investigating the transition to online instruction. Chiasson, Terras, and Smart (2015) found that instructors spent a significant amount of time learning how to use the online instructional

technologies while transitioning their traditional courses to online instruction. Jones et al. (2014) reported doctoral students initially having difficulties with the online technologies involved. In Napier et al.'s (2011) study, instructors noted students taking an undergraduate computer course had low computer skill levels, and concerns about using the online software.

Three out of four instructor participants found interaction with their students as challenging during the course transitions. Their comments were consistent with qualitative research studies investigating the transition to online instruction in other venues. Koehler et al. (2013) found it challenging to establish comparable levels of online student interaction with instructors and other students. In Napier et al.'s (2011) study, instructors identified interaction with their students as challenging. In contrast, Diaz and Entonado (2008) reported more interaction between instructors and their students in an online version of an education class than the face-to-face version.

Designing a course that establishes clear expectations and instructions for the online coursework was challenging for these instructor participants. Similar issues were found in recent research. In Chiasson et al.'s study (2015), instructors transitioning a computer course to online instruction found challenges when establishing online assignment expectations and due dates. Jones et al. (2014) reported instructors having difficulties while transitioning a doctorate program to hybrid delivery due to miscommunication with their students on expectations and details.

Course planning and preparation. Categories of course material preparation, teaching strategies, and professional development were prevalent among the instructor

participants when they were asked what they did to plan and prepare for online or hybrid course instruction. A sample of instructor participant responses to Question 3 in the interview guide (Appendix C) are shown in Table 27. Responses to other interview questions were considered if the instructor participant identified an experience pertaining to a change in course planning and preparation.

Table 27

Course Planning

Category	Sample responses
Course design	It is a virtual classroom. You've got to have convert, plan (and have) everything set up so as you go through the actual teaching that it flows seamlessly (P1). The quizzes, the reading material, the videos, the lessons. Every opportunity is preplanned, outlined and choreographed (P2). The most time consumed was converting the materials (P4).
Teaching strategies	Sometimes when you are in a resident course, you can go in one direction. But when you are online, it is pretty structured (P2). I find I ask a lot more open ended questions when I'm teaching (online) (P4).
Professional development	We had some faculty development (P2). One of the local universities came in and shared their lessons learned (P2). The schoolhouse hosted a course (P2). I took a course in Atlanta and read some (P3).

The category of course design was also found in other qualitative research studies comparing traditional, hybrid, and online instructor experiences. Instructors in Chiasson et al.'s study (2015) reported spending a significant amount of time converting traditional course material to online content. Napier et al. (2011) commented on the extensive time

needed to completely redesign a traditional computer course to a hybrid format. Online instructors in Diaz and Entonado's (2009) study restructured courses to balance content-based lectures with online activities. Instructors in Lam and Bordia's (2008) study identified instructional design as the most essential element in online course development.

Shifting to new online teaching strategies, and preparing for online instruction through professional development were categories in instructor participant responses. The findings supported Chiasson et al.'s recent research (2015) of instructors shifting their teaching strategies from lecturing to facilitating during online instruction. Napier et al. (2011) stressed the importance of shifting to new interactive teaching strategies and preparing for hybrid course instruction through professional development. Lam and Bordia (2008) reported instructor use of new online teaching strategies that engaged students taking these courses.

Teaching strategies. Categories of student-centered instruction and experiential learning were prevalent among the instructor participants when they were asked what teaching strategies were necessary for success in online and hybrid courses. A sample of instructor participant responses to Question 7 in the interview guide (Appendix C) are shown in Table 28. Responses to other interview questions were considered if the instructor participant identified an experience pertaining to online and hybrid teaching strategies.

Table 28

Teaching Strategies

Category	Sample responses
Student-centered	It is a virtual classroom. You've got to have convert, plan (and have) everything set up so as you go through the actual teaching that it flows seamlessly (P1). The quizzes, the reading material, the videos, the lessons. Every opportunity is preplanned, outlined and choreographed (P2). The most time consumed was converting the materials (P4).
Experiential learning	We have students take the information and us it (in their work centers) and come back (to the online classroom) and reflect on it (P1). Sometimes when you are in a resident course, you can go in one direction. But when you are online, it is pretty structured (P2). I find I ask a lot more open ended questions when I'm teaching (online) (P4).

The categories of student-centered instruction and experiential learning were also found in qualitative research studies comparing traditional, hybrid, and online instructor experiences. Instructors in Napier et al.'s (2011) study based their selection of teaching strategies on methods that engaged students. Lam and Bordia (2008) found that successful instructors chose instructional strategies that balanced virtual and direct student interaction. Steinbronn and Merideth (2008) found online instructors used questioning and feedback teaching approaches to encourage interaction.

Professional development. Categories of self-study, external sources, and internal sources of professional development were prevalent among the instructor participants when they were asked what professional development courses did they take to help

transition from traditional to online or hybrid instruction. A sample of instructor participant responses to Question 8 in the interview guide (Appendix C) are shown in Table 29. Responses to other interview questions were considered if the instructor participant identified an experience as pertinent to professional development.

Table 29

Professional Development

Category	Sample responses
Self-study	I didn't take any specific courses (P1). It's just a matter of continuing to do it (and) practice (P1). Internet resources (P2). Self-study (P2). I read some (P3). My masters was online so I did a lot of talking with my instructors (P4). Just practice (P4).
External sources	We were allowed to attend…conferences (where) there were workshops (P1). Local university (P2). I took a course in Atlanta (P3). Blackboard came in 2010 (P4). They had some folks come in from AUM (local university) (P4).
Internal sources	I set up a course for our faculty here (P3). I teach the (Military School's) Academic Instructor Distance Learning Course (P4). (Learned from) subject matter experts at (the Military School) (P2).

The findings shown in Table 29 were consistent with research addressing professional development needs for online instructors. Napier et al.'s (2011) research prescribed the necessity of proper training for faculty members transitioning courses to hybrid formats. Lam and Bordia (2008) detailed the need for professional development and proposed a model for training online instructors.

Instructional materials. Categories of course objectives and course design were prevalent among the instructor participants when they were asked how they developed online or hybrid instructional materials to address learning objectives from a traditional course. A sample of instructor participant responses to Question 10 in the interview guide (Appendix C) are shown in Table 30. Responses to other interview questions were considered if the instructor participant identified an experience as pertinent to the development of online and hybrid instructional materials.

Table 30

Instructional Materials

Category	Sample responses
Course objectives	We used the same learning objectives. We just used different means of achieving the learning objectives (P1). The course objectives all the way down to the lesson materials had to be modified and adjusted for a different type of student engagement (P2). We really didn't modify the objectives. We just modified the way we got to those objectives (P4).
Course design	We had 9 hours (webinar time) that we had to redesign and put a course that had 40 hours into. So you had to boil it down to what was really important (and put the rest) in readings and synchronous stuff (P3). We went back and did a lot of 'what is the meat'…and then created readings…exercises or group assignments or discussion board questions to support those objectives (P4).

Instructor participants had varied perspectives on course objectives during the course transitions. P2's view was consistent with Napier et al.'s (2011) finding that

transitioning a traditional computer course to a hybrid format was viewed by instructors as a complete course redesign. P1 and P4's views supported Chiasson et al.'s research (2015) where instructors reported using the same course objectives during the transition of a traditional course to online instruction. Instructor participants' responses pertaining to course design supported the results of a study by Chiasson et al. in which instructors reported spending a great deal of time putting course materials online. Instructors in Napier et al.'s study (2011) also reported spending a significant amount of time redesigning course materials for online instruction. Student workload and synergizing asynchronous and synchronous activities were of most concern in the transition of course materials to online delivery (Napier et al., 2011).

Emergent instructor experiences themes. I found three emergent themes that spanned all of the categories examined and the responses of all instructor participants. The first emergent theme pertained to course design. While transitioning their courses from traditional to online and hybrid instruction, instructor participants spent a significant amount of time converting the course material, organizing the course for intuitive navigation, and creating clear course expectations and assignment instructions. The second emergent theme addressed teaching strategies. During the transition instructor participants found creating a comparable level of interaction with their online students challenging. However, the participants overcame these challenges by incorporating student-centered teaching strategies using facilitation and questioning techniques in their online classrooms. Finally, the need for professional development emerged as a third theme. Instructor participants initially relied on self-study for preparing for online

instruction and redesigning their course materials. Eventually, external sources of training were utilized and an internal instructor training course was developed to assist the instructor participants.

Triangulation of Quantitative and Qualitative Findings

Triangulation of the quantitative and qualitative findings were guided by the methods of Cohen and Crabtree (2006), Patton (1999) and Creswell (2009). Cohen and Crabtree defined triangulation as "using multiple data sources in an investigation to produce understanding" (Triangulation section para. 1). I used methods triangulation which, according to Patton (1999) is "checking out the consistency of findings generated by different data collection methods (p. 1193)."

Creswell (2009) recommended a number of approaches when analyzing different data sets within a mixed methods research design. I selected the approach which based the analysis on multiple levels of data that were collected using quantitative and qualitative methods (Creswell, 2009). Student and instructor data sets comprised the multiple levels. The student satisfaction data set was collected using a survey that collected both quantitative and qualitative data. The instructor experiential data set was collected using semistructured interviews.

A discussion of triangulated findings was developed based on Patton's (1999) recommendation to focus on the "degree of convergence rather than forcing a dichotomous choice-the different kinds of data do or do not converge (p. 1194)." I presented the degree of student and instructor data convergence in the areas of most concern to the Military School stakeholders, mission accomplishment, course instruction,

course management, and course value. I noted when there was convergence among the student satisfaction rating means, student satisfaction comments, and instructor interview responses. In the areas of mission accomplishment and course instruction all three data sets converged on multiple themes. In the areas of course management and course value, all three data sets converged on a single theme.

Mission accomplishment. A fair amount of data convergence existed among the student satisfaction data sets and instructor experiential data set in the area of mission accomplishment. Posttransition course student satisfaction rating means for mission accomplishment were not significantly different than the pretransition traditional course means, and it met the Military School standard of “Excellent” or higher for both online and hybrid delivery formats. Examination of qualitative student satisfaction data and instructor interview data revealed convergent themes of course relevance to student jobs and interaction as possible factors contributing to no significant differences in course mission accomplishment student satisfaction ratings.

