The Study of Blended Learning and Teaching Officers Investigative Skills

Cheryl Lynne Lepatski

Submitted to the Faculty of Extension
University of Alberta
in partial fulfillment of the requirements for the degree of
Master of Arts in Communications and Technology

August, 2011

Acknowledgements Page

It is a pleasure to thank Dr. Adria for his leadership and vision for the Masters in Arts Communication Technology Program (M.A.C.T.). I would also like to thank Sgt. (retired) Carol Glasgow, Insp. (retired) Rick Gagnon and the Edmonton Police Service for their continued support and enthusiasm for my study; also, Dr. Marion Allen who provided collegial insight, and Dr. Stanley Varnhagen my advisor who provided direction, and essential feedback whilst I completed my study. In addition, I'd like to thank all of my research participants who took time out of their busy schedule to participate in the study. The study would not be possible with out them. I would also like to thank my M.A.C.T. Colleagues for their personal encouragement and advice. Most of all, I would like to recognize my husband for his patience and support during the completion of my studies.

Disclaimers

This study by Cheryl Lepatski, is in partial fulfillment for the Masters of Arts in Communication Technology program at the University of Alberta. The information and data published in this document is strictly for informational purposes. Any opinions or viewpoints that are published herein are directly from the contributing author and does not represent the philosophy or viewpoints of the University of Alberta or the Edmonton Police Service.

Copyright

Copyright © 2011 by the author Cheryl Lepatski. All rights reserved. This material may not be published, reproduced, broadcast, rewritten, or redistributed without permission.

Table of Contents

Abstract

Introduction……p. 1

Literature Review…….....….p. 5

Introduction…….……p. 5

History of Policing and Police Training…….p. 5

Current Issues in Police Training……...……p. 6

Technology of Learning…….p. 7

Classroom Instruction ……..……..p. 9

Blended Learning……...……p. 10

What is Blended Learning?.....p. 10

Benefits of Blended Learning ……...…….p. 11

Blended Learning Helps Organizations Respond to Change…….p. 11

Improving Student Learning……..p. 12

Benefits for Learners…….….p. 13

Convenience of Blended Learning…….……p. 13

Self-paced Learning…….…….…….....p. 13

Social Collaboration…….……..p. 14

Success in Blended Learning…….……p. 14

Limitations of Literature…….……...p. 16

Research Design…….……p. 18

Introduction…….…..….p. 18

Methods…….…….…p. 19

Setting ……..…..p. 19

Sample……..…..p. 21

The Researcher's Role……..…..p. 22

Participant Recruitment…….….p. 22

Data Collection…….p. 22
Data Analysis…….p. 23
Findings……..p. 25
Introduction……p. 25
Content Analysis……p. 25
Data Collected……p. 26
Classroom Entries…….…..p. 26
Group Work and Social Collaboration…….…..p. 28
Subject Matter Expert Presentations…….….p. 28
Syndicate Leaders and Course Facilitators…….……...p. 29
Blended Learning……...p. 29
Approach to Learning the Material……....p. 29
Online…….p. 31
Perceptions of the Online Material……...….p. 31
Process and Content……...p. 33
Online Activities……...…….p. 34
User Centered Design and Interactivity…….…….……p. 34
Technical Problems……..…..p. 35
Self-Paced Learning……...….p. 36
Convenience of Online Learning or Lack of Convenience of Online Learning ……p. 37
Implement of New Knowledge…….……p. 37
Prior Experience and Knowledge…….…….….p. 38
Discussion…….……..…p. 39
Technology is the Focus of the Blended Learning Equation……..….p. 41
Instructional Inconsistencies……..…….……....p. 41
Learning Styles…….……...p. 43

The Literature Does Not Address Key Instructional Strategies…….p. 43
No One Learning Theory…….……..p. 44
Organizations Implement Blended Learning…….……p. 44
Conclusion…….…p. 45
Learner Outcomes……..…….....p. 45
Future Studies…….....p. 46
Improving Blended Learning…….…p. 46
Evaluation and Andragogy…….p. 47
Lessons Learned……....…….……p. 47
Research Question…….…….....p. 48
Appendices…….…...…...p. 49
Appendix A: Ethical Considerations and Data Storage…….…….p. 49
Appendix B: A Research Overview……p. 52
Appendix C: Consent Letter……...…p. 55
Appendix D: Consent Form…….…...p. 58
Appendix E: Raw Data…….....p. 60
Figures…….....p. 73
Figure 1.0 Investigative Skills Education Program……...…….....p. 73
Figure 2.0 ISEP 200 Overview…….....p. 74
Figure 3.0 Summary of Research Design…….…..p. 74
Figure 4.0 Concepts Related to the Quality of Learning in a Police Context……..…p. 75
References…….....p. 76

Abstract Page

In response to change, and the continual need for officer training, the Investigative Skills Education Program (ISEP) a blended learning program helps to teach officers investigative skills. Blended learning is thought to be an effective method of instruction as it mixes traditional values of education while meeting changing demands. The study examines the officers' perception of the blended learning environment. Qualitative data was collected in the form of written entries in a book, or typed entries on a computer. The officers' entries reflected their experience in a blended learning environment. The researcher used content analysis to determine the coding scheme. The findings in the study suggest that the perceptions of the blended learning environment are directly related to the officer's prior experience, the type of learning environment provided, how the material is selected and organized, presented and assessed will affect both their approach to learning the material and the quality of learning achieved (Ginns & Ellis, 2007).

Keywords: blended learning, students' perceptions, police officer training

Introduction

Drucker (1999) suggests that Frederick Winslow Taylor (1856-1915), who studied the productivity of manual workers and created a comprehensive methodology to increase the number of goods that are produced by each manual worker, but not necessarily the quality of the goods. Taylor's methods of improved efficiency changed the way manual work was conducted by reducing the worker's autonomy, and their monopoly on their craft and their skills. Taylor's work was successful and his model helped develop economies, and eventually manual workers evolved into knowledge workers. Knowledge workers do not create goods, their contribution to the economy is the knowledge that they have. Knowledge workers are characterized as autonomous; they require continuous learning, need to have the opportunity to teach (pass on knowledge), are focused on the quality of output not the quantity, and their explicit and tacit knowledge is viewed as an asset to the organization. This paradigm shift is significant because it better relates to the way people work today and how they are trained for their positions. Due to technological developments and societal changes, many occupations (including policing) that currently exist today, are more complex and require ongoing professional development (Drucker, 1999; Dunham & Alpert, 2010). Organizations, including police organizations, require their workers to be knowledgeable and have up-to-date knowledge pertaining to their occupation. Organizations also recognize the knowledge and experience that workers have. As a result, organizations need to respond to the shift between the need for manual to knowledge workers. The shift requires organizations to implement effective adult learning programs that meet the continually changing needs of the organization and provide employees with meaningful and effective learning opportunities.

Organizations such as police services require ongoing professional development to prepare officers to effectively investigate crime throughout an officer's career (Dunham & Alpert, 2010). Policing requires officers to have a diverse skill set including affective skills such as; risk effective decision making skills, case management, note taking, report writing, crime scene management, photographic line-ups, interviewing, confidential source management, court testimony, search warrants, judicial administration.

Donavant (2009) suggests that the inability to address the training needs of policing will result in an ineffective police practices that will have a negative effect on society. Ryan (2006) supports Donavant's perspective and Ryan indicates that police agencies are currently being scrutinized in the legal system because in some cases the agency failed to adequately train their officers. In some police agencies in North America, once an officer completes recruit training, their professional development is comprised of stand-alone courses that are not sequenced together into a comprehensive curriculum. In addition, the training is not necessarily offered at the appropriate stage of an officer's career. Police training is also not necessarily tied to promotion/eligibility or a requirement to gain entry to specialized units such as gang, or homicide. Many police services face additional training obstacles due to a high attrition rate of police officers, a large number of junior officers, and an increase in the community population. Furthermore, some police services are required to maintain a certain number of officers on the street to address the community needs, thus reducing the number of hours police officers can attend training.

Police officer training is typically experiential and hands-on or a Socratic lecture style. Cleveland (2006) argues that the typical police training approach is utilized not because it is effective, but because it is easier and more familiar. Many police organizations utilize training

practices that are familiar, and pass those training practices to other trainers (Cleveland, 2006), and according to Donavant (2009) often the training practices that are used are not necessarily supported by empirical evidence as being the most effective for learner retention. Ryan (2006) cites that the legal system may require agencies to present their curriculum in court. In one case the officers received a lecture and a video presentation to learn about use of force. The officer who shot and killed an individual, testified that the training he received was inadequate and is not accountable for the death that occurred. The police agency was deemed liable and the agency required to pay damages.

In response to the complexities of policing and the need for a comprehensive curriculum that would address the some of the ineffectiveness of utilizing more familiar training methods, the Edmonton Police service created the Investigative Skills Education Program (ISEP). ISEP is a blended learning program that is comprised of four levels that address the aforementioned complexities (See Appendix, Figure 1.0).

Blended learning uses a combination of online and classroom instruction to teach, and it is becoming a popular instructional approach that combines traditional classroom instruction with online learning. It is a popular form of training in organizations that require ongoing development of their employees. Many organizations, such as the Edmonton Police Service, are implementing blended learning because it can help organizations administer the materials efficiently and it is also thought to utilize the best methods from both classroom instruction and online learning. Blended learning offers organizations the ability to customize their training for their specific needs in several ways. Organizations can adjust the ratio of classroom and online learning to deliver the best training. A blended learning approach allows organizations the ability to reduce the number of hours spent in a classroom, and focus on hands-on activities in the

classroom. Online learning can also help organizations train a larger number of learners in a shorter amount of time.

Although some post secondary institutions are already utilizing blended learning, there is little research regarding the rationale to incorporate blended learning in their curricula (Picciano, 2006). The effectiveness of the blended learning approach, the experience and successfulness of students who use this approach. The research is more limited when it comes to blended learning in a non-academic environment. This study will examine how blended learning environment was implemented at the Edmonton Police Service, the rationale for determining what curriculum was taught online and in the classroom. The study will also help to determine how the blended learning environment teaches officers investigative skills and the officers' perceptions of the blended learning environment.