During the course transitions, instructor participants focused on relating course material to students' job experiences during their online and hybrid courses. A sample of instructor participant comments were "you're teaching them skills to develop in their work centers (P1)" and "it's more linking together their experiences with the course material (P4)." Instructor participant efforts were noted by the students as evidenced by their comments. A sample of student comments on course mission accomplishment were "this helps me do a better job," "gave me a great overview and reinforcement of my duties," and "provided the tools and methodology to accomplish...duties and

responsibilities." The importance of establishing a course's relevance to student jobs was also identified in the work of Knowles et al. (2011) and Mott (as cited by Wlodkowski, 2008). Both researchers theorized that adults are more prone to choose learning opportunities that they perceive to be relevant to their jobs.

Robust interactive experiences might also have contributed to a finding that there were no significant differences in student satisfaction ratings of course mission accomplishment. Instructor participants shifted teaching strategies to student-centered approaches that encouraged interaction in the posttransition online and hybrid courses. A sample of instructor participant comments included "we try to engage the students at least every 3-5 minutes with some sort of activity (P1)," "we had to come up with unique icebreakers to get people talking (P2)," and "I ask a lot more open ended questions when teaching online (P4)." Student comments about posttransition online and hybrid course mission accomplishment reflected a recognition of these efforts to keep interaction levels high. Students identified "interaction with peers," "networking," and "weekly class sessions that were interactive" as reasons for their course mission accomplishment ratings. Instructor efforts to establish and student recognition of a moderate degree of interaction in the posttransition online and hybrid courses were consistent with Anderson's (2008) research emphasizing the importance of interactions in an online learning environment.

Course instruction. In the area of course instruction, there was a fair amount of convergence among the data sets. Student satisfaction data met the Military School standard of "Excellent" or higher for the pretransition traditional course, and both online

and hybrid formats. Examination of qualitative student satisfaction data and instructor interview data revealed convergent themes of overcoming technology challenges and establishing interaction as possible factors contributing to no significant differences in course instruction student satisfaction ratings.

Both students and instructor participants had to overcome initial technology-related challenges with online course instruction to succeed in these courses. Student comments on course instruction mentioned the webinar system, DCO, and Blackboard, the learning management system. A sample of negative student comments included "DCO medium was sometimes difficult," "having Blackboard and DCO it seemed like I was always missing something," and "typing conversation is time consuming and a lot can be lost in translation." Positive student comments included "the DCOs were easy to follow" and notes that course instructions were "very clear when you logged in to Blackboard." Instructor participant comments similarly identified initial technology challenges using webinars for course instruction and identified methods they used to overcome these technology challenges. Instructor participants commented "Initially it was (me and the students) getting use to technology (P1). Not being able to see the students with the technology that we have (P3). Technology is great when it works, but when it fails, having a backup is a challenge (P3). Having the (technology) orientation sessions (P1). Making sure there were instructions online if (students) are having computer issues (P2). Chiasson et al. (2015) found that instructors spent a significant amount of time learning how to use the online instructional technologies while transitioning their traditional courses to online instruction. Jones et al. (2014) reported

doctoral students initially having difficulties with the online technology. In Napier et al.'s (2011) study, instructors noted students taking an undergraduate computer course had low computer skill levels and expressed concerns about using the online software.

Despite technology challenges, instructor participants and students were able to establish a moderate level of interaction in the posttransition online and hybrid courses. All four instructor participants commented on challenges and teaching strategies to actively engage their students. A sample of instructor participant comments include "getting students engaged (was challenging) (P1, P3)," "try to engage the students at least every 3-5 minutes (in a webinar) with some sort of activity (P1)," "you have defined a new way, approach of engaging students (P2)," and "on my discussion board I'll let them make anonymous posts. I think you get more organic honest answers when you have DL (distance learning) discussions rather than sitting in a classroom (P4)." Student comments on course instruction recognized instructor efforts to actively engage them and encourage engagement with other students. A sample of student comments include "allowed for interaction not only with the instructors/facilitators, but also the students," "instructors were engaging" and "instructors were always engaging and on point." Student perceptions and instructor experiences with establishing interaction in the online and hybrid classroom were consistent with earlier qualitative research studies. Koehler et al. (2013) found it challenging to establish comparable levels of online student interaction with instructors and other students. In Napier et al.'s (2011) study, instructors identified interaction with their students as challenging. Conversely, Diaz and Entonado (2008) reported positive student comments pertaining to interaction in an online course and

attributed them to instructor efforts to engage their students using multiple modes of online communication.

Course management. There was a small degree of convergence among the data sets in the area of course management. Student satisfaction means for course management were not significantly different between the pretransition traditional courses and posttransition online and hybrid courses. Examination of qualitative student satisfaction data and instructor interview data revealed student support as a possible factor contributing to no significant differences in course management student satisfaction ratings.

Instructor participants made themselves available to their students for course and technical support. When describing their challenges and teaching strategies, instructors commented on "having the (technology) orientation sessions (P1)," "making sure there were instructions online (P2)," and team teaching during the webinars where one instructor taught while a second instructor worked with individual students having issues.

Students appeared to appreciate the degree of student support provided by their instructors. A sample of student comments include "always available to help and answer questions," "very helpful to those of us computer challenged," and "when there was a technical issue (the course director) found a way around it." Napieret al.'s (2011) research identified student support as critical to the successful transition of a traditional computer course to hybrid instruction. Lam and Bordia (2008) similarly reported student support as essential for online courses.

Course value. There was a small amount of convergence among the student satisfaction, student perceptions and instruction experiences converged in the area of course value. Student satisfaction means for course value were not significantly different between the pretransition traditional courses and posttransition online and hybrid courses. Examination of qualitative student satisfaction data and instructor interview data revealed course relevance to student jobs as a possible factor contributing to no significant differences in course value student satisfaction ratings.

Instructor participants used student-centered teaching strategies to encourage critical thinking and reflection about their job. A sample of instructor participant comments included comments that "we have students take the information and us it (in their work centers) and come back (to the online classroom) and reflect on it (P1)," "we're teaching them skills to develop in their work centers (P1)," and "I find myself asking 'has anyone else ever dealt with this? (P4)." "It's more linking together their experiences with the course materiel (P4)."

Students valued course instruction and content that related to their jobs as evidenced by positive student comments on course value. A sample of student comments included "made me ask the right questions to learn about my (organization)," "gave you the tools, tips and tricks of the trade," and "better perspective of our job."

Summary

There were no significant differences in student satisfaction among the traditional, online, and hybrid versions of Course 1 and Course 2. Kruskal-Wallis inferential testing resulted in no significant differences in the areas of mission accomplishment, course

management, course instruction, and course value. These outcomes were consistent with studies finding no significant difference in student satisfaction (Bayliss & Warden, 2011; DiRienzo & Lilly, 2014; York, 2008).

Examination of student satisfaction qualitative data and instructor interview data provided insight into the transition of the courses from traditional to online and hybrid deliver, and possible reasons why the transition resulted in no degradation in quality of the courses.

In the area of mission accomplishment, instructor participants focused on relating course material to students' job experiences, and establishing comparable levels of interaction during their online and hybrid courses. Positive student comments during the online and hybrid versions of the courses reflected an appreciation for the relevance of course activities and materials to their jobs, and their instructors' efforts to encourage interaction. These outcomes were consistent with the theoretical foundation established in Section 1. Knowles et al. (2011) and Mott (as cited by Wlodkowski, 2008) stressed the importance of relating learning activities to students' professional lives. Interaction was the centerpiece of Anderson's (2008) theory of online learning.

Efforts to overcome technology challenges and establish comparable levels of interaction and might have been reasons why course instruction student satisfaction did not degrade after the transition. Instructors conducted technology orientation sessions and posted technology troubleshooting instructions in their online classrooms. They used teaching strategies that focused on engaging their students during the webinars and on the discussion boards. Students appeared to appreciate instructor efforts to help them with

technology challenges, and engage them in the online classroom. These outcomes supported recent research identifying technology challenges and interaction as course instruction challenges (Chiasson et al., 2015; Jones et al., 2014; Koehler et al., 2013, Napier et al., 2011).

Course management student satisfaction did not significantly differ during the transitions possibly because of efforts by the instructor participants to maintain a high level of student support for their online and hybrid courses. Instructor participants made themselves available to assist students with course and technical issues. Based on their satisfaction ratings, students appeared to appreciate their efforts and gave ratings of *excellent* or higher in course management and offered positive comments. These outcomes supported Napier et al. (2011) and Lam and Bordia's (2008) research that identified student support as critical to the successful transition of traditional courses to online and hybrid delivery.

In the area of course value, examination of qualitative student satisfaction and instructor interview data sets revealed course relevance to student jobs as a possible factor in maintaining student satisfaction ratings of *excellent* or higher. Instructors used student-centered teaching strategies to encourage critical thinking and reflection on future responsibilities in their online classrooms. Students attributed their course value ratings to instruction and content that facilitated critical thinking and reflection on their future jobs. These outcomes were consistent with the theoretical foundation established in Section 1. Knowles et al. (2011) and Mott (as cited by Wlodkowski, 2008) stressed the importance

of relating learning activities to students' professional lives. Interaction was the centerpiece of Anderson's (2008) theory of online learning.

Project Deliverable

To communicate these findings and resultant recommendations to Military School senior leaders, faculty, and support staff, I prepared an executive summary level evaluation report. The evaluation report may contribute to the success of future course transitions. Theorists in the field of program evaluation recommend that an evaluation report of this sort be developed to concisely convey information to program stakeholders (Mertens and Wilson, 2012; Spaulding, 2008; Stuffelbeam, 2003). After obtaining Walden's final approval of this study, I will provide the evaluation report to Military School stakeholders, conduct a professional development session to Military School senior leaders, faculty, and support staff, and assist Military School trainers to incorporate the information into existing Military School instructor preparation courses. In addition, I also expect to develop a report for publication in keeping with common practice to inform the broader research community (Yost, Ciliska, and Dobbins, 2014; Rogan and Miguel, 2013; Dell, 2012).

Section 3: The Project

Introduction

The project is an evaluation report of a study investigating the transition of two traditional classroom courses to online and hybrid delivery. The problem addressed by the study was the need to examine instructor experiences and student satisfaction before and after courses transitioned from traditional delivery to online and hybrid delivery. The purpose of the study was to evaluate hybrid and online delivery of two military professional development courses by analyzing student satisfaction ratings and narrative comments, and instructor interview data.

The evaluation report contains a summary of a sequential mixed methods program evaluation study that evaluated hybrid and online delivery of two military professional development courses previously offered as traditional classroom courses. I analyzed student satisfaction ratings and narrative comments for traditional, hybrid, and online versions of the courses. I also analyzed instructor interview results that detailed the experiences of those instructors before, during, and after the course transitions. Prior to my study, the military school had not captured or analyzed instructors' reflections on their experiences as they transitioned their courses from traditional delivery to online and hybrid delivery. Furthermore, the Military School had not conducted formal comparative analyses of student satisfaction data as the courses were transitioned from traditional delivery to online and hybrid delivery using research-based practices.

The Evaluation Report

The purpose of the evaluation report is to provide military stakeholders with a summary of the evaluation results and analyses and recommendations for future course transitions based on the findings of my research. My goal for providing the evaluation report to assist Military School educators is to significantly increase student satisfaction in the areas of (a) mission accomplishment, (b) course instruction, (c) course management, and (d) course value as they transition from traditional courses to hybrid and online delivery. Significant increases will be measured based on end of course evaluation results in the areas of mission accomplishment, course instruction, course management, and course value using analysis of variance testing with a significance level set at $p = .05$.

Rationale

I conducted this program evaluation study to examine the Military School's course transition efforts from traditional to online and hybrid delivery. This transition began in 2010 as a result of military budget cuts and personnel shortages. However, the course transitions were being accomplished without the benefit of examining results using research-based practices. The purpose of this sequential mixed-methods program evaluation was to evaluate hybrid and online delivery of two Military School courses by analyzing student satisfaction data and instructor interview data during the delivery transition. I triangulated findings from the quantitative analysis of student satisfaction numerical ratings, the qualitative analysis of student satisfaction comments, and the qualitative analysis of instructor interview data.

Effectively communicating the findings and recommendations of this study are essential for ensuring that future course transitions are informed by research-based practices. Researchers emphasized the critical role and challenges of communication program evaluation results to program stakeholders with diverse interests and perspectives. Yarbrough, Shula, Hopson, and Caruthers. (2011) listed timely communication and reporting as an essential standard of program evaluation. Mertens and Wilson (2012) similarly highlighted the importance of communicating and using evaluation findings as critical to improving a program. Stufflebeam (2003) also emphasized the importance of communicating results of an evaluation in a timely manner. Furthermore, he highlighted the challenge of communicating findings and recommendations to a diverse body of stakeholders with multiple perspectives and interests (Stufflebeam, 2003). Therefore, the method of communication must not only summarize findings and recommendations, but also resonate with the diverse needs and perspectives of Military School senior leaders, faculty, and support staff.

To concisely address the needs of a diverse body of program stakeholders, I chose an evaluation report as the project for this study. Theorists in program evaluation research support the use of evaluation reports as a means to convey findings and recommendations to stakeholders in a timely manner. Stufflebeam (2003), author of the widely used context, inputs, processes, and products (CIPP) program evaluation model, recommended the use of summary reports that focused on the needs of the sponsoring organization. Spaulding (2008) also highlighted the need for tailored executive reports that provided timely information for rapid program change. In contrast to Stufflebeam's and

Spaulding's focus on tailored reports for program stakeholders, Mertens and Wilson (2012) proposed that evaluation reports can be published as academic literature to inform a wider audience. Therefore, the evaluation report for this study may be used to inform military school stakeholders, and contribute to the scarce body of literature pertaining to online military professional development programs.

Review of the Literature

I conducted a secondary literature review to address the use of evaluation reports, guide the elements of the evaluation report, and support the recommendations in the report. I conducted a multidisciplinary ProQuest and EbscoHost search using the following search terms: *grey literature, gray literature, program evaluation, evaluation, evaluation report, professional development, continuing education, online technology, online interaction, online course support*. The search was limited to the years of 2013-2016.

Use of Evaluation Reports

Evaluation reports are used in both the academic and grey literature to convey research findings and recommendations for online professional development programs. Yost, Ciliska, and Dobbins (2014) published an evaluation report after assessing the effectiveness of an intensive online workshop for health professionals, and in the field of health care, Rogan and Miguel (2013) reported the results of their research after examining an online English as a Second Language program for nursing students. In an education research setting. Dell (2012) published a summary report after evaluating an online elementary education teacher preparation program. While published sources were

informative, grey literature provides more recent and relevant examples of evaluation reports.

Although not published by commercial sources, grey literature is noted by the research community as an essential source of evidence. In 1999, attendees of the Grey Literature Conference defined grey literature as "that which is produced on all levels of government, academics, business, and industry in print and electronic formats, but which is not controlled by commercial publishers (Grey Literature Conference Program, 1999)." Grey literature is used in various settings to ensure that the latest evidence is incorporated into research. Bellefontaine and Lee (2014) encouraged the use of grey literature to provide "the most current, up-to-date information, providing a snapshot in time as to what is happening with a body of literature in the field of psychological research." More recently, Borjesson (2015) found grey literature sources were cited more than academic literature in archaeological field evaluation reports. Thomas, Houghton, and Weldon (2015) extolled the importance of grey literature within the field of public policy and practice, and recommended improvement of collection services in this area. Godin, Stapleton, Kirkpatrick, Hanning, and Leatherdale (2015) demonstrated various systematic search strategies for grey literature to inform Canadian school-based breakfast programs. Similarly, Happe and Walker (2013) recommended the use of grey literature to provide pharmacy students with the latest information in the rapidly changing healthcare field.

Evaluation reports resulting from recent doctoral project studies in the field of education provided the most relevant examples of effectively communicating research results. Hodge's program evaluation report (2016) addressing low retention rates in

military education programs and provided recommendations for improvement. Pittman-Windham's evaluation report (2015) followed Stufflebeam's CIPP framework (2003) and contained recommendations for improving a middle school reading program. Neuenschwander (2015) evaluated a college remediation program and provided recommendations for improving retention in the evaluation report. Ayers (2012) produced an evaluation report to stakeholders of a college preparation program. Button's (2012) white paper resulting from a program evaluation contained recommendations for instructional practices to improve student academic performance.

Evaluation Report Elements

Structuring the evaluation report so that it effectively communicates and recommendations to stakeholders was essential for maximizing potential benefits to the Military School. Stufflebeam (2003) provided the structure for the evaluation report recommending the inclusion of three sections addressing the program background, program implementation, and program results. I added evaluation report elements recommended by Spaulding (2008) and Mertens and Wilson (2011) when additional detail was necessary. Evaluation reports found in the academic and grey literature further substantiate the selection of each element and provided informative exemplars. I used Dell's article (2012) because the subject matter was close to my research topic, and Pittman-Windham's evaluation report (2015) because it conformed to the CIPP framework.

Program background. The evaluation report program background section includes contextual descriptions of the program, the problem addressed by this study, and

purpose of this program evaluation. The program background section contains descriptions of the program beginnings and operating environment (Stufflebeam, 2003). Mertens and Wilson (2013) similarly recommended that a description of the program and supporting literature be included in the introductory section of the evaluation report. Spaulding (2008) also recommended a description of the program in an introduction and spoke of the importance of including the purpose of the program evaluation. Dell's evaluation report (2012) included program background information in a program description section. Similarly, Pittman-Windham (2015) provided background information when describing the context of the evaluation.

Program implementation. The evaluation report program implementation section includes a description of the courses under study, student population, instructor staffing, facilities, and other program operational details. The program implementation section is based on Stufflebeam's framework (2003) which contains program operational details including an overview of the program, description of beneficiaries, program staffing, facilities, and governing directives. For example, Dell (2012) described the operational details of an online teacher preparation program in a program description section in an evaluation report. Pittman-Windham's evaluation report (2015) provided another example of including operational details in an evaluation report of a remedial reading program for elementary and secondary education students.

Program evaluation results. Stufflebeam (2003) included the three areas of evaluation design, findings, and conclusions in the program evaluation results section. The evaluation design section contains a description of the research setting, sample, data

collection, and data analysis. Spaulding (2008) noted that a summarized description of tools, setting, and participants in a way that stakeholders could easily absorb was essential. Mertens and Wilson (2013) also highlighted the areas of participant description, data collection, and data analysis as important subsections. Dell's evaluation report contained evaluation design (2012) details in a method section. Pittman-Windham (2015) provided evaluation design details in an evaluation context section. In the evaluation design subsection, the evaluation report contains a description of the Military School setting, student description and instructor participant demographics. I also include descriptions of the end of course survey and interview guide. Finally, I describe the descriptive and inferential testing procedures, and coding techniques used for analyzing student satisfaction data and instructor interview data.

The findings subsection contains a summary of the analysis of the quantitative and qualitative data, and triangulation of the findings. Spaulding (2008) and Mertens and Wilson (2012) both highlighted the importance of including an executive summary of data analyses in a manner that is easily understood by stakeholders. Dell (2012) provided evaluation findings in a results section. Pittman-Windham's evaluation report (2015) contained qualitative and quantitative findings in an evaluation results section. The evaluation report includes analyses of the quantitative student satisfaction ratings, qualitative student comments, and qualitative instructor interview data. Triangulation of the analyses and resultant findings are also provided in this section.

The conclusions section of the evaluation report contains recommendations, implications, next steps, and future research suggestions. These sections were consistent

with content recommended by Stufflebeam (2003). In addition to recommendations, Mertens and Wilson (2012) included implications, and next steps in a conclusion section, and Dell (2012) included future research suggestions in in a conclusions section.