Literature Review

Introduction

To examine the perceptions of police officers to a blended learning method offering professional education, and to ascertain the effectiveness of this approach, the literature presents findings for the success of both the classroom instruction, and elearning, but little is known about the two approaches in blended learning model. Primary and secondary schools (grades one to twelve) sometimes utilize blended learning to teach children (Chandra &Fisher, 2009). Post-secondary institutions are also implementing blended learning for some courses (c.f., Picciano, 2006; Albrecht, 2006; Ahamad, Shafie & Janier, 2008). Lastly corporations (Schooley, 2005) are utilizing blended learning to address the educational needs of employees. However, the literature pertaining specifically to police organizations that utilizes blended learning model is very limited. To assist in these examinations, the author reviewed the research literature not only on blended learning but also on the historical and the current state of police training. The key themes of the literature are presented here.

History of Police Training

Haberfeld (2002), Rydberg and Terrill (2010) refer back to policing in the 1930s; the authors recount policing as a career that required little schooling with the occupation viewed by society as corrupt. August Vollmer, a police chief in Berkeley, California between 1905-1935 (Dunham & Alpert, 2010), advocated for the reform of police education. Vollmer suggested that improved training for police officers would help legitimize the occupation as a profession and assist with the negative perceptions of policing. Dunham and Alpert (2010) quote Vollmer's perspective:

> The citizen expects police officers to have the wisdom of Solomon, the courage of David, the strength of Samson, the patience of Job, the leadership of Moses, the kindness of the Good Samaritan, the strategical training of Alexander, the faith Daniel, the diplomacy of Lincoln, the tolerance of the Carpenter of Nazareth, and finally, an intimate knowledge of every branch of the natural, biological, and social sciences. If he had all these, he might be a good policeman (as cited in Bain, 1939, p. 1)!

Current Issues in Police Training

Dunham and Alpert (2010) suggest that the role of police officers is more complex than the one Vollmer described. In response to the additional complexities of policing, organizations are attempting to improve police training (cf., as cited Donavant, 1999; Birzer, 2004; Brims. 2005; Deakin, 1998; Delta, 2004; Pope, 2003). There are critics, though, who say that police organizations have not yet done enough to adequately change the way officers are trained. Vodde (2009) suggests that police training is still characterized as being rudimentary, fragmented and reminiscent of a traditional, pedagogical, military model. Cleveland (2006) acknowledges that based on research about how knowledge is acquired and transferred, the traditional Socratic and mimetic methods of police instruction are not effective. Without an effective and comprehensive curriculum, police officers likely will not be able to investigate crime as effectively. As Donavant noted:

> A failure by police administrators and trainers to address the contemporary training needs of police service will create a generation of mediocre police personnel who are unprepared to fulfill the requirements of police service within modern society and eventually lead to a breakdown of other social institutions (Donavant, 2009, p. 228).

Donavant is critical of the implementation of online education and andragogical methodologies (adult learning methodology) because the program evaluation that is conducted to determine the success of the program is often based on student satisfaction, not on learner outcomes. For example, this type of evaluation does not provide information as to why the students responded the way they did to the online training and whether they learned and retained the material. Donavant argues police organizations often create new training programs for the sake of change:

> Within professional development circles, the urgency to revamp and improve existing training methodologies without a comprehensive assessment of learners' needs sometimes promotes an atmosphere of change simply for change's sake (Caffarella, 2002; Nadler & Nadler, 1994), and this tendency toward the haphazard development of training programs and practices contributes to the gap between scholarship and practice (Donavant, 2009, p. 229).

Technology and Learning

The first use of media technology in the classroom can be traced back to radio education in the 1920s, students were taught by listening to the "school on air" program (Garrison & Shale, 1990). Garrison and Vaughn (2008) suggest that technology has opened up the potential to transform the learning environment for the better. Similarly, like the advent of "school on air", blended learning uses technologies because it is thought to expedite the transfer of knowledge.

While Garrison and Vaughn praise the use of technology in the classroom, authors such as Clark are more discerning. "Studies of the influence of media on learning have been a fixed feature of educational research since Thorndike (1912) recommended pictures as a labor-saving device in instruction" (Clark, 1983, p. 445). Clark suggests that every technology attracts advocates who will claim that the technology will directly improve learning. Research that

focuses on using technology to assist with the teaching and learning of the material is often with the intent that "…learning will be enhanced with the proper mix of medium, student, subject matter content, and learning task" (p. 445). Clark is critical of research that attempts that compare achievements of groups who received similar content using different media because many of the studies are based on the presumed learning benefits from media. Clark further explains that if a dramatic change in learner occurs, it is not because of the efficacy of the technology but the improvements to the instructional strategy. "The best current evidence is that media are mere vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes changes in our nutrition" (p. 445). Previously, Donavant suggested that police organizations should not implement instructional changes for the sake of change. Clark similarly claims that organizations should not begin with instructional solutions, such as implementing technology, as an instructional strategy and then search for the problem that can be solved by technology (1994).

Online learning is often compared to traditional Socratic classrooms where the teacher is the conveyor of knowledge. The literature suggests that online instruction can be as effective as traditional Socratic classroom instruction. Schooley notes "Outside of subject areas where face-to-face interaction is necessary, recent research indicates that no significant differences exist in the effectiveness of learning through classroom, online, or self-study" (2009, p. 3). The literature describing the pedagogical benefits has evolved and "most of these studies indicate that online learning is perceived to be at least as effective as classes" (Picciano, 2006, p. 99). These statements are supported by research conducted by Tallent-Runnet. Their study concluded that online instruction is as effective as classroom instruction and quality online instruction will translate to student learning (Schooley, 2009).

Classroom Instruction

Although classroom instruction has been around for a long time, it is not without criticism. Like online instruction, classroom instruction is only as effective as the methodologies that are practiced in the classroom. Without sound curriculum, classroom instruction can suffer from the same ineffective methods and practices. For example, in a statement submitted by Fairfield University for the Pew application process (now administered by the National Centre for Academic Transformation), the university describes a General Biology course to be redesigned as a "traditional course [that] suffers from a number of academic deficiencies. The most serious is the lack of a student-centered, inquiry based pedagogy… (Albrecht, 2006, p. 9). The statement also indicated that the preliminary data collected, indicated that the students' retention and comprehension was lower than expected (Albrecht, 2006). The University of Fairfield decided to redesign their course delivery by implementing a student centered learning environment, improving facilitation, and transfer of information, and exposing the students to a variety of biological information. The results were conclusive, "…the drop, fail, or withdraw rate dropped, the number of students enrolling in the second semester increased…" (Albrecht, 2006, p. 9). Another example of classroom instruction suffering from ineffective teaching methods is Penn State, according to John Harwood, the senior director, the statistics course did not actively engage students or provide instruction that appealed to different learning styles (Albrecht, 2006). Kun and associates support the need for effective pedagogical practices that are student centered. "Deep and meaningful learning experiences are best supported by actively engaged learners" (as cited in Garrison & Vaughan, 2008, p. ix).

Blended Learning

What is blended learning?

The term blended learning or hybrid learning does not have a readily agreed upon definition by either practitioners or scholars. “The definition of blended learning has been argued and debated at workshops and in print” (Albrecht, 2006, p. 2). Schooley (2005) also agrees that there is no one definition, but Schooley points to three key aspects of the blended learning models; online self-paced learning (asynchronous), offline instruction (or classroom instruction), and lastly, online synchronous learning. The use of online learning whether it is asynchronous or synchronous will overlap with classroom instruction. Schooley acknowledges that the characteristics of the blended learning method will vary between the participants, instruction, interaction, learning approach and instructional leader. Similar to Schooley, Elliot Masie (2002, p. 59) wrote that blended learning “is the use of two or more distinct methods of training” that may “include combinations such as:

- Classroom instruction with online information
- Online instruction with access to a coach of faculty member
- Simulations with structured courses
- On-the-job training with brown bag information sessions
- Managerial coaching with e-learning activities” (as cited in Albrecht, 2006, p. 2).

Although there is no one accepted definition of blended learning, typically it is acceptable to characterize blended learning as using web based or online activities thus often reducing the time required for classroom instruction. Blended learning can provide organizations who wish to

improve their teaching methods can utilize two different approaches opens more opportunities to utilize the strengths of each method to achieve the intended learning objectives.

For the purpose of this study, blended learning is defined as a combination of online (asynchronous) and classroom instruction, using multi-media and technology in both the classroom and online, with the use of course facilitators or tutors, (The Investigative Skills Education Program (ISEP) uses the term syndicate leaders to describe their tutors). This definition reflects the police officer training program, ISEP, which will be examined in this study.

Benefits of Blended Learning

Blended learning helps organizations respond to change.

Thorne (2003) suggests that blended learning is a natural evolution of a learning agenda. Schooley (2005), Albrecht (2006) and Thorne (2003), suggest organizations utilize blended learning because it is a flexible solution that helps organizations meet their objectives. Blended learning is a flexible solution because organizations can deliver the material required, and the necessary amount of material, in the best sequence for learning online and in the classroom to achieve the intended outcomes. Consequently, most blended learning programs are not driven by the learners themselves, but the institution or organization in which the blended learning program is created. For example, in 1996 the University of Central Florida (UCF) began to implement blended learning in large part to respond to enrollment that outpaced faculty capacity (Albrecht, 2006). “A public urban university (UCF) in the sunbelt has been experiencing unprecedented enrollment growth as a result of a population boom that has continued for more than fifteen years” (Picciano, 2006, p. 95). State funding did not keep up with the needs of the University to expand, and with online courses already in existence, the faculty viewed blended learning as a

realistic approach to recapture classroom space (Picciano, 2006). Sometimes, the driving factor for implementing blended learning is due to a lack of infrastructure. Automakers are also utilizing blended learning to address corporate objectives. Schooley (2005) explains that the automakers and dealers determined that classroom training alone could not meet their demands in a timely way because the learners were spread over a large geographical area. The automakers acknowledged key drivers for implementing blended learning such as: employees are constantly changing, products require up to date knowledge to provide an excellent product and customer service, and customers are demanding improved expertise and knowledge (Schooley, 2005). The automakers utilized a learning management system (LMS) that tracked the employees learning activities, progress, and results. The LMS system was integrated into the human resources system to assist with combining employee records. The blended learning programs were comprised of classroom instruction, synchronous online instruction, and asynchronous online learning. The three approaches mentioned were utilized in different combinations depending on the employee that required training such as management, sales and technicians.