Literature Supporting Findings and Recommendations

I surveyed recent literature supporting the recommendations in the evaluation report based on recurrent findings from Section 2 of course relevance, interaction, and technology challenges. Being able to relate course content and materials to students' jobs was the most significant finding and most important recommendation in the evaluation report. Stone-MacDonald and Douglass (2015) found early childhood professionals taking an online professional development course preferred online trainers who successfully related course content to their jobs. Price, Whitlach, Maier, Burdi, and Peacock (2016) highlighted the importance of encouraging students to apply course concepts to their jobs for nurse educators teaching an online professional development course. Mirriahi, Alonzo, McIntyre, Kligyte, and Fox (2015) recommended professional development courses for online instructors provide realistic experiences that can be transferred to their own practice.

The importance of establishing robust student-instructor and student-student interaction in online and hybrid professional development courses was also a key finding in Section 2 and is a recommendation offered in the evaluation report. Stone-MacDonald and Douglass (2015) found early childhood professionals and their trainers commented more positively when professional development incorporated a higher level of involvement between the trainers and their students. Mirriahi et al. (2015) recommended

high levels of interaction among students during hybrid professional development for online instructors. Price et al. (2016) emphasized the importance of a high level of instructor interaction and engagement during professional development courses for nurse educators. Purkis and Gabb (2014) highlighted the importance of interaction among online nursing students and instructors, and echoed Salmon's emphasis (2011) on the central role e-moderators play in establishing vibrant online communities. A majority of instructor participants during a study conducted by Bjelland, Miller, and Sprecher (2014) identified interaction with their students as a barrier to online instruction. Ninety percent of the instructor participants indicated a strong desire to learn techniques that would increase student interaction in their online classrooms (Bjelland et al., 2014). Collins, Weber, and Zambrano (2014) also focused on building strong online communities and advocated capping online course enrollments to no more than 15 students in order to establish robust interaction and prevent feelings of isolation.

Finally, the evaluation report contains recommendations to implement strategies to help faculty and students overcome technology challenges. Faculty professional development programs must be structured to account for unfamiliarity with online course management systems and supporting technologies. Herman's study (2012) revealed the importance that higher education institutions place on online technology training for their faculty. In the study, institution officials reported orientation to course management systems and technical services as the top two most offered professional development courses to their online instructors (Herman, 2012). Onguko, Jepchumba, and Gaceri's study (2013) investigated a comprehensive online professional development course for

online instructors and emphasized the importance of addressing technology challenges during the first session. In addition to initial orientation sessions, Vaill and Testori (2012) advocated ongoing technical support for online instructors to keep them focused on instructional duties. Baran and Correia (2014) similarly recognized the importance of technical support with particular emphasis on when instructors transition from the traditional to online classroom.

After overcoming their challenges with technology, instructors must recognize their primary role in orienting their students with online technology. Stone-MacDonald and Douglass (2015) identified understanding students' technology comfort level and providing technical support as vital for successful online professional development for early childhood professionals. Purkis and Gabb (2014) similarly recommended instructors assist their students in overcoming access challenges during the initial weeks of an online nursing course. In addition to learning how to use online course management systems and online learning tools, Collins et al. (2014) cautioned against too much technology diversity. They recommended introducing no more than one new technology-enhanced learning aid a week.

Project Description

The evaluation report and the faculty development session will be focused on providing recommendations for future course transitions. Central to Stufflebeam's CIPP program evaluation model (2003) is the shift from validating program objectives to providing program stakeholders with recommendations for improving programs. Therefore, I will provide Military School senior leadership, faculty, and staff

recommendations in the areas of course relevance, interaction, and technology challenges to guide future course transitions from traditional to online and hybrid delivery. Table 31 is the timetable for implementation.

Table 31

Implementation Timetable

Event	Date
Faculty development Session	Within three months of Walden University approval of project evaluation study.
Meeting with online instructor training course trainers	Within one month of faculty development session, and during subsequent offerings of the online instructor training course.
Online instructor training course lecture	During the online instructor training courses.
Follow-up sessions with new online instructors	Within one month of each online instructor training course graduation.

Within three months of Walden University approval of this program evaluation study, I will provide the evaluation report to the Military School's commander, dean, and institutional effectiveness personnel. I will subsequently seek approval from the Military School commander and dean to schedule and conduct a one-hour faculty development session for the Military School senior leadership, faculty, and staff to communicate a synopsis of the evaluation report. The faculty development session will focus on the problem that prompted the evaluation study and outline the purpose, goals, research design, findings and conclusions of the evaluation that was conducted. The existing Military School education quarterly meetings will provide the forum for this presentation.

Within one month after the faculty development session, I will schedule an in-depth session with the trainers of the existing Military School online instructor course to discuss how the recommendations of the evaluation report can be incorporated into their training curriculum. I will offer to conduct the faculty development session during their course as a one-hour lecture, provide copies of the evaluation report as a course handout. I will also propose additional sessions after the course to minimize impact on their training schedule.

Needed Resources and Existing Supports

Communication to stakeholders. Timely communication of the findings and recommendations of the evaluation report may be achieved through a one-hour faculty development session with these stakeholders. The stakeholders for this project study are the senior leadership, faculty, and staff of the Military School. Classroom facilities with sufficient audio-visual systems are available to conduct a traditional faculty development session for Military School senior leaders, faculty, and staff. For Military School personnel who are not able to attend the traditional classroom session, existing online technology systems available at the Military School can be used to broadcast the faculty development session as an interactive webinar and to record it for later viewing.

During the faculty development session, I will summarize findings and recommendations in the areas of course relevance, interaction, and technology challenges. I will request that a staff member of the Military School Institutional Effectiveness Office be present to answer any in-depth questions pertaining to the end of course evaluation administration and data collection. I will also request that a staff

member of the Military School Information Technology Office be present to demonstrate educational technology systems. Another key component of the faculty development session will be the presence of an experienced online instructor to provide examples of how the evaluation report recommendations can be incorporated into online and hybrid courses.

Implementation of recommendations. I will use the existing Military School online instructor training course to assist new online instructors with implementing the recommendations in the evaluation report. In 2015, the Military School piloted a training course for online instructors that was developed and taught by in-house trainers who also teach the traditional classroom instructor training course. I will provide the evaluation report to the instructor trainers and offer to present a one-hour guest lecture similar to the faculty development session during the online instructor training course.

Potential Barriers and Solutions

Communication to stakeholders. Identifying a time for the faculty development session will be challenging. The Military School is comprised of three different departments running 66 military continuing education courses with 49 instructors. Many of these instructors are developing, conducting, and modifying traditional, hybrid, and online courses simultaneously.

In addition to finding an optimal time, there will be further challenges associated with the chosen delivery mode. If the faculty development session is delivered in a traditional classroom, it will be difficult to find available Military School facilities with sufficient capacity at a time that is convenient to my potential audience. If the faculty

development session is a webinar, having sufficient bandwidth to accommodate a majority of the Military School instructors while accommodating existing online courses will also present a challenge.

Implementation of recommendations. Inserting a one-hour lesson into the Military School online instructor training course might be challenging based on the time constraints of the course. The trainers might have to make decisions on whether or not to incorporate the material into their rigorous training schedule. Their perspectives might also vary on recommendations made in the evaluation report, and this might create resistance to formally incorporating the material into the training course.

To overcome these barriers, I will offer to conduct individual sessions with the new online course instructors after the training course. Another potential solution is to provide copies of the evaluation report to the training instructors to distribute to the students for self-study. Finally, a third solution is to scope down the one-hour presentation into a shorter session that is more easily incorporated into the online training course.

Proposal for Implementation

Communication to stakeholders. The first step in the implementation process of the evaluation report recommendations is to present an executive summary of the project study to the program stakeholders comprised of Military School senior leadership, instructors, and staff. It will consist of an executive-level faculty development session based on findings and recommendations in the report based on a synopsis of the findings and recommendations of this project study. Within three months after approval of this

program evaluation study, I will schedule and conduct an executive-level faculty development session based on this evaluation report. Multiple offerings will be made available in traditional classrooms and online interactive webinars to overcome potential barriers and to encourage the implementation of the essential components contained in the report.

Implementation of recommendations. The second implementation step is to assist Military School instructor preparation trainers to incorporate the recommendations in the evaluation report relating to course relevance, interaction, and technology challenges in their courses. The recommendations can be integrated in existing courseware, provided as a handout, or made available in separate sessions after the course to augment formal instruction. Within one month after the faculty development session, I will meet with the Military School online instructor course trainers and offer to conduct a one-hour lecture, provide the evaluation report as a course handout, and conduct additional sessions after the course to minimize impact to their training schedule.

Roles and Responsibilities

I will be responsible for scheduling, publicizing, and presenting the traditional and online faculty development sessions, and distributing copies of the evaluation report. I will also be responsible for assisting Military School instructor trainers with integrating the information in the evaluation report into online instructor training courses. Military School instructor trainers will be responsible for incorporating the recommendations in the evaluation report into their courses.

Military School faculty will be responsible for implementing the recommendations as they transition courses from traditional to hybrid and online delivery. Military School senior leadership will be responsible for providing the resources and support for this transition, and sustaining the transitioned courses. Military School staff will be responsible for providing technical and administrative support during and after the course transitions. Military School online instructor course trainers will be responsible for incorporating the evaluation report recommendations into the courseware. If there is not enough available training time in the course to incorporate new material, they will be responsible for distributing the evaluation as a course handout. They will also be responsible for collecting and providing feedback on the new course material and handout.

Project Evaluation Plan

The goals of the evaluation report are to assist Military School educators in significantly increasing student satisfaction in the areas of (a) mission accomplishment; (b) course instruction; and (c) course management; and (d) course value as Military School instructors continue to transition traditional courses to hybrid and online delivery. Military School instructional effectiveness personnel will evaluate future course transitions by analyzing student satisfaction data for courses that make this transition. Accomplishment of the project goals will be completed after student satisfaction ratings from hybrid and online leadership courses originally offered by the Military School in a traditional classroom significantly increase in the areas of mission accomplishment, course instruction, course management, and course value. To determine whether or not

significant differences exist, analysis of variance testing will be conducted with a *p* value set at 0.05. The expectation is that these goals will be accomplished within one year after the course transitions occur.

Finally, the results of the program evaluation may contribute to the sparse body of knowledge evaluating the transition of military professional continuing education courses from traditional classroom formats to hybrid and online delivery. Although a number of studies have been conducted comparing outcomes in military education settings, the literature is sparse when it comes to comparisons of student satisfaction for courses that transitioned from traditional to hybrid and online delivery. Furthermore, I found no research studies examining instructor experiences during course transitions in a military setting.

Project Implications

Course relevance, interactive online instructor methods, and strategies designed to help overcome technology challenges may motivate and enable deployed and overseas military personnel and civilian employees to take online professional development courses. The Military School is a provider of continuing education courses and is currently transitioning a number of courses from traditional classroom delivery to online and hybrid delivery. In a military setting, professional development is essential for preparing soldiers, airmen, and sailors to lead through and overcome challenges of the future battlefield (Bourque, Butts, Dorsett & Dailey, 2014). By offering our military members and civilian employees of the military opportunities to stay current in their

professional development, the Military School may more effectively contribute to our nation's military readiness and overall security.

Local Community

I collected and examined qualitative faculty data, and examined quantitative and qualitative student data relating to student satisfaction in two Military School courses during the transition from traditional classroom to hybrid and online delivery. The findings and recommendations as communicated through the evaluation report, faculty development session, and online instructor training course may help the Military School more effectively transition courses from traditional classroom to online and hybrid delivery. In particular, course relevance, interaction, and technology challenges were identified in both the faculty interviews and student satisfaction data as areas of emphasis when traditional courses transitioned to hybrid and online delivery.

For both courses under study, there were no significant differences in student satisfaction despite the need to balance course and work demands and negative perceptions of technology. Examination of student responses to open-ended questions revealed positive comments pertaining to course relevance and interaction with their instructors and fellow students. This finding reinforced the results of my analysis of instructor interview data that identified their focus on relating course material to practical application, and incorporating interactive teaching strategies centered on their students. The Military School may benefit from the findings of this study if it chooses to incorporate student centered instructor approaches that can relate to job related experiences and promote interaction in the online and hybrid classroom.

Far-Reaching

Military and civilian professionals around the world would benefit from increased access to continuing education opportunities as courses offered in a traditional setting are made available in hybrid and online delivery formats. There are approximately 260,000 military members and civilians serving overseas or deployed at locations around the world (U.S. Department of Defense, 2015). The Military School and other providers of military professional development courses may use the recommendations in the evaluation report to tailor courses to meet the needs of personnel serving worldwide, allowing it to offer more hybrid and online continuing education courses for these professionals. Hybrid and online continuing education courses may also benefit stateside military members and civilians who, for budgetary reasons, might not attend traditional classroom courses at the Military School. By assisting these professionals with their professional development, the Military School and other providers of continuing education courses can help maintain the United States military readiness and national security.

The results of this evaluation may also add to the sparse body of knowledge pertaining to military professional continuing education traditional classroom course transitions to hybrid and online delivery. While there was a modest amount of recent research generally supporting the use of technology in military education and training settings, there was very little in the literature comparing traditional classroom course delivery with hybrid and online course delivery. I only found one article in the literature review supporting this study that compared online and traditional courses in this context.

Artino (2010) examined the relationship between military students' personal factors and their choice of instructional format. Although comparative in nature, it focused on student characteristics rather than student satisfaction in the areas of course mission accomplishment, course management, course instruction, and course value. Furthermore, I did not find any recent research examining instructor experiences during course transitions in a military education setting.

Conclusion

The research in this section supported the use of the evaluation report as an appropriate means to convey the findings of this study to Military School senior leadership, faculty, and staff. The evaluation report is an executive-level summary of the research design, analysis, findings and recommendations of the evaluation study. The goals of the evaluation report are to assist Military School educators in significantly increasing student satisfaction in the areas of (a) mission accomplishment; (b) course instruction; and (c) course management; and (d) course value as Military School instructors continue to transition traditional courses to hybrid and online delivery. To implement the recommendations of the evaluation report, I propose a one-hour faculty development session and incorporation of the recommendations into the courseware of the Military School online instructor training course.

Section 4: Reflections and Conclusions

Introduction

The process of examining faculty and student experiences and perceptions during course transitions from traditional to hybrid and online delivery had multiple benefits. It surfaced informative findings for Military School senior leadership, increased my understanding of online education, and encouraged the instructor participants' appreciation of their accomplishments. In this section, I provide reflections on the evaluation report and implications for social change. I also reflect on my roles as a scholar, practitioner, and project developer and implementer. I discuss recommendations for alternative approaches and suggestions for future research. Lastly, I provide final conclusions.

Project Strengths and Limitations

The evaluation report has strengths and limitations as detailed in this section. The main strength of the evaluation report is the direct applicability of the study findings and recommendations to other midlevel leadership courses at the Military School. Its main limitation is the inability to generalize the findings and recommendations to other courses not taught at the Military School and the subjectivity of the program evaluation approach. As noted by Spaulding (2008), program evaluations are tailored to meet the needs of stakeholders in the specific organization to which they are addressed, and this can the generalization of findings. There is also a degree of subjectivity when preparing evaluation reports (Mertens & Wilson, 2012).

Strengths of the Project

Evaluation reports provide information to stakeholders for decision-making (Mertens and Hess-Biber, 2012; Spaulding, 2008). They are tailored to meet the specific needs of an organization's stakeholders (Spaulding, 2008; Mertens & Wilson, 2013; Moscoso, Chaves, Vidal & Argilaga, 2012). Findings and recommendations summarized in an evaluation report may lead to change in an organization's structure, processes, and resource utilization (Moscoso et al., 2012).

Possible changes resulting from the findings and recommendations of this study could be in the professional development of Military School instructors who are contemplating hybrid and online course delivery. Research-based practices in course design and instruction can be presented during the Military School Online Instructor Course. Examples of these practices could be the use of appropriate interactive teaching approaches, ensuring that technology orientation sessions are incorporated in the training of both instructors and their students, and the need to maintain course relevance to students' jobs.

Limitations of the Project

At present, 21 out of 66 courses offered by the Military School have transitioned or are in the process of transitioning to hybrid and online delivery. Only two of the courses were evaluated. The evaluation report contains findings and recommendations that are based on the evaluation of these two midlevel leadership courses that transitioned from traditional to hybrid and online delivery. This narrow focus was done to minimize extraneous variables in the research study. Therefore, the applicability of the evaluation

report may not be easily transferred to professional development courses that are not taught at the Military School.

There is also a degree of subjectivity when preparing evaluation reports (Mertens & Wilson, 2012). Because the evaluation report is intended to provide an executive summary of the program evaluation, the evaluator has a large say in what is included. There is a possibility that information that may have been useful and actionable by the stakeholders is left out, and it would be useful to see the methods used here to examine work on other courses as they transition to either confirm the results here or add additional recommendations as we develop a catalog of best practices in the school. In this program evaluation, I included all of the quantitative data in the analysis. However, during the qualitative analysis, subjective judgments needed to be made to use particular codes and whether or not a phrase or comment fell into the coding scheme. Another researcher might choose to interpret and analyze the data in a different manner and find insights not previously discovered.

Recommendations for Alternative Approaches

The problem addressed in the program evaluation study was the need to examine student satisfaction and instructor experiences before and after the courses were transitioned from traditional to hybrid and online delivery. I examined student satisfaction data from two traditional Military School courses that were transitioned to hybrid and online delivery. I used a sequential mixed methods summary program evaluation design. According to Stufflebeam (2003), there are three major types of program evaluations. This program evaluation was a product evaluation. An alternative

way of viewing the research problem would be to conduct a context evaluation to determine to what extent the Military School is prepared to transition additional courses to hybrid and online delivery. A third type of program evaluation is a process evaluation (Stufflebeam, 2003). A course can be selected to evaluate as it is undergoing transition. Although this evaluation would largely incorporate student and instructor experiences, the perspective would be different because the data are collected as the transition is occurring, and not afterwards.

Scholarship, Project Development, Leadership and Change

When I began my doctoral program, a mentor congratulated me on choosing to transform from a consumer to a creator of knowledge. The enormity of this transformation did not become apparent until after I completed the two years of coursework and began my program evaluation study full time. I had previously conducted research on a very limited scale and written papers in work and school settings. However, I did not fully appreciate my mentor's words until midway through the development and execution of this program evaluation study.

Conducting the program evaluation study expanded my experiences in areas not previously explored. Working with Military School stakeholders to identify the goals for this program evaluation study, and orchestrating interviews with the participants required me to assume an evaluator role. Finally, navigating all of the various requirements to obtain IRB and community partner approvals built on my program management skills.

Analysis of Self as Scholar

My growth as a scholar largely emanated from having to conduct a qualitative analysis. As an engineer, I felt comfortable with quantitative methods where truth is calculated and hypotheses are either proven or disproven. My initial idea was to use a quantitative design to support a program evaluation. Fortunately, one of my mentors encouraged me to add a qualitative piece to capture instructor experiences during the course transitions.

Incorporating qualitative methods initially intimidated me because this method is exploratory and inductive. Engineers are not exactly comfortable with uncertainty, especially if there is not a way to calculate the correct answer to a problem. Guiding questions were foreign to me, and it took me several iterations to adequately define the qualitative guiding question for this program evaluation study. As the program evaluation study progressed, I realized how important and complementary qualitative methods are to research in the social sciences. Conducting the interviews revealed findings that were not possible through quantitative analysis of student satisfaction data. Conversely, an objective look at the course transitions might not have been possible had I not incorporated a quantitative analysis of student satisfaction data.

Analysis of Self as Practitioner

I chose the concentration of Higher Education and Adult Learning because I wanted to apply what I was learning at Walden University immediately to my work at the Military School. Qualitative data analysis, triangulation, and collaborative learning are three areas that I have successfully incorporated into my department's work.

Prior to beginning this program evaluation, my department focused on evaluating the success of courses by conducting descriptive statistical analyses on student satisfaction ratings. Student comments were considered, but the ratings were emphasized. After learning and using axial coding methods to analyze qualitative data, I passed along this knowledge to my department course directors and encouraged them to include analysis of student comments in their course assessments.

Triangulation was another area that was lacking in my work practices prior to beginning work on the program evaluation study. The importance of corroborating evidence from multiple data sources to assess course results is essential. In addition to quantitative and qualitative analysis of student satisfaction data, I now incorporate analysis of post course interviews with course adjunct faculty.