Improving student learning.

While organizations and institutions are utilizing blended learning to address corporate objectives, funding limitations and space issues, a second picture emerges. The need to improve student learning is also a factor. According to Thorne (2003) blended learning "…suggests an elegant solution to the challenges of tailoring learning and development to the needs of individuals" (p.16). Whilst integrating the best technologies with the ability to have both interaction and participation in a classroom setting (Thorne, 2003). Blended learning enthusiasts believe that the combination of classroom and online instruction offers more experiential learning and encompasses more learning styles that just one method of instruction. J. Harwood, a

senior director at Penn State, exclaimed that an introductory statistics course which was a purely classroom course was rebuilt as a blended learning course to assist with improving student learning and to accommodate more learning styles (Albrecht, 2006). C. Dede, from Harvard University, also agrees with the concept that blended learning accommodates more learning styles than a traditional classroom approach alone (Albrecht, 2006). According to Albrecht (2006), few critics of the blended learning module have come forward. Albrecht explains this lack of opposition with the thought, "Perhaps the concept of improving learning has discouraged potential criticism" (p. 4).

Benefits For Learners

Convenience of blended learning.

Combining online learning with classroom instruction reduces the amount of time students need to attend classroom instruction (Picciano, 2006; Albrecht, 2006). By having some materials online, the learners gain some flexibility in their schedule and can balance their competing demands both professionally and personally for that component. As opposed to children and youth, many adult learners have increased responsibilities at work and at home that affect the time they have available for learning.

Self-paced learning.

A direct benefit in the blended learning model that utilizes asynchronous learning is that students can learn at their own pace (Schooley, 2009). Also, the opportunity for learners to review the material and search for answers any new questions whenever that arise increases the chances for success. "Blended learning in its common form of combining classroom and Web activity serves a broader spectrum of learning styles than either one alone, and in some practices

it begins to offer the many opportunities that are evolving as the world of e-learning" (Albrecht, 2006, p. 3).

Social collaboration.

The concept of collaborative constructivism was envisioned by John Dewey in 1916 when he argued that creating meaningful and worthwhile knowledge is a continuous process of collaboration and reconstruction from personal experiences (Garrison, & Archer, 2000). Social collaboration is central to the process in which new ideas become the foundation for discourse and the construction of new knowledge. The face-to-face discussions are important because the interaction in the classroom, or after class, can assist with learning new material. Students can ask questions and discuss in small groups or as a whole class any concepts they wish to discuss. "Meaning and knowledge are constructed and reconstructed from a complex mosaic of social experiences, and it is this process of personal construction that ensures continuous development" (p. 11). Also classroom time can also be used to focus on more interactive, or experiential activities that are not easily replicated online.

Success in Blended Learning

The success of a blended learning program is directly related to the quality of instruction and using the delivery methods appropriately. Organizations must have equal quality in both online and classroom materials. "Maximizing success in blended learning initiative requires a planned and well-supported approach that includes a theory-based instructional model, high-quality faculty development, course development assistance, learner support, and ongoing formative and summative assessment" (Dziuban, Hartman, & Moskal, 2004, p. 3). To have a successful blended learning environment, careful planning is required to ensure that the materials compliment one another. Schooley suggests the effectiveness of blended learning is directly

related to the course quality for both sides of the blended learning equation (2009). Organizations that are new to online learning may struggle to provide curriculum materials that are effective, and may result in a disjointed approach. “Whether content is classroom-based, online self-paced, or blended learning, it must be engaging and tied specifically to outcomes that are meaningful to the employees” (Schooley, 2008, p. 11).

To be successful in the blended learning environment, learners must reexamine their approach to studying and learning the material in a blended learning environment. Dziuban, Hartman, Moskal (2004) suggest that students must realize that their previous approach to learning material in a classroom or a purely online class may not be effective in a blended learning environment. “The rhythms of blended courses differ from those in face-to-face classes, forcing students to stay actively engaged and connected” (Dziuban, Hartman, & Moskal, 2004, p. 9).

Penn State University determined that the student’s retention of statistics material was low; consequently they changed the method of instruction by implementing blended learning. Some of the students did not view the blended learning method positively and criticized the instructors for having to do all the work themselves. “…one student remarked in an evaluation, “I came to learn; your job is to teach. Now, teach, dammit!” Another lamented that in this “terrible course…I had to learn everything myself” (Albrecht, 2006, p. 4). Penn State University does not necessarily view these comments as negative, but as a positive, because the students in a blended learning model must take more responsibility for their learning, and these comments support that goal.

The online environment can provide an additional advantage when students are trying to learn abstract concepts because the students can review the concepts as much as they need and those concepts can be presented in video, illustrations, pictures and Flash animations. For example, students can experience difficulties when learning mathematical concepts. Ahamd, Shafie & Janier (2008) explain that the math students struggle to remember formulas and this results in a negative attitude towards learning math. The traditional methods of using experiments may help teach the mathematical concepts but it did not alter the students' attitudes towards math. Flash tutorials were developed to help students learn and visualize the mathematical concepts. The results of the study showed that the student's marks improved and so did their overall attitude. At the end of the study, students filled out a questionnaire at the end of the course. The results showed that 95% of the students indicated that they were satisfied with the blended learning environment (Ahamd, et al., 2008). This shows that blended learning can be a successful way to teach material.

Limitations of Literature

There is some data on the perceived effectiveness of blended learning, the institutional motivations for implementing blended learning, and how blended learning was approached, but the literature is limited when it comes to capturing adult students' perceptions of blended learning. For example, Macdonald (2006) in her survey of institutions who had implemented blended learning received feedback from 37 educational institutions in 17 countries. The study helped gain an understanding of the current practices in blended learning but not the students' perception of the blended learning environment. Another study entitled "Students' perceptions of a blended web based learning environment" by Chandra and Fisher (2009) directly linked the students' perception and the blended learning environment. The study undertaken addresses two

key questions; One, is blended learning feasible to teach high school science; and two, what are the students' perceptions of the blended learning environment (Chandra & Fisher, 2009). The investigators found that the students viewed the blended learning environment favorably. Chandra & Fisher do contribute to the body of knowledge in the area of blended learning however the demographic in the study was ages 10-13—not adults.

The blended learning model is gaining attention but little is understood of the learner's perceptions of the blended learning model in an adult learning environment. Organizations are utilizing blended learning in an attempt to address the need for ongoing training of employees, in a way that is both effective and efficient, however, they are not collecting sufficient data on students successfully mastering the material (Piccianno, 2006). While research in this area is new, many organizations are making the assumption that they are utilizing the best of the traditional classes and online communication technologies. Many of the conclusions are indirectly inferred, what is needed is more direct empirical evidence to determine how the blended learning environment helps learners learn (Donavant, 2009).

The purpose of this study will examine perceptions of whether the blended learning environment helps officers learn the knowledge, skills and abilities to improve their investigative skills. The study will provide valuable insight into the officers' perception of the blended learning environment, by focusing on two areas: the officers' perception of the teaching and learning environment, and their approach to learning and studying material. The research question: How is the blended learning environment perceived by officers who are enrolled in the Investigative Skills Level 200 program? Secondly how do officers approach their learning in a blended learning environment?

Research Design

Introduction

Blended learning is a relatively new method of delivering instructional material in an organization such as a police service. It is difficult to explore blended learning because the ratio of classroom and online instruction can vary, and the mix of technology may vary from one program to another. For example, organizations can use threaded discussion (asynchronous), textual information, interactive Flash tutorials, or videos. The classroom instruction may also use technology such as Skype, video or a Smart board. ISEP, the focus of this study, utilized online modules with textual information and interactive materials; the classroom instruction had lectures and a problem based learning scenario exercise.

The research design in this study will use the social constructivist worldview to provide a general frame and rationale for answering the research question. The research question: How is the blended learning environment perceived by officers enrolled in the Investigative Skills Level 200 program and how do they approach learning in a blended learning environment? "The researcher's intent is to make sense of (or interpret) the meaning others have about the world" (Creswell, 2009, p. 8). This study will collect qualitative data as it is a broad and inclusive form of research and because it "…is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (p. 4). The qualitative research will help the researcher examine multiple meanings. Consequently, the researcher will collect data and, by way of qualitative content analysis, the researcher will look for dominant themes.

Methods

Within a social construction perspective, humans are viewed as continually constructing meaning as they engage with the world they are interpreting (Creswell, 2009). It is the participants' meanings that will be the focus of the study, not the researcher's meaning. In keeping with this worldview, the study collected entries written or typed by police officers about their perceptions of the teaching and learning experience in a blended learning environment. Entries are an unobtrusive method of data collection: and provide officers with the flexibility to record their perceptions whenever they feel they want to. The construction of new knowledge is not an activity that is scheduled or easily captured in an interview or focus group. The method is similar to the notes that officers make in their notebook during an investigation. It will capture the officers' experiences free from the researcher's point of view. The entries can be thoughtful because the participant can give attention to completing their entries (Creswell, 2009). The entries will provide a heuristic device in the form of words, and by way of content analysis; an inductive data analysis, patterns and themes will emerge.