Finally, I realized the importance of collaborative learning in adult education as part of my coursework after completing this study. At present, my department courses are largely delivered in traditional fashion, and the instructional blocks are lecture-based. However, I have incorporated more opportunities for collaboration in my courses by adding small group discussion sessions and transforming lecture-based instructional blocks to guided discussions.

Analysis of Self as Project Developer and Implementer

Before becoming an instructor, I served in the military as an engineer and program manager. I applied my program management skills to develop and implement the program evaluation. The evaluation report is similar to staff summary packages I have prepared for upper management. Both documents are designed to inform stakeholders

and present recommendations for decisions. Although some of the skills and experiences from work were translatable when addressing Walden University's expectation for a program evaluation, there were differences. In particular, the process used to ensure that participant rights were protected and appropriate ethical reviews were conducted is not something that has been stressed in my work life. The program evaluation study had to be approved by both Walden University and the DoD. Fortunately, the process I used was well defined, and the research design did not contain unusual elements, meaning that approval came quickly.

Reflection on the Importance of the Work

There are approximately 260,000 military members and civilians who are serving or who are deployed at locations around the world (United States Department of Defense, 2015). These professionals are unable to return to the United States to participate in the traditional professional development courses essential to their career progression and to the accomplishment of their missions due to mission requirements and travel costs. The recommendations in the evaluation report may help Military School instructors translate traditional classroom courses to online learning opportunities that will enable military members and civilians to continue their professional development while they are serving abroad. More online learning opportunities that incorporate student-centered course instruction, modular course management, and user-friendly educational technology will also benefit stateside military members and civilians who, for budget reasons, might not attend traditional classroom courses at the Military School.

Implications, Applications, and Directions for Future Research

The evaluation report attached provides Military School stakeholders with research-based analyses of student satisfaction data and instructor interview data of two courses that transitioned from traditional delivery to hybrid and online delivery. It highlighted course instruction, course management, and education technology as areas of interest for future transitions. The evaluation report also provides a baseline for future evaluations in a summary-level format that can be implemented by Military School senior leaders, faculty and staff.

This program evaluation focused on two courses in one Military School department. Future research is needed across other Military School departments and courses to build research-based best practices on using various course delivery modes. Specifically, single methodology studies can be conducted that focus on quantitative evaluations of student satisfaction data for all Military School courses transitioning to hybrid and online delivery, and separate qualitative evaluations of instructor experiences for functionally-specific transitioning courses.

Conclusion

Without access to professional development courses at the Military School, military and civilians serving abroad might find it more difficult to sufficiently perform their duties, thereby impacting readiness and ultimately national security. Budget cuts and personnel shortages are simultaneously limiting the ability for military members and civilians to travel to the Military School to take traditional professional development courses. Consequently, the Military School is turning to hybrid and online delivery to

offer courses to military members and civilians. However, these course transitions are being made rapidly without the benefit of examining student satisfaction and instructor experiences using research-based practices. The problem addressed in this study was the need to examine student satisfaction and instructor experiences before and after courses are transitioned from traditional delivery to online and hybrid delivery. The evaluation report contains findings and recommendations in the areas of course relevance, interaction, and technology challenges. The recommendations in the evaluation report may help Military School instructors translate traditional classroom courses to online learning opportunities that may enable military members and civilians to continue their professional development despite budget cuts and personnel shortages.

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Appendix A: The Evaluation Report

Program Background

Senior military officials are encouraging the use of online technologies for delivering professional development courses to offset budget and personnel shortfalls. However, there is little in the literature about the viability of using online courses to replace traditional courses for professional development in a military education setting. The problem addressed in this study was the need to examine student satisfaction and instructor experiences before and after courses are transitioned from traditional delivery to online and hybrid delivery. The purpose of this sequential mixed methods study was to evaluate hybrid and online delivery of two Military School professional development courses by analyzing student satisfaction data and instructor experiences during the transition.

Program Implementation

Two courses were selected for this study. A team of four instructors transitioned the first course, referred to in this evaluation report as Course 1 from a two-week traditional course to online delivery. They replaced the first week with a four-week online course that is referred to in this evaluation report as the Basic Skills Course that students can take at their workplaces. They replaced the second week with a four week online specialized skills course referred to in this evaluation report as the Specialized Skills 1 Course.

The same team of instructors transitioned the second course from a two-week traditional course offered in the classroom to hybrid delivery. They replaced the first

week with the same online four week Basic Skills Course. The second week was replaced with a one week traditional specialized skills course referred to in this evaluation report as the Specialized Skills 2 Course. This course was conducted in a traditional classroom at the Military School.

The results of this study may help instructors transition traditional classroom courses to online learning opportunities that may enable military members and civilians to keep their personal professional development schedules current with minimum disruption in their work routines whether they are posted in the United States or are serving abroad. Online learning opportunities will also benefit the military by reducing the cost of professional development programs and minimizing the disruption in the personal and work lives of civilians and service members alike. This summative program evaluation may also provide a baseline for future research investigating course transitions in military professional development education settings.

Program Evaluation Results

Evaluation Design

A mixed methods program evaluation was used to capture both student satisfaction data and instructor experiences before, during, and after the course transitions. A goals-based program evaluation approach was used with two program evaluation goals:

(a) Compare student satisfaction data between resident, online, and hybrid military leadership professional development courses;

(b) Examine instructor experiences while teaching traditional, online, and hybrid military leadership professional development courses.

Student satisfaction ratings from 96 course evaluations were compared using nonparametric Kruskal-Wallis analysis of variance tests for significant differences in student satisfaction in the areas of mission accomplishment, course instruction, course management, and course value. Four instructors were interviewed who transitioned their courses from traditional to hybrid, and online delivery. The quantitative and qualitative data generated were triangulated to produce a portrait of the perceptions of faculty and students relating to the process used to transition these courses and the results achieved. This evaluation report contains recommendations based on the study's findings for future course transitions.

Data Analysis and Findings

Analysis of quantitative student satisfaction data. Course 1 transitioned from a traditional face to face course to online course delivery. Archival data were analyzed from 51 student course evaluations of mission accomplishment, course instruction, course management, and course value. Microsoft Excel 2013 and STATDISK 11.1.0 was used to conduct descriptive statistical analysis and analysis of variance tests for significant differences between student satisfaction means. The means for the posttransition online Basic Skills Course and the online Specialized Skills 1 Course were higher than the mean for the pretransition traditional Course 1 in the areas of mission accomplishment, course instruction, and course management, but lower in the area of course value. When the

differences in means were analyzed using Kruskal-Wallis tests, the increases were found to not be significant with a p value set at 0.05.

Course 2 transitioned from traditional to hybrid course delivery. Archival data from 68 student course evaluations of mission accomplishment, course instruction, course management, and course value were analyzed. Microsoft Excel 2013 and STATDISK 11.1.0 were used to conduct a descriptive statistical analysis and an analysis of variance. There were differences in means between the pretransition traditional course and the posttransition hybrid courses. However, when the differences were analyzed using Kruskal-Wallis tests, they were found to not be significant with a p value set at 0.05.

Analysis of qualitative student satisfaction data. The student satisfaction data set provided by Military School institutional effectiveness personnel included narrative student comments to open-ended questions associated with each survey item. Merriam's qualitative data analysis method (2009) was used to examine data from traditional, online, and hybrid versions of Course 1 and Course 2. The data set was reviewed iteratively and axial coded using topic areas that were relevant to the research question. Codes that appeared to be related or similar were subsequently grouped into categories. The findings were organized for each course by mission accomplishment, course instruction, course management, and course value, the areas of most concern to the Military School stakeholders.

The coded data set was provided to a Military School faculty member with a doctorate and experience with qualitative research methods for peer review. Furthermore, the faculty member had experience with traditional, hybrid, and online instruction in this

environment, though that person was not affiliated with any of the courses under study. No additional changes to the coding of the qualitative data related to student satisfaction were recommended by the peer reviewer.

Three emergent themes spanning courses and areas were found. Course relevance to job duties, roles, and responsibilities influenced student perceptions of the two pretransition traditional courses, and posttransition online, and hybrid course formats. Instructors exhibiting characteristics of professionalism and expertise generated positive perceptions of students taking the courses under study. For the posttransition online and hybrid course formats, there were positive student satisfaction responses when there was a high degree of student interaction with instructors and peers. There was a notable lack of student responses pertaining to interaction for the pretransition traditional Course 1 and Course 2 in the areas of mission accomplishment, course instruction, course management, and course value.

Analysis of qualitative instructor interview data. Four Military School instructors who transitioned Course 1 and Course 2 from traditional classroom delivery to online and hybrid delivery were interviewed. All are civilians employed by the military. Two out of the four instructor participants taught the courses prior to the course transitions. The other two instructor participants were hired during the course transitions. All four instructors taught the courses after they transitioned to hybrid and online delivery. Prior to the interviews, all instructor participants voluntarily accepted the invitation to participate and signed the consent form. All were interviewed, and the results of those interviews were transcribed within 24 hours of each interview. At the

beginning of each interview, permission was secured from each instructor participant to tape record the interview as back up to the written notes taken during the course of these conversations. The tape recorder during one of the interviews malfunctioned. However, sufficient notes were taken during the interview to transcribe the responses. To insure that this was so, this participant was given an opportunity to review and make changes to the transcribed results to insure accuracy. All interview data and transcripts were kept on a password protected personal laptop.

A copy of each transcript was emailed to the individual instructor participants at the end of the interview process to have them check for accuracy of their transcript (transcript review), and these instructors were given one week to email changes to me prior to finalizing this narrative data set. One participant made minor grammatical edits and provided additional detail, and this revised transcript was used in the qualitative analysis of this study. The other three participants made no changes to their transcripts.

Merriam's (2009) qualitative data analysis method was used to examine the instructor interview transcripts. The data set was reviewed iteratively, and instructor participant responses that appeared to be relevant to the research question were axial coded. With the permission of the instructor participants, the coded transcripts were given with no identifying data to a Military School faculty member with a doctorate for peer review. This faculty member has experience with qualitative research methods and traditional and online instruction at the Military School. Furthermore, the faculty member was not affiliated with the courses being studied and was not in the supervisory chain of

the interviewed instructors. No additional changes to the coded transcripts were recommended by the peer reviewer.

Coded data were categorized, and responses shared by two or more of the four instructor participants were included in the analysis. Categories were noted and tied to relevant research literature. Three emergent themes that spanned across categories and instructor participant responses were found. Three emergent themes that spanned the categories and instructor participant responses were found. The first pertained to course design. While transitioning their courses from traditional to online and hybrid instruction, instructor participants spent a significant amount of time converting the course material, organizing the course for intuitive navigation, and creating clear course expectations and assignment instructions. The second emergent theme addressed teaching strategies. During the transition, instructor participants found creating a comparable level of interaction with their online students challenging. However, the participants overcame these challenges by incorporating student-centered teaching strategies using facilitation and questioning techniques in their online classrooms. Finally, professional development was a third emergent theme. Instructor participants initially relied on self-study to prepare for online instruction and redesign their course materials. Eventually, external sources of training were utilized and an internal instructor training course was developed to assist the instructor participants.

Major Outcomes

Triangulation of the quantitative and qualitative findings were guided by the methods of Cohen and Crabtree (2006), Patton (1999) and Creswell (2009). Cohen and

Crabtree defined triangulation as “using multiple data sources in an investigation to produce understanding” (Triangulation section para. 1). I used methods triangulation which, according to Patton is “checking out the consistency of findings generated by different data collection methods (p. 1193).”

Creswell (2009) recommended a number of data analysis approaches when converging different data sets in a sequential mixed methods research design. I selected the approach which based the analysis on multiple levels of data that were collected using quantitative and qualitative methods. Student and instructor data sets comprised the multiple levels. The student satisfaction data set was collected using a survey that collected both quantitative and qualitative data. The data set relating to the experiences of the instructors was collected using semistructured interviews.

The discussion of triangulated findings was based on Patton’s (1999) recommendation to focus on the “degree of convergence rather than forcing a dichotomous choice-the different kinds of data do or do not converge” (p. 1194). I presented the degree of student and instructor data convergence in the areas of most concern to the Military School stakeholders, mission accomplishment, course instruction, course management, and course value. I noted when there was convergence among the student satisfaction rating means, student satisfaction comments, and instructor interview responses. In the areas of mission accomplishment and course instruction, all three data sets converged on multiple themes. In the areas of course management and course value, all three data sets converged on a single theme.

Mission accomplishment. A fair amount of data convergence existed among the student satisfaction data sets and instructor experiential data set in the area of mission accomplishment. Posttransition course student satisfaction rating means for mission accomplishment were not significantly different than for the pretransition traditional course means, and each of the courses met the Military School standard of "Excellent" or higher for both online and hybrid delivery formats. Examination of qualitative student satisfaction data and instructor interview data revealed convergent themes of course relevance to student jobs and interaction as possible factors contributing to no significant differences in course mission accomplishment student satisfaction ratings.

During the course transitions, instructor participants focused on relating course material to students' job experiences during their online and hybrid courses. A sample of instructor participant comments were "you're teaching them skills to develop in their work centers (P1)" and "it's more linking together their experiences with the course material (P4)." Instructor participant efforts were noted by the students as evidenced by their comments. A sample of student comments on course mission accomplishment were "this helps me do a better job," "gave me a great overview and reinforcement of my duties," and "provided the tools and methodology to accomplish...duties and responsibilities." The importance of establishing a course's relevance to student jobs was identified in by Knowles, Holton, and Swanson (2011) and Mott (as cited by Wlodkowski, 2008). Both researchers theorized that adults are more prone to choose learning opportunities that are relevant to their jobs.

Robust interactive experiences might also have contributed to no significant differences in student satisfaction ratings of course mission accomplishment. Instructor participants shifted teaching strategies to student-centered approaches that encouraged interaction in the posttransition online and hybrid courses. A sample of instructor participant comments included “we try to engage the students at least every 3-5 minutes with some sort of activity (P1)," “we had to come up with unique icebreakers to get people talking (P2)," and "I ask a lot more open ended questions when teaching online (P4)." Student comments of posttransition online and hybrid course mission accomplishment reflected a recognition of these efforts to keep interaction levels high. Students identified "interaction with peers," “networking,” and “weekly class sessions that were interactive" as reasons for their course mission accomplishment ratings. Instructor efforts to establish and student recognition of a moderate degree of interaction in the posttransition online and hybrid courses were consistent with Anderson’s (2008) research emphasizing the importance of interactions in an online learning environment.

Course instruction. In the area of course instruction, there was a fair amount of convergence among the data sets. Student satisfaction data met the Military School standard of "Excellent" or higher for the pretransition traditional course, and both online and hybrid formats. Examination of qualitative student satisfaction data and instructor interview data revealed convergent themes of overcoming technology challenges and establishing interaction in as possible factors contributing to no significant differences in course instruction student satisfaction ratings.

Both students and instructor participants appeared to overcome initial technology-related challenges with online course instruction. Student comments on course instruction mentioned the webinar system, Defense Connect Online (DCO), and Blackboard, the learning management system. A sample of negative student comments included "DCO medium was sometimes difficult," "having Blackboard and DCO it seemed like I was always missing something," and "typing conversation is time consuming and a lot can be lost in translation." Positive student comments included "the DCOs were easy to follow" and "very clear when you logged in to Blackboard". Instructor participant comments similarly identified initial technology challenges using webinars for course instruction and identified methods they used to overcome these technology challenges. Instructor participants commented "Initially it was (me and the students) [sic] getting used to technology (P1). Not being able to see the students with the technology that we have (P3). Technology is great when it works, but when it fails having a backup is a challenge (P3). Having the (technology) orientation sessions (P1). Making sure there were instructions online if (students) are having computer issues (P2). Chiasson, Terras, and Smart, (2015) found that instructors spent a significant amount of time learning how to use the online instructional technologies while transitioning their traditional courses to online instruction. Jones et al. (2014) reported doctoral students initially having difficulties with the online technology. In Napier, Dekhane, and Smith's et al (2011) study, instructors noted students taking an undergraduate computer course had low computer skill levels, and concerns about using the online software.

Despite technology challenges, instructor participants and students were able to establish a moderate level of interaction in the posttransition online and hybrid courses. All four instructor participants commented on challenges and teaching strategies to actively engage their students. A sample of instructor participant comments include "getting students engaged (was challenging) (P1, P3)," "try to engage the students at least every 3-5 minutes (in a webinar) with some sort of activity (P1)," "you have defined a new way, approach of engaging students (P2)," and “on my discussion board I'll let them make anonymous posts. I think you get more organic honest answers when you have DL (distance learning) discussions rather than sitting in a classroom (P4)." Student comments on course instruction recognized instructor efforts to actively engage them and encourage engagement with other students. A sample of student’s positive comments include "allowed for interaction not only with the instructors/facilitators, but also the students,” “instructors were engaging," and “instructors were always engaging and on point." Student perceptions and instructor experiences with establishing interaction in the online and hybrid classroom were consistent with qualitative research studies. Koehler et al. (2013) found it challenging to establish comparable levels of online student interaction with instructors and other students. In Napier et al.’s (2011) study, instructors identified interaction with their students as challenging. Conversely, Diaz and Entonado (2008) reported positive student comments pertaining to interaction in an online course and attributed them to instructor efforts to engage their students using multiple modes of online communication.

Course management. There was a small degree of convergence among the data sets in the area of course management. Student satisfaction means for course management were not significantly different between the pretransition traditional courses and posttransition online and hybrid courses. Examination of qualitative student satisfaction data and instructor interview data revealed student support as a possible factor contributing to the conclusion reached in this project evaluation that there was no significant differences in course management student satisfaction ratings.

Instructor participants made themselves available to their students for course and technical support. When describing their challenges and teaching strategies, instructors commented on "having the (technology) orientation sessions (P1)," "making sure there were instructions online (P2)," and team teaching during the webinars where one instructor taught while a second instructor worked with individual students having issues.

Students appeared to appreciate the degree of student support provided by their instructors. A sample of student comments include "always available to help and answer questions," "very helpful to those of us computer challenged," and "when there was a technical issue (course director) found a way around it." Napier et al's (2011) research identified student support as critical to the successful transition of a traditional computer course to hybrid instruction. Lam and Bordia (2008) similarly reported student support as essential for online courses.

Course value. Student perceptions and instruction experiences converged to a limited degree in the area of course value. Student satisfaction means for course value were not significantly different between the pretransition traditional courses and

posttransition online and hybrid courses. Examination of qualitative student satisfaction data and instructor interview data revealed course relevance to student jobs as a possible factor contributing to no significant differences in course value student satisfaction ratings.

Instructor participants used student-centered teaching strategies to encourage critical thinking and reflection about their jobs. A sample of instructor participant comments included “we have students take the information and us it (in their work centers) and come back (to the online classroom) and reflect on it (P1),” “we're teaching them skills to develop in their work centers (P1),” and “I find myself asking 'has anyone else ever dealt with this?'(P4),” “it's more linking together their experiences with the course materiel (P4).”

Students valued course instruction and content that is related to their jobs as evidenced by positive student comments on course value. A sample of student comments included “made me ask the right questions to learn about my (organization),” “gave you the tools, tips and tricks of the trade,” and “better perspective of our job.”

Conclusions

Recommendations

Instructors transitioning traditional courses to online and hybrid delivery must continue to relate course content and materials to students’ jobs. The findings in this study and recent literature support this recommendation. Military School instructors incorporated courseware and employed probative questions that related course concepts with their students’ job experiences. Stone-MacDonald and Douglass (2015) found early

childhood professionals taking an online professional development course preferred online trainers who successfully related course content to their jobs. Price, Whitlach, Maier, Burdi, and Peacock (2016) highlighted the importance of encouraging students to apply course concepts to their jobs for nurse educators teaching an online professional development course. Mirriahi, Alonzo, McIntyre, Kligyte, and Fox (2015) recommended professional development courses for online instructors provide realistic experiences that can be transferred to their own practice.