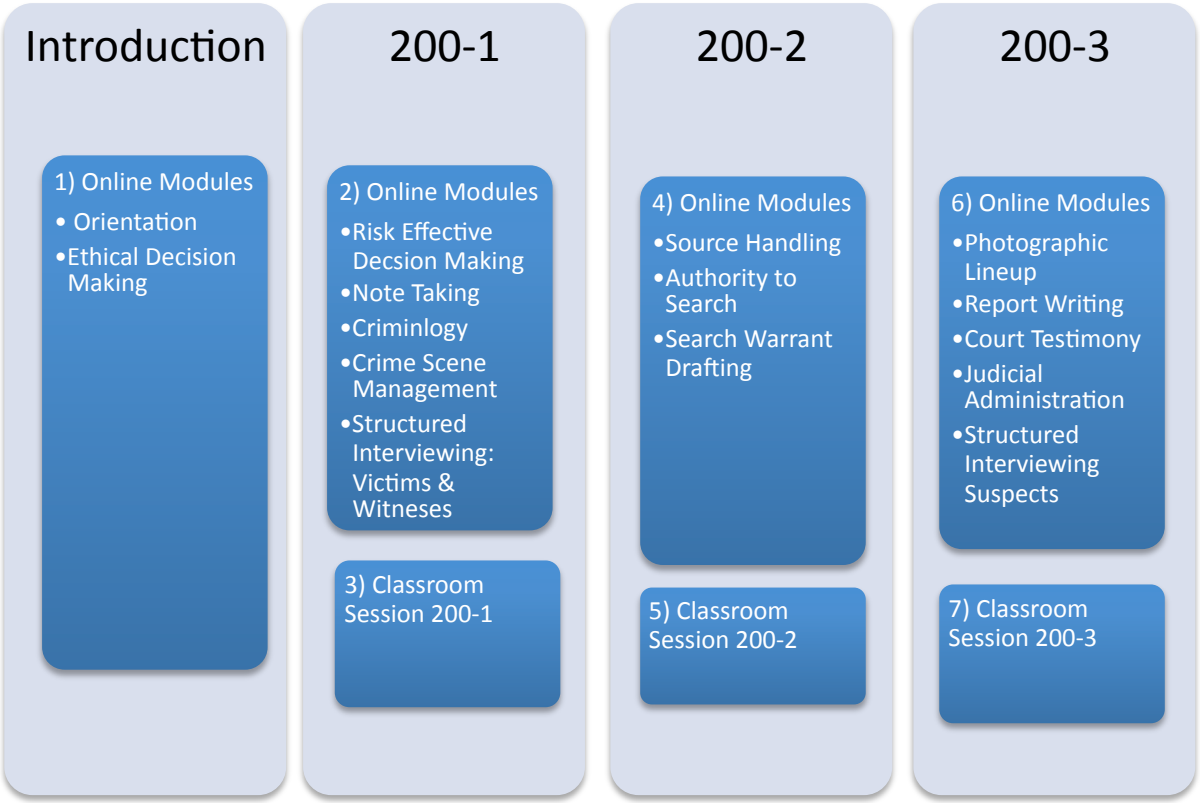
Setting

The study took place within the Edmonton Police Service, and in particular the focus was the Investigative Skills Education Program (ISEP) Level 200. The researcher conducting this study is a full-time employee at the Edmonton Police Service, in the In-House Training Unit, as an elearning instructional designer. The researcher was also involved in the development of ISEP materials. In particular, she assisted with the creation of the online materials in ISEP 200.

ISEP is a unique training program and is an innovative approach to teaching officers investigative skills because it utilizes blended learning and it is a comprehensive curriculum that spans throughout an officer's career. ISEP is comprised of four sequential levels; Level 100,

recruit training; Level 200, officers who have completed recruit training and have achieved the rank of constable; Level 300, officers who have five years or more of experience; and Level 400, officers who are detectives or about to become detectives (See Figure 1.0 Investigative Skills Education Program). At the time of the study, it was planned that Level 200 and Level 300 would utilize a blended learning approach. It should be noted that Level 300, a blended learning model was not developed or piloted at the time of this study. Level 100 (recruit training) and Level 400 already existed and do not utilize blended learning. In Level 200, both the online modules and classroom segments are a mandatory component of ISEP. As outlined below, in Level 200 the online modules are completed before the classroom sessions. Participants of the study completed 15 distinct online modules and three classroom sessions over a period of five months (See Figure 1.0 Investigative Skills Education Program).

Figure 2.0. ISEP Level 200 Overview.



During the study, officers completed approximately 16 hours of online instruction and 24 hours of classroom instruction. Beyond that, officers needed additional time to complete the final assignment. The percentage of online equals 40% and classroom 60% respectively. Figure 2.0 above outlines the sequence in which the learners must complete their studies in numerical order. The officers complete the online material first, and then they attend class. The online content is applied to a problem-based learning scenario investigation that continues throughout all three classroom sessions. The final assignment requires students to complete their police report (including a prosecutorial summary, a narrative account of investigative steps and details, a source registration form, source debriefing report, information to obtain warrant, search warrant, structured interview preparation package, show case package and investigative notebook for review. Officers must achieve a minimum grade of 80% to pass.

Within the Edmonton Police Service (EPS), the ISEP online modules are available using a learning management system (LMS) called TRACCESS CI ™. The online material is only available on the EPS Intranet, as a result the participants worked through the online material at various police stations around Edmonton. The computers in the police station are not individually assigned and are considered to be communal computers. If an officer does have computer problems, they have access to an Information Technology (IT) department for any hardware or software issues. The officers also may contact the In-House Training Unit (IHTU) via email or by phone for any issues with the online materials.

Sample

The sample planned was for five police officers who were enrolled in ISEP 200. The officers could choose to write or type their entries on a computer. The officers were instructed to

write entries about their experience while completing ISEP Level 200.[1] The researcher estimated that the five officers would create approximately 18 entries each (one entry for each classroom session and online module) totaling roughly 90 entries. The researcher determined that five officers will generate sufficient data for the qualitative study.

The Researcher Role

The researcher ensured that the participants understood their role in the study, the beginning and end dates for writing their comments, and how and when they could withdraw from the study. Participants talked with the researcher about the nature of qualitative research, the approximate amount of information they should be recording, and how their information would be used. The researcher facilitated the process in an unobtrusive manner (See Appendix B: Research Overview).

Participant Recruitment

Officers registered in ISEP 200 received email communication from the ISEP provincial coordinator describing the study and how they could sign up. The researcher attended the three different sections of cohorts that were being offered at the time and discussed the purpose and rationale of the study.

Data Collection

After the officers agreed and signed confidentiality and ethical standards form (Appendix C: Consent Letter, Appendix D: Consent Form), they began making entries beginning October, 2009 until the end of February 2010. At the end of February 2010 the participants were asked to submit their entries to the researcher, by interdepartmental mail, or by email. The time period

---

[1] Each cohort had approximately 20 officers.

chosen proposed coincided with the ISEP schedule. Courses began October, 2009 and their final assignment was due at the end of February 2010.

Data Analysis

Content analysis, a qualitative approach, helps the researcher to gain an understanding about the problem or issue from the participants' perspective (Creswell, 2009). In this study, the method of data analysis was designed to assist with the examination of the officers' perceptions of the teaching and learning in a blended learning environment. Such an analysis ensures that "…the researcher keeps a focus on learning the meaning that the participants hold about the problem or issue, not the meaning that the researchers bring to the research…" (p. 175) "More than just a single technique, content analysis is really a set of methods for analyzing the symbolic content of any communication" (Singleton & Straights, 2005, p. 371). Silverman suggests qualitative content analysis begins with determining what the main units of data are, then what categories the participants use and, finally, the consequences of the participants' categories (Silverman, 2000). An inductive data analysis will help identify further categorization or themes. The advantage of content analysis is the ability to connect the participants' experience and the context of the entries (Mayring, 2000). Mayring describes the textual data as having differentiated levels of content. Primary content is comprised of themes and main ideas, whereas the latent content is any contextual information. Content analysis relies on established categories, which result in a consistent analysis when the same body of text is analyzed by different encoders (Silverman, 2005). The validity of the data analysis does not depend on the sample size, but rather the quality of the analysis (Silverman, 2000).

The qualitative content analysis conducted by the researcher was based on Mayring's step model of inductive category development:

1. Criterion of selection or contextual units helped sort the participants' perceptions and experiences into general themes.
2. The text was further analyzed and the researcher formulated additional subcategories. The subcategories were abstracted from the participants' entries within the four main categories. The subcategories were reviewed and revised after reviewing 50% of the material. Each main category was give a letter representing; "C" for classroom, "O" for online and "B" for blended. The participants' entries were further coded by using both the letter representing the main category and a number representing the subcategory.
3. After the subcategories were revised the researcher revisited the research question to ensure that all of the categories reflect the research question.

Findings

Introduction

Five officers in the ISEP 200 course agreed to participate in the study. The participants all typed their entries in a Word document; none of the participants chose to hand-write their entries. The participants' entries were typically organized in the same sequential pattern in which the course materials were delivered. As a result, the participants would direct their comments to a specific classroom session or online module. Most of the participants' entries discussed the online component of the program (approximately six pages), then the participants created entries for the blended learning (approximately three pages), and the classroom entries (approximately two pages), for a compiled total of 11 pages of qualitative data.

Content Analysis

Singleton & Straights (2005) suggest content analysis helps researchers obtain a deeper understanding of their data because it is a systematic approach of analyzing qualitative data. The systematic approach enabled the researcher to explore the meaning of the participants' entries. The researcher began by separating the data into three broad categories, classroom, blended and online (See Table 1.0). The three broad categories were simple to do because the officers wrote separate entries to address their experience in the classroom or online. In cases where entries discussed both the classroom and online materials at the same time they were classified as blended, the third broad category. After the entries were categorized in one of the three broad categories, the entries were further categorized into subcategories that addressed the research question. The subcategories were revised until each entry was easily coded. The researcher used Mayrings' four step process of inductive category development and the following categories and subcategories were derived (See Table 1.0).

Table 1.0. Content Analysis: The Broad and Sub-Categories

The broad and sub-categories derived from the data collected in the study.

Broad Categories	Sub-Categories
Classroom	C-1-Perceptions of the learning materials C-2-Approach to learning the material C-3-Content area taught C-4-General process and classroom activities C-5-Group work and or social collaboration C-6-Syndicate leaders, course facilitators, subject matter experts
Blended Learning	B-1-Perceptions of the learning materials B-2-Approach to learning the material B-3-Action planning, how to improve future investigations
Online	O-1-Perceptions of the learning materials O-2-Approach to learning the material O-3-Content area taught O-4-General process and online activities O-5-User centered design, and interactivity O-6-Technical problems O-7-Self-paced learning O-8-Convenience or lack of convenience of online learning

Data Collected

Classroom entries.