Establishing robust student-instructor and student-student interaction in online and hybrid professional development courses is a second recommendation supported by the study findings and recent literature. Military School instructors adopted student-centered teaching strategies to that focused on collaborative learning and encouraged interaction with and among their students. Stone-MacDonald and Douglass (2015) found early childhood professionals and their trainers commented more positively when professional development incorporated a higher level of involvement between the trainers and their students. Mirriahi et al. (2015) recommended high levels of interaction among students during hybrid professional development for online instructors. Price et al. (2016) emphasized the importance of a high level of instructor interaction and engagement during professional development courses for nurse educators. Purkis and Gabb (2014) highlighted the importance of interaction among online nursing students and instructors, and echoed Salmon's (2011) emphasis on the central role e-moderators play in establishing vibrant online communities. A majority of instructor participants during a study conducted by Bjelland, Miller, and Sprecher (2014) identified interaction with their

students as a barrier to online instruction. Ninety percent of the instructor participants indicated a strong desire to learn techniques that would increase student interaction in their online classrooms (Bjelland et al., 2014). Collins, Weber, and Zambrano (2014) also focused on building strong online communities and advocated capping online course enrollments to no more than 15 students in order to establish robust interaction and prevent feelings of isolation.

A final recommendation supported by the study findings and recent literature is to make certain that the strategies put in place to help faculty and students are effective in overcoming technology challenges. Faculty professional development programs must be structured to account for unfamiliarity with online course management systems and supporting technologies. Herman's (2012) study revealed the importance that higher education institutions place on online technology training for their faculty. In the study, institution officials reported orientation to course management systems and technical services as the top two most offered professional development courses to their online instructors (Herman, 2012). Onguko, Jepchumba, and Gaceri (2013)'s study investigated a comprehensive online professional development course for online instructors and emphasized the importance of addressing technology challenges during the first session. In addition to initial orientation sessions, Vaill and Testori (2012) advocated ongoing technical support for online instructors to keep them focused on instructional duties. Baran and Correia (2014) similarly recognized the importance of technical support with particular emphasis on when instructors transition from the traditional to online classroom.

After overcoming their challenges with technology, instructors must recognize their primary role in orienting their students with online technology. Military School instructors conducted technology orientation sessions, and incorporated team teaching strategies to help their students overcome technology challenges. Stone-MacDonald and Douglass (2015) identified understanding students' technology comfort level and providing technical support as vital for successful online professional development for early childhood professionals. Purkis and Gabb (2014) similarly recommended instructors assist their students in overcoming access challenges during the initial weeks of an online nursing course. In addition to learning how to use online course management systems and online learning tools, Collins et al. (2014) cautioned against too much technology diversity. They recommended introducing no more than one new technology-enhanced learning aid a week.

Implications

Course relevance, interactive online instructor methods, and strategies designed to help overcome technology challenges may motivate and enable deployed and overseas military personnel and civilian employees to take online professional development courses. The Military School is a provider of continuing education courses and is currently transitioning a number of courses from traditional classroom delivery to online and hybrid delivery. In a military setting, professional development is essential for preparing soldiers, airmen, and sailors to lead through and overcome challenges of the future battlefield (Bourque et al., Butts, Dorsett & Dailey, 2014). By offering our military members and civilian employees of the military opportunities to stay current in their

professional development, the Military School may more effectively contribute to our nation's military readiness and overall security.

Local community. I collected and examined qualitative faculty data, and examined quantitative and qualitative student data relating to student satisfaction in two Military School courses during the transition from traditional classroom to hybrid and online delivery. The findings and recommendations as communicated through the evaluation report, faculty development session, and online instructor training course will help the Military School more effectively transition courses from traditional classroom to online and hybrid delivery. In particular, course relevance, interaction, and technology challenges were identified in both the faculty interviews and student satisfaction data as areas of emphasis when traditional courses transitioned to hybrid and online delivery.

For both courses under study, there were no significant differences in student satisfaction despite the need to balance course and work demands and negative perceptions of technology. Examination of student responses to open-ended questions revealed positive comments pertaining to course relevance and interaction with their instructors and fellow students. This finding reinforced the results of my analysis of instructor interview data that identified their focus on relating course material to practical application, and incorporating interactive teaching strategies centered on their students. The Military School may benefit from the findings of this study if it chooses to incorporate student centered instructor approaches that can relate to job related experiences and promote interaction in the online and hybrid classroom.

Far-reaching. Military and civilian professionals around the world would benefit from increased access to continuing education opportunities as courses offered in a traditional setting are made available in hybrid and online delivery formats. There are approximately 260,000 military members and civilians serving overseas or deployed at locations around the world (U.S. Department of Defense, 2015). The Military School and other providers of military professional development courses may use the recommendations in the evaluation report to tailor courses to meet the needs of personnel serving worldwide, allowing it to offer more hybrid and online continuing education courses for these professionals. Hybrid and online continuing education courses may also benefit stateside military members and civilians who, for budgetary reasons, might not attend traditional classroom courses at the Military School. By assisting these professionals with their professional development, the Military School and other providers of continuing education courses can help maintain the United States military readiness and national security.

The results of this evaluation may also add to the sparse body of knowledge pertaining to military professional continuing education traditional classroom course transitions to hybrid and online delivery. While there is a modest amount of recent research generally supporting the use of technology in military education and training settings, very little research comparing traditional classroom course delivery with hybrid and online course delivery has been published. I only found one article in the literature review supporting this study that compared online and traditional courses in this context. Artino (2010) examined the relationship between military students' personal factors and

their choice of instructional format. Although comparative, it focused on student characteristics rather than student satisfaction in the areas of course mission accomplishment, course management, course instruction, and course value. Furthermore, I did not find any recent research examining instructor experiences during course transitions in a military education setting.

Future Research Suggestions

This program evaluation focused on two courses in one Military School department. Future research is needed across other Military School departments and courses to build research-based best practices on using various course delivery modes. Specifically, single methodology studies can be conducted that focus on quantitative evaluations of student satisfaction data for all Military School courses transitioning to hybrid and online delivery, and separate qualitative evaluations of instructor experiences for functionally-specific transitioning courses.

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Appendix B: Military School End of Course Evaluation

1. I believe the course accomplished its mission.
{Choose one}
( ) Strongly Agree
( ) Agree
( ) Slightly Agree
( ) Slightly Disagree
( ) Disagree
( ) Strongly Disagree

2. Instruction during this course was delivered effectively.
{Choose one}
( ) Strongly Agree
( ) Agree
( ) Slightly Agree
( ) Slightly Disagree
( ) Disagree
( ) Strongly Disagree

3. The course was managed very effectively by the course director.
{Choose one}
( ) Strongly Agree
( ) Agree
( ) Slightly Agree
( ) Slightly Disagree
( ) Disagree
( ) Strongly Disagree

4. The education received was highly valuable to my professional career development.
{Choose one}
( ) Strongly Agree
( ) Agree
( ) Slightly Agree
( ) Slightly Disagree
( ) Disagree
( ) Strongly Disagree

5. The education has given me a foundation to effectively perform in an operational or support environment.
{Choose one}
( ) Strongly Agree

( ) Agree
( ) Slightly Agree
( ) Slightly Disagree
( ) Disagree
( ) Strongly Disagree

6. I will use this education to enhance my performance in leadership, advisory, and /or support roles.
{Choose one}
( ) Strongly Agree
( ) Agree
( ) Slightly Agree
( ) Slightly Disagree
( ) Disagree
( ) Strongly Disagree

7. The course was intellectually stimulating.
{Choose one}
( ) Strongly Agree
( ) Agree
( ) Slightly Agree
( ) Slightly Disagree
( ) Disagree
( ) Strongly Disagree

8. The course was supported by appropriate educational technology.
{Choose one}
( ) Strongly Agree
( ) Agree
( ) Slightly Agree
( ) Slightly Disagree
( ) Disagree
( ) Strongly Disagree

9. The course contained current content.
{Choose one}
( ) Strongly Agree
( ) Agree
( ) Slightly Agree
( ) Slightly Disagree
( ) Disagree

( ) Strongly Disagree

10. What were the best area(s) of instruction?
{Enter answer in paragraph form}

11. What area(s) of instruction do you consider to be the least effective?
{Enter answer in paragraph form}

What were the course strengths? Why?
{Enter answer in paragraph form}

What are some possible recommended improvements for the course?
{Enter answer in paragraph form}

Why do you feel the course was or was not facilitated well by the course facilitator?
{Enter answer in paragraph form}

Additional Comments:
{Enter answer in paragraph form}

Appendix C: Interview Questions

[Interview questions 1-9 developed using the interview guide from Chester, M. (2012). *Challenges faced by instructor who transitioned to postsecondary online education* (Doctoral dissertation). Available from ProQuest Dissertations and Theses Database UMI No. 3523893]

1. How long have you been teaching? How long have you taught online and/or hybrid courses? How many online and/or hybrid courses do you teach currently?
2. When you transitioned into teaching online and/or hybrid courses, what challenges did you experience? What factors contributed to those challenges? How did you address those challenges?
3. How did you change your course planning when the decision was made to transition your course to an online or hybrid format? How did your preparation and teaching change during and after your first online or hybrid course?
4. What are the benefits of teaching an online course? What are the benefits of teaching a hybrid course? What are the benefits of teaching a traditional course?
5. What are the limitations of teaching an online course? What are the limitations of teaching a hybrid course? What are the limitations of teaching a traditional course?
6. What do you think differentiates teaching an online course from teaching a traditional classroom course in terms of teaching strategies and skills? What do you think differentiates teaching a hybrid course from teaching a traditional classroom course in

terms of teaching strategies and skills? What do you think differentiates teaching a hybrid course from teaching a fully online course in terms of teaching strategies and skills?

7. What types of teaching strategies and skills are necessary for instructors teaching online and hybrid courses to use to support student learning?

8. What, if any, professional development courses did you take to help you transition into online and hybrid instruction? What else could have been provided to further support your learning and understanding of online instruction?

9. How can the educational institution support instructors when courses are transitioned from traditional to online and/or hybrid instruction?

[Questions 10-11 were developed with the Military School stakeholders.]

10. How do you develop online and/or hybrid instructional materials to address learning objectives from a course that was previously offered as a traditional classroom course?

11. Identify instructional strategies and course design strategies that you believe are central to student success in online courses and hybrid courses.