In relation to the classroom portion of ISEP the respondents discussed individual experience, approach to learning the material, content taught, general process and classroom activities, group work, socialization, and syndicate leaders, course facilitators and subject matter experts. The participants presented some ideas about the general process and classroom activities. For example, this participant felt that time in the classroom to work on their information to obtain (ITO) was beneficial for them, but that doing the activity at the end of the day was not ideal.

> I did like that the instructors gave us the opportunity to work on our ITO's in class; however, I do recommend giving the class time to work on them prior to the end of the day.

The respondents could also articulate how the materials could be redesigned slightly to make it easier for them to learn the material.

> I might be better if we had time to work on it [Search Warrant Assignment] after the search warrant presentation. I do realize that the day was very busy as it was and at the end of the day may be the only time possible for us to have time to work on it, but it is just a suggestion.

None of the classroom entries indicated how they could adapt their approach to learning the material, or seek out assistance to assist with the learning process.

The three classroom sessions spanned over a period of approximately five months. A problem based learning investigative scenario exercise spanned throughout all of the classroom sessions. Some of the respondents expressed some difficulty recalling the material due to long periods of time in between the classroom sessions.

> During our first in class session, we reviewed one residential break and enter for the entire day. Then in our next in class session, we jumped to source handling /search warrants which seems like a huge step from a break and enter.
>
> What was difficult was the continuity of the file that we were suppose to be doing, I got a little confused as to time line and dates because of the gap between the sessions.

Alternately, another participant wrote that they liked the way a classroom session or overall classroom session was structured. The respondent indicated that they knew what the expectations were and were not confused by the course materials or the facilitator who explained the next steps. The participant's comment is favorable.

> At the end of the day we got a full detailed report of what would be required of us for this course as a final project. I have no complaints regarding this day at all.

Another respondent indicated that the investigative scenario was presented in a logical order, just like a real investigation. The entry indicates that the classroom activities were presented in a way that was favorable to them.

> The order in which the course was set up was great. It was a step by step order just like an actual investigation would have played out.

Group work and social collaboration.

In addition to commenting on the classroom activities, a few of the participants made comments about the group work and the social collaboration during the classroom sessions. The participants' entries indicate that the group work and collaboration provided them with different ideas or insight.

> The group work was also very informative because other classmate had different idea and answer that I didn't think of.
>
> The group work was good due to the fact you were able to hear other ideas from other members on how they would do things. Some of the ideas from my partner were great because it is something I have never thought of doing. I can now take that ideas and use them in the field.

These two entries reflect the learners' need to discuss the materials and collaborate with others to help them learn the material.

Subject matter expert presentations.

The participants indicated that they learned much better when there was a person who delivered the information during the classroom session as opposed to the online modules.

> Overall, I found the classroom sessions where quest speakers/experts on the topics came in and spoke to us much more effective...
>
> I learned more in the 1 ½ [hours] the guest speaker was in than I did in the many hours it took to read through the module.

Syndicate leaders and course facilitators.

A few of the entries commented on the use of syndicate leaders and course facilitators during the classroom sessions. These entries reflected the learner's perspective about how the syndicate leaders and course facilitators provided a unique learning environment that helped them learn the material.

> This training session was alike other training sessions due to the fact of working in groups. It was different in the way that "teachers" came around and looked at our progress for our investigation which further led to more information being provided.
>
> The interaction between the students and teachers was a good setup. Allowing the students to figure things out on their own and then having the teachers check to see if they have progressed to where they needed to be within the investigation was good. If the students missed something, the teacher was able to throw in a different suggestion or idea.

Blended Learning

The blended learning entries discussed both the online and classroom context. The participants' comments about the blended learning environment emphasized any instructional gaps in the program. This category reflects the participants' perspective about whether or not the materials were blended from their point of view. For example:

> I think the in-class lecture could have been focused more on skill building in individuals rather than a re-emphasis of the information in the online modules.
>
> We did not go over much regarding this [note taking] module in class and I don't think this portion of the course was really utilized that well.

Approach to learning the material.

The entries in this section capture the officers' approach to learning the material in a blended learning program. They typically did not discuss how they approached the material to improve their understanding such as making notes, creating diagrams, or organizing the

information in a binder. The officers discussed how they completed their studies during work hours, or at home after work.

> As I mentioned earlier it can be very hard to find this amount of time to spend on this course. Lets just say I am lucky to have an understanding sergeant and staff sergeant due to the fact numerous other supervisors may question why we are spending so much time in the station.
>
> For this assignment they are requesting us to write a narrative, a summary, hand it the photo line up, write an ITO [Information to Obtain] and search warrant, and fill out the source registration package. I do feel this is fair to ask of all of us. I do not believe I will be able to do most of this at work. I do plan to take most of the assignments home and do it on my own time. I am not only doing this because I do not feel I will have time but also I will be able to concentrate more on the task at hand.

Officers typically receive paid time for their professional development hours. The requirements of the ISEP Level 200 were difficult to complete during shifts. Also a police station is not the ideal learning environment, especially while a person is on duty. Officers adjusted to the increased requirements by completing their assignments at home.

> It was very difficult to find time to actually finish the modules during work hours. Often the only down time available is between 0300hrs-0700hrs. at the end of a shift when I was tired and it was not very effective to try to complete a module or learn new information at that time. All of the work and assignments were completed on work time and none of it was completed during my spare time.
>
> I often came in early to work to try to finish modules, I had to juggle my schedule because most of the in class sessions were only offered either during my days off or during a set where I was working nights, my workload at work increased a great amount because I had to take time at works during “reports” to go through modules and organize assignments and I will be unable to sit and completely any of the final assignments at work – they will all have to be done during personal time.
>
> The final assignments of the course were also very time consuming. I do not know how the teachers of this course think there is time to do all of the final assignments during work hours.
>
> From day 1, I approached this course with the idea that I will attempt to work on the course during my work shifts only. This was motivated by the idea of balancing my work life and family life which involves a 9 month old baby and a 2 year old boy.

Online

In relation of the online materials, most of the participants commented on: their perceptions, approach to learning the material, their general process and content, their online activities, ease of use, interactivity and any technical issues, as well as the ability to learn at their own pace and the overall convenience of online learning. The entries categorized as online discuss the online modules only, and neither the classroom sessions nor a combination of classroom and online. The participants in the study had more entries that discussed the online material than the other two broad categories. Most of the participants did not make general comments about online learning, but tended to direct their comments to a particular module.

Perceptions of the online material.

The participants commented on their perception of the importance of the content of the specific modules and related the importance of online content to their police work today and in the future.

> I do feel that Ethical Decision making should be one of the first assignments or modules we do. This is mainly for the fact that it is a very important issue. I do think that it is not only important for the officers with 18 months on but it is also important for the officers with many years on the job. Ethics can be a very controversial issue. I think it is important for everyone to be reminded of what is ethical and what is not. Sometimes people can forget these things over the years.
>
> Note taking was a fantastic course. I don't think it matters how long you have been on the job it is always a good idea to take any opportunity to make your notes better. I have found that numerous officers have been getting questioned about there notes on the stand and by that time it is too late to fix them. I have started to take more detailed notes, that it will help me with my testimony in the future.
>
> Collecting a good witness statement can be one of the best skills you can learn on this job. What you learned in this module can be applied at work every single day. By taking this module [Interviewing Witnesses and Victims] it reminds you of all the information you need to collect to not only write a good report but to also conduct a good

> investigation. The more information you collect at the beginning it is less likely you will have to do follow up later on.
>
> Online helped officers prepare for classroom instruction.

The next four entries captured how the learner used the online material to prepare for the classroom instruction. The second participant quoted here also indicated that they intend to use what they learned from the online material in future interviews. The third entry quoted describes how the online material helped the officer to understand what level of competency they should achieve in their assignments.

> The authority to search was a good refresher module. I did find that the authority to search was good for just refreshing what you have already learned.
>
> Excellent videos that I can use in the future to mirror my own interviews. This is a topic that we don't have a lot of training in. It was useful to review the information as well as the videos, prior to being in class with the expert lecturer.
>
> Note taking was a good reminder from recruit class. I also think it was a good idea to have this module online, prior to entering class. This way the expectation for the quality of notes for assignments (in and out of class) was clear from the beginning.
>
> Again…a lot of material to cover and was nice to complete online, prior to attending class.

The design of the program intended to help the officers arrive to the classroom sessions with the same background and knowledge. A participant commented on how the online materials were beneficial because all of the officers in the program would have the same level of knowledge. The quote also acknowledges that there is too much content for a singular method of delivering the material.

> The officers in this course are at various different experience levels and as a result some of the material would be too much review to complete all in-class.

Process and content.

The participants in the study commented on the module content and often related it to their current investigative skills. They did not differentiate from the content, the process and their daily duties as a police officer.

> Report Writing was an informative module. As you can see by reading my information above one of my biggest weaknesses is my grammar and spelling. This is one module I have been attempting to use not only at work, but in my every day activities. I do think that both myself and numerous people rely on computers for fix there [sic] spelling and grammar. Nowadays even when you are typing your computer will automatically fix the word for you. Half the time I do not even know that I have misspelled the word. I enjoyed this module because it gave us examples we could learn from as well as activities to complete. I am trying my best to break the bad habits that I have learned since elementary school.
>
> Court Testimony was one of the most important modules with in this entire course. I have been to court approximately 25-30 times and yet I have only testified three times. Testifying in court is something we do not seem to learn until we get on the stand and do it in real life. I did enjoy this module because it gave tips on what the defense might say to trick you or to make you angry.
>
> Excellent module. The online activities (i.e. creating your own photo line-up) made me realize how closely I needed to match my subjects in a photo-line up. I learned a few things from this course on why certain steps in completing the photo line-up that [I] had not been doing [sic] before.
>
> I did find the information that was given in both Criminology and Crime Scene Management was interesting and useful for everyday police work, especially for newer members who may not know the most effective way to approach an investigation.
>
> The online module basically gave an overview of good tips for what is important to record in our notebook as well as how to be professional while doing so (all of which is very important during investigations).[2]

[2] The entry refers to the Note Taking Module in ISEP 200.

Online activities.

The online modules had a number of activities for the learner to complete. These activities helped teach the learning objectives and prepare officers for the classroom activities. The online activities are separated from user centered design and interactivity because the latter refers to the visual design and user interaction with the online materials.

> The scenario in this online module [Crime Scene Management] was a unique way for me to learn this material without having to read it from a page. Helps that it is more real life, than reading an IDENT or forensic unit tips sheet.[3]
>
> I liked how the online module forced you to complete narratives based on the information provided. This activity was useful. Again, this would have taken up too much in-class time and would be a review for most people.[4]
>
> I also like the little quiz questions that help to emphasize the content.
>
> In this online module, the example videos were very useful as these techniques cannot always be observed or trained while learning while on the street. I think I will be able to use some of the examples and mannerisms of the officer in my own interviews. As if I was monitoring the interview myself.

User centered design and interactivity.

The participants in the study wrote about their perceptions of the online materials that are defined as user centered design issues. User centered is specific to online learning and it is defined by instructional designers as the ease of use, and how easy is it for the learner to understand the material and interactivity. The following entries pertain to the visual aspects of the material, including how the textual information was presented.

---

[3] The entry refers to Crime Scene Management in ISEP 200.

[4] The entry refers to Report Writing in ISEP 200.

> There were lots of visual diagrams and media to emphasize and explains [sic] theory and concept. The chunking of information to process was just right. This was important because I was interrupted frequently with people coming into the station to file reports.
>
> I thought the elevator/floor activity [court testimony] was not user friendly; however it did provide a break between the different topics. It took too much time to enter and exit each topic… maybe fewer things to click on. Also, I found that it was difficult to determine which items in the room we were supposed to click on. I think it could have been easier if the items stood out more.[5]
>
> I do not think that clicking on certain arrows to have more text pop up on the screen makes this particular module any different from just reading the information out of a book.

The entries indicated that the respondents liked the interactivity, but when the interactivity was not intuitive or did not work properly, officers became frustrated.

> I think it is great to have interaction but when it does not work properly, it sure raises the frustration level.

Technical problems.

Technical problems are differentiated from user centered design issues because technical issues are a result of items such as slow internet connection, compatibility issues, hardware limitations or software failure. The study results seem to indicate that once a learner is frustrated with the technical difficulties, they focus on the technical issue not learning the material. The technical difficulties associated with elearning present a large barrier for quality learning.

> The crime scene management module was rather frustrating. In the activity you could go through a break and enter into a store, click on "hot spots" on the monitor and attempt to gather information, evidence and statements. The problem was is that you would get half way through the activity and it would freeze, shut down or reset. Then you would have to complete the entire activity again.

---

[5] The entry refers to Court Testimony in IESP 200.

It was later noted that the Crime Scene Management interactive crime scene, a Flash activity, had an invisible hot spot that moved and was still active. The participants' entries reflected the technical difficulties they encountered.

> One of the problems I encounter was that one of the computers did not have the program installed to allow me access to the on-line modules.

The computers that police officers use to access the material are located all over the city. As a result the computers are not always updated.

> …my only complaint is the minor technical issues, like volume and display of information (screen display clipping). Other minor tweaks are like the navigation sometime is finicky but I'm not sure if it is a result of the computer I am on.

Self-paced learning.

Online learning allows the learners to learn at their own pace and review the material after the course is completed. The officers made few references to the ability to learn at their own pace. For example:

> The content of this module was useful for identifying patterns of behavior for criminals. It is also nice that it was all completed in an online module rather than in class. If all of this material was completed in class it would be very dry. In addition, I was able to read and study this at my own pace.[6]

Convenience or lack of convenience of online learning.

During the time of the study, officers could not access the online materials anywhere but at police stations. The participants in the study indicated that the online materials were not convenient because they had to log onto many times in order to complete all of the online module. The participants indicated that there was too much time between the logging in and they had difficulty remembering where they left off in the module.

---

[6] The entry refers to the Criminology module in ISEP 200.

> I also had to log in and out multiple times because the information is only available at work and it was impossible to do the entire module at one time.
>
> I had to log on and off multiple times before I was able to finish the entire module and I had often forgotten what I had already read by the time I was done reading the slide, causing me to have to re-read and then become very frustrated by the amount of time it took to get through the module.

Implementing new knowledge.

Some of the participants reflected on their experience as a police officer and they commented about how they would improve their investigative techniques in the future based on the material/skill acquired in ISEP Level 200.

> After taking the course and looking back I have learned that I may have a hard time testifying in court on the warrants I have written. I found my previous warrants did contain a lot of detail; however...

Another participant wrote about using additional resources such as an analyst to help gather more information during an investigation.

> One of the things that I will use in the future is using my analyst in my investigations. That is one thing I have never done. I have never received nor have I had my analyst make up a crime map for me. I see that as very beneficial. By doing this I can see were other similar crimes are in the area with the same MO [Modus Operandi].[7]

The following entry shows how the participant used the skills learned during the program to assist another officer.

> I have already been able to use the information I have learned regarding search warrants in the field. A member in my squad ended up having to do a drug warrant. I was able to assist him with providing him with examples of the warrants we were given in class as well as providing him with information regarding warrants.

---

[7]The respondent did not specify whether this comment was meant to be a classroom or online entry.

Prior experience and knowledge.

The officers' entries indicated that their prior experience and knowledge varied from one respondent to another. While ISEP 200 is designed for more junior officers, participants will have a range of work experience and knowledge. One respondent indicated officers should have already mastered the topics in ISEP 200:

> I think the course would be most beneficial to new recruits first coming out onto the street, more junior that the 18 month requirement. Most of the material, I felt most officers already knew and have completed charge reports and photo line ups etc, many many times during their career.

> I do find some of the modules in this course similar to what they taught us in Recruit class. I could see some people getting frustrated due to the fact they may feel that they have already taken or have been informed of this information already. Doing something for the hundredth time did not provide any new learning.

Alternately, another respondent wrote that the material was very new to them because source handling is something that is done by more senior officers. This officer indicated that they had no training or experience handling confidential sources.

> This [source handling] is a subject that is not taught in recruit class and is only taught by experience officers who choose to be a source handler. Therefore this material was new to me as a junior officer.

One of the participants exclaimed that they had been conducting photographic lineups for a couple of years, but did not have a lot of training. The entry reflects the officer's frustration with a lack of training in this particular investigative area.

> In the past 2.5 years I have done numerous photo line ups; however, no one has ever explained the exact way to do them like this module had. I have written notes when doing a photo line up. My notes usually consisted of what time it started, what time it finished and what number of photo the person picked if they picked any. It was good to actually have a little training on it. …It can be frustrating to find out that you have been doing something for the past few years and the way you did it was not exactly wrong, but there was a better way it could have been done.

Discussion

The qualitative data collected in this research study provides insight into whether or not the blended learning environment helps to teach officers investigative skills, their perceptions of the material, and their approach to learning the material. Ginns and Ellis (2007) suggest that the perceptions, the approach students take to learning the material, and their ability to learn is closely related to their previous learning experience and in addition to the quality of the learning materials. Their research in blended learning and the evaluative methods of determining the quality of instruction is a useful construct for the discussion of the results in this study (See Figure 4.0). "The quality of student approaches to learning has been found to be closely associated with the quality of their learning outcomes" (p. 54). The quality of the learning environment refers to the ability of the program to teach the intended outcomes. For the purpose of this study, the quality of learning environment can assist with determining whether or not ISEP is effective in teaching officers investigative skills.

The findings in the study suggest that the perceptions of the blended learning environment are directly related to the officer's prior experience and the type of learning environment provided. One participant wrote:

> I think the course would be beneficial to new recruits first coming out onto the street, more junior that the 18 month requirement. Most of the material, I felt most officers already knew and have completed charge reports and photo line ups etc, many many times during their career. Doing something for the hundredth time did not provide any new learning.

The officer perceived that the material was too easy, and indicated that most officers already know it because they have on-the-job experience doing things like photographic line-ups and report writing. The officer's opinions are based on their viewpoint, but there may be a disconnect between what they think they know and what they can actually do. The topics that are taught in

recruit class, such as note taking and report writing are fundamental competencies that all officers must be able to do. Although officers learn to take notes and write reports in recruit training, some officers who meet the basic standards continue to struggle to articulate effectively. Their inability to articulate effectively may be highlighted in court. Once recruit training is completed, the officer may receive very little feedback on their notes and reports and not know that there are deficiencies in their investigative note taking or reports. ISEP provides officers with an opportunity to receive feedback from the course facilitators. The course facilitators in ISEP Level 200 would be able to determine whether this respondent had mastered the material by reviewing their final assignment.

Topics that are not taught in recruit class, such as source handling, are perceived by the learner as having more value and the online material was viewed as favourable. Officers also prefer topics that are high risk and dynamic and are less critical of those topics. The participants explained:

> This [Source Handling] is a subject that is not taught in recruit class and is only taught [to] …experience[d] officers who choose to be a source handler. Therefore this material was new to me as a junior officer.

> The source handling module was excellent. I had no idea how to handle a source nor did I even realize that I was supposed to register one.

Some officers have a good understanding of why some of the material in Level 200 is similar to recruit training. One respondent wrote:

> When you are learning everything in block 1 there is a lot of information to retain. Some people come into block one with absolutely no policing or security. Attempting to absorb everything that is mentioned to you in block one can be difficult. If you don't practice it regularly on the job as well you could forget things that you have learned.

The officer understands that Level 200 provides them with an opportunity to revisit important investigative skills, and the officer may improve or build on what they learnt in recruit training, and on-the-job.

Technology is the Focus of the Blended Learning Equation

The Edmonton Police Service embarked upon a very large blended learning project with a lot of experience in classroom instruction and only a little experience in online learning. During the design of ISEP 200, more focus was placed on designing of the online portion of the program. The online materials were reviewed and revised more than the classroom materials. For example the online materials were edited by an appointed editor, but not the classroom materials. Similarly, the respondents' entries tended to focus more on the online portion of the program, than on the classroom instruction. Although in ISEP the blended learning equation was 40% online and 60% classroom instruction, the participants in the study wrote more entries pertaining to the online portion of the program.[8] A total of six pages were compiled for the online, compared to two for the classroom materials.[9] This may be attributed to the fact that online learning is relatively new at the Edmonton Police Service and the participants could access the online materials and review them as they wrote their entries. Interestingly, both the literature and the participants also focused more on the technology portion of the blended learning equation.

Instructional Inconsistencies

The Edmonton Police Service lacked experience in designing blended learning material and the weaknesses in the instructional design created some ambiguity and frustration for the

---

[8] There were approximately 16 hours of online material and 24 hours of classroom instruction.

[9] Three pages touched on the blended learning category.

learners. If we refer back to Ginns and Ellis's (2007) model, the pedagogical knowledge and conceptions of teaching, the organization, presentation, and assessment of the material directly affects the quality of learning. The entries indicated some frustration when there was no direct link, or when there was too much repetition, between the online material and the classroom instruction. For example, there were conflicting instructions given in the online portion and in the classroom. The learners were asked to complete something online and then bring it class, and the assignment was not discussed in class. Instructional inconsistencies such as that example increased the learner's frustration with the overall program. "I don't feel as though this module [Ethical Decision Making] was really a blend of online and classroom information as in class we did not discuss just how much ethical decision making is required while being a police officer." Another participant suggested that the assignment in the photographic lineup module did not make any sense because they were unsure as to how it would be used for the classroom scenario. "The information given in the module [Photographic Lineup] was good information; however I do not see what the point of the assignment was. How is that assignment going to be used in our investigation?" It is important that instructional designers ensure that the learning material is organized in a way that provides the learner with as much continuity as possible.

Instructional inconsistencies are problematic because the learners are already immersed in a relatively new learning environment which they may not have experienced before. Dziuban, Hartman, and Moskal (2004) suggest that students need to adapt their approach to studying and learning the material in a blended learning environment. The findings of this study indicated that the participants could evaluate what they thought could be changed to improve the program to make it easier for them to master the material. Respondents also discussed how they attempted to

balance work, studying and their personal life, but they did not indicate how they adapted their approach to learning the material to the blended learning environment.

Learning Styles

Thorne (2003) and Albrecht (2006) suggest in their literature that while organizations implement blended learning to address organizational needs, an unintended outcome is blended learning appeals to more learning styles than conventional instruction. Like online learning or classroom instruction however, the success of a blended learning program is directly related to the quality of instruction. "Maximizing success in blended learning initiative requires a planned and well-supported approach that includes a theory-based instructional model, high-quality faculty development, course development assistance, learner support, and ongoing formative and summative assessment" (Dziuban, Hartman, & Moskal, 2004, p. 3).

The Literature Does Not Address Key Instructional Strategies

The literature does not address key instructional design issues in order for quality learning to occur in a blended learning environment. The literature outlines some basic approaches to utilizing blended learning, but the descriptions leave many unanswered questions. Despite the literature, and authors such as Schooley (2009), Picciano (2006), who indicate that online learning is as effective as classroom instruction, the Edmonton Police Service is still trying to establish how to utilize online learning to effectively teach officers. Perhaps nonacademic organizations such as the Edmonton Police Service need to become more comfortable with using technology and develop strategies that best accommodate the organizational needs. Nonacademic organizations also need to ensure that both the technological and organizational infrastructure is in place to adequately deliver blended learning materials.

No One Learning Theory

Biggs (1999) suggests that good teaching is when the students begin to use a higher cognitive process. The learning process is complex and sometimes it is difficult to determine which activity helped the students reach a higher level of thinking. Biggs suggests that there is not one grand theory of learning that can be applied to all situations and learners. Using one master learning theory does not work because learners are complex and while one activity may work well for one learner, another activity may not. The focus on using one grand learning theory has been reduced in the last 20 years, and there is more attention spent on precisely how students go about learning in formal, institutional contexts. Appropriately, this field of study is now designated as "student learning research" (Biggs, 1999, p. 59).

Organizations Implement Blended Learning

Regardless of what the authors and academics say about blended learning, nonacademic organizations such as the Edmonton Police Service are motivated to address logistical and infrastructure issues, organizational objectives, and to improve student learning through implementing blended learning strategies. The decision to implement blended learning occurs when the organization identifies a need, and the opportunity to utilize both classroom and online instruction is present. Organizations such as the Edmonton Police Service use blended learning due to pragmatic reasons, not theoretical ones. For both classroom and online delivery to be an option, an organization needs to have the technology infrastructure and the pedagogical knowledge to create the learning material. Albrecht (2006) suggests that few critics of blended learning have emerged, because organizations are implementing blended learning as a way to meet organizational needs and objectives and to improve student learning.

Conclusions

The results of the study seem to indicate that the officers' perceptions of the material are closely linked to both how the materials are designed, and the organization's perceptions of training. Any issues with the instructional design seem to be reflected in the officers' feedback. The data collected suggests that officers were able to comment on their experience and their perceptions, but they were less clear about how they approached the material. Many participants commented on work life balance, or where they studied the material. The intent of the question was supposed to contrast prior learning experiences, with a new experience (the blended learning environment). The literature suggests that learners in a blended learning environment need to adjust their study habits to learn the material. However none of the participants in the study reflected back or compared previous strategies to learn material in either a classroom or online. Without the researcher present it is difficult for the participants to fully gasp what the researcher was attempting to find out, especially when the research question is exploratory.

Learner Outcomes

The study also attempted to determine whether or not ISEP was effective in teaching officers investigative skills. The study did not collect data that reflected the learner outcomes such as quizzes, or assignments scores. Donavant (2009) suggests that the learner's perception of the training is not sufficient to determine what the participants learnt as a result of the material. As a result, the design of the study and the qualitative data collected was limited to the participants' perceptions and could not provide insight into whether or not ISEP was effective in teaching investigative skills.

Future Studies

In the future, a follow up study could expand our understanding of the blended learning environment by determining key instructional strategies and a conceptual model for designing a blended learning program. A conceptual model could assist with the overall structure, while key instructional strategies would identify specific learning activities in both the classroom and online. Combining the two strategies would help determine how best to create a blended learning program for an organization and reduce any confusion for the learners.

Improving Blended Learning

Now that ISEP Level 200 has been offered for a few years, a number of improvements could be made to other blended learning programs. Organizations need to determine how adult learners need to be coached to improve their learning and their success in a blended learning program. The blended learning environment differs from being in a classroom or online; program coordinators, facilitators and curriculum designers do not necessarily know what the learners need to improve their ability to learn the material.

The online courses should have more time devoted to testing the material before the material is launched. The material should be tested on computers throughout the city to ensure that the materials are displaying correctly. Also, the current learning management system does not support threaded discussion. As a result the officers cannot post comments or questions and continue the interactive portion while they are not in class. The inability of officers to interact online while they are not in a classroom setting, decreases the discussions officers could have to better understand the material.

Evaluation and Andragogy

During the research study, the researcher observed a contradiction between adult learning methodologies and evaluative methods, such as the Kirkpatrick model of evaluating adult learning programs. Adult learning theory suggests that adults should be taught differently from children because they have prior experience and knowledge. Advocates for andragogy suggest that adult learning should be learner centered and provide opportunities for the adults to contribute to their learning. The Kirkpatrick model of evaluating adult learning programs, however is a hierarchical system based on four levels. Level one, reactions which is characterized as the least valuable; level two, learning; level three, behaviour; and lastly level four, results (the most favourable). This study focused on the learner's perceptions of the blended learning environment. This study would fall under level one in the Kirkpatrick model of evaluation. According to the Kirkpatrick model, the study would be characterized as somewhat superficial. However, adult learning theories value the adult learner's perspective. This dichotomy needs further exploration to determine how the two concepts have been utilized and perceived by instructional designers who often implement both adult learning methodologies and the Kirkpatrick model of evaluation.

Lessons Learned

The study attempted to understand officer's perceptions of the material in ISEP Level 200. The study was fairly open-ended because the research was exploratory. The lack of structure was difficult for some of the participants and they were unsure what to write about despite the researcher explaining what the study was about. A survey, or an interview in addition to the entries, may help the researcher determine some more information about their experience; such as taking notes, talking with others officers before/ after class, or asking the course

facilitators questions for help or clarification. Creswell (2009) suggests that qualitative researchers can use additional methods of collecting data to determine dominate themes and assist with answering the research question.

During the study the participants were asked to write about their perceptions while they were completing Level 200. As a result their perceptions are commenting on their short-term perspective. Creswell (2009) suggests that people are continually constructing meaning as they interact with the world. The participants' perceptions may change as they begin to apply more of the skills they learnt, and gain more job experience. The study could have had the participants create entries (or participate in a survey, or interview as suggested above) three months after the training, and then again in six months. Collecting data over a longer period of time might help provide information about the learner's perceptions over time as they apply their learning on-the-job, not just their immediate thoughts.

Research Question

The purpose of the study was to examine how the blended learning environment helped to teach officers the knowledge, skills and abilities to improve their investigative skills. The social constructivist worldview helped the researcher determine the participants' point of view, and the dominate themes. The qualitative data collected helped to provide insight into what the officers thought of the blended learning environment and their approach to studying the material.

Appendices

Appendix A: Ethical Considerations and Data Storage

Ethical considerations.

The participants were informed that the minimal risk study had been reviewed and adhered to the ethical guidelines set out by the University of Alberta, Faculty of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) (See Appendix). Contact information was provided if the participants wished to make any inquiries.

Participants chose what they wished to disclose in their entries about their perception of the teaching and learning environment, and their approach to learning and studying the material. Although participants were encouraged to write one entry per classroom session and one per online module, they were told to adjust their entries as needed. If the participants required assistance, they could contact either the researcher or the advisor directly for guidance.

Informed consent.

Each interested potential participant received a copy of the research overview document. The overview provided information about the focus of the study, the benefits of the study, and what to expect if they participated and the researchers contact information (See Appendix A: A Researcher Overview). Potential participants also received a consent letter (See Appendix B: Consent Letter) which detailed the data collection type, the data collection procedures, the verification and review, the participants' rights, other uses of the data, and the ethics approval statement. Attached to the Consent Letter, a consent form outlined the agreement to participate in the study.

Confidentiality.

Confidentiality was maintained by keeping any printed copies in a locked in a file cabinet during the study and will continue to be for five years. The electronic data will also be stored in a word document with password protection. Only the researcher will have access to the raw data. Any data that is published or shared will not have any indentifying marks that may inadvertently be traced back to an officer in the study.

Anonymity.

The participant's name, regimental number, sex, level of school completed, are key identifiers that helped the researcher when compiling the data. The email address and phone number was used during any correspondence. The officer's name, regimental number, email, and phone number will be kept confidential and excluded from any publications, presentations or reports. Their identifying information will be taken out by revising specific statements with general ones. For example; "I reviewed the online material at the S.W division." The specific reference would be changed to "I reviewed the online materials at a police station." Or "Cst. Brown has four years of post secondary education in Arts, majoring in English and French." Would be revised to "The constable has four years of post secondary education in Arts, majoring in English and French." The researcher will do everything possible to ensure the anonymity of the participants. However because of the relatively small sample size it is not entirely possible.

Data storage.

The research data will be stored the researcher's laptop. Once the study is completed any personal identifying information such as name, regimental number, email and phone will be blackened out on any hand written entries, or deleted from the electronic entries. Once the data is collected and compiled into one document, the participants' name will be removed. The

compiled information will be stored in a word document with a password. The data will be stored in accordance with The Tri-council Policy Statement (Public Works and Government Service Canada (2005).

Appendix B: A Research Overview

Investigative Skills Education Program Level 200: Research Opportunity Fall 2009

Research overview.

This study is in partial fulfillment of a Masters project for the Masters of Arts Communication Technology (M.A.C.T) program. The study is conducted with the appropriate permissions from both the University of Alberta and the Edmonton Police Service.

As an Edmonton police officer participating in the Investigative Skills Education Program (ISEP) Level 200 program, there is an opportunity to volunteer for a unique research study. The study will attempt to gain a better understanding of how officers perceive the blended learning environment and their:

- perception of the teaching and learning environment,
- and their approach to learning and studying material.

The participants will write or type entries about their experience in the blended learning environment over a period of time. The study will be entirely qualitative (as opposed to numerical or quantitative data), as a result there are no right or wrong answers. The data is solely based on the participants' views. "Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2009, p. 4).

For more information about the study, contact information is on the next page.

About the researcher.

Cheryl Lepatski, is an elearning instructional designer at the Edmonton Police service. She is also a student in the Masters of Arts in Communication Technology (M.A.C.T.) program at the University of Alberta.

Why does this study matter?

Officers require training throughout their career. With the increase in the population of Edmonton and more complex crime, officers require effective training throughout their career. The Edmonton Police Service recognize this need, however, they are unable to increase the number of hours officers spend in the classroom. In addition to the increased training needs, many officers are retiring. The loss of senior expertise, further complicates police training.

Presently, the blended learning method is thought to be the most effective because it utilizes the best practices from on-line and traditional classroom instruction.

The perceived benefits of the blended learning environment are informally observed, however there isn't enough information empirical evidence to support this belief. The majority of the research pertaining to blended learning discusses how organizations can benefit from offering blended learning, not how the learner perceives or approaches their learning. This study will help training organizations have a clearer understanding of the learner within a blended learning environment.

What happens if I participate?

You will contact the researcher and discuss the details of the study and answer any questions. Then each participant will sign a consent form. Then you will write approximately five to ten entries about your experience learning in a blended learning environment. There will

be on mid-point checkpoint for the researcher to check in with you and discuss any issues. A set date will be given to complete all of the entries. Then the researcher will transcribe any written material. You will be contacted to validate the information you submitted. Then the researcher will conduct a content analysis to identify key themes, and a final paper will be written to summarize the research.

Contact Information

Cheryl Lepatski

Ph: 780-695-6255

Email: lepatski@ualberta.ca

Appendix C: Consent Letter

Consent Letter

As an Edmonton police officer participating in the Investigative Skills Education Program (ISEP) Level 200 program in the fall of 2009, there is an opportunity to volunteer for a unique study. This study is in partial fulfillment of a Masters project for the Masters of Arts Communication Technology (M.A.C.T) program. The study is conducted with the appropriate permissions from both the University of Alberta and the Edmonton Police Service. The purpose of the study is to attempt to gain a better understanding of how officers perceive the blended learning environment and the officer's; perception of the teaching and learning environment, and their approach to learning and studying material.

Research Overview

The study is relatively low risk however, the researcher or research advisor may be contact any time. The study will help make further improvements to any blended learning curriculum in the future.

Research Methods: six police officers participating in Level 200, with 0-3 years of experience will keep written or typed entries about their experience while completing both the online and classroom assignments. Entries will be used as a research method for the following reasons:

- Entries provide the officer with the flexibility to record whenever they want to. The construction of new knowledge is not an activity that is scheduled activity or easily captured in an interview or focus group.

- The data will capture the officer's experience and exclude the possibility of the researcher paraphrasing their information.
- The collection of data is unobtrusive.

Data collection type: Documentation in the form of a hand written or typed entries will be collected. The Officers will complete approximately one half page to one page of written or typed information, per online module, and classroom session totaling a maximum of 18 entries. The length of the entry is dependent on how much the officer wishes to write. They may combine entries that span over more than one class and online module. The written or typed entries will take approximately nine to 12 hours.

Data Collection Procedures

Entries: Each entry will begin with the date, time and place where they entry took place.

Time: Officers will begin making entries as soon as practical. The officer's entries will be handed in February 2010.

Verification/Review

Once an officer completes and hands in their entries, the written entries will be transcribed and typed in a Word Document. The Word Document will be validated and reviewed by the officer. If an officer chooses to type their entries in a Word Document, the researcher will save it, and the officer will have an opportunity to validate and review the Word Document.

Participants' Rights

If an officer chooses to participate and signs the consent form, they will have until January 01, 2010 to withdraw. The officer can determine to what extent their entries are removed

from the study. The officer who chooses to discontinue the study will retain full rights to confidentiality and any identifying information will not be disclosed in any publication, presentation or report.

All participants are entitled to receive a final copy of the study (the culminating project for EXT 508). The officer can simply call or email the researcher to request a copy.

Other Uses

This study is in conjunction with the requirements for the M.A.C.T. program. The findings in this study will provide curriculum enhancements to blended learning programs at the Edmonton Police Service. The findings may be disclosed in future publications, presentations or reports.

Ethics Approval Statement

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB at (780) 492-3751.

Appendix D: Consent Form

Consent Form

I, hereby, consent to participate in the research study entitled "Blended Learning: Teaching officers investigative skills". I understand that the study is in partial fulfillment of a Masters project for the Masters of Arts Communication Technology (M.A.C.T) program. The study is also conducted with the appropriate permissions from both the University of Alberta and the Edmonton Police Service. The purpose of the study is to attempt to gain a better understanding of how I perceive the blended learning environment, and the teaching, and learning environment, and my approach to learning, and studying the material.

- I understand that my participation in this research project is completely voluntary.
- I understand the overall approach of the study.
- I understand that the results of this study may be published, presented or appear in reports.
- The researcher will do everything possible to prevent my identity or any identifying information from being included in any reports, presentations and publications, however I understand that there is not a complete guarantee.
- I understand that the raw data will not be presented to my superiors or coworkers.
- I understand that my written or typed contributions may be quoted.
- I understand that my contributions will be compiled, transcribed and analyzed.
- I understand that my contributions will be verified and approved by myself, prior to its' inclusion in the study.
- I understand that I can withdraw from this research project before February 28, 2010.

- I understand that there are two copies of the letter and consent form. One copy is for my own records, and the other is for the researcher.

Please indicate that you fully understand the information regarding the study by entering the date in which you are completing this consent form and sign your name in the space provided below. You may use the contact information provided on the next page, if you have any questions about the study.

Date: _____

Signature:_____

Contact Information

Researcher: Cheryl Lepatski

Ph: 780.695.6255

Email: lepatski@ualberta.ca

Advisor: Dr. Stanley Varnhagen

Ph: 780.492.3641

Email: stanley.varnhagen@ualberta.ca

Appendix E: Raw Data

Raw Data

Respondents' Entries: Classroom

The first day of class was interesting. I did find the class moved to slow for my liking. I do understand what the instructors were trying to achieve; however, it felt like I was just coming out of recruit class. The group work was good due to the fact you were able to hear other ideas from other members on how they would do things. Some of the ideas from my partner were great because it is something I have never thought of doing. I can now take that ideas and use them in the field.

The second day in class was very informative and interesting. It may have seemed a little redundant to some people; however I felt that going through the forms to register a source was very informative. Like I said earlier the best way for someone to learn is actually doing the activity themselves. I did like that the instructors gave us the opportunity to work on our ITO's in class; however, I do recommend giving the class time to work on them prior to the end of the day. I have found a person is more tired after a day of sitting and listening to presentations. You are trying to concentrate and retain as much information as possible. At the end of the day the last thing you want to do is work on a search warrant. I might be better if we had time to work on it after the search warrant presentation. I do realize that the day was very busy as it was and at the end of the day may be the only time possible for us to have time to work on it, but it is just a suggestion.

The last day of in class training was probably my favorite day. I enjoyed every presentation and I found that I needed to learn the most on bail packages, executing search warrants, as well as interviewing suspects. At the end of the day we got a full detailed report of what would be required of us for this course as a final project. I have no complaints regarding this day at all.

This training session was alike other training sessions due to the fact of working in groups. It was different in the way that "teachers" came around and looked at our progress for our investigation which further led to more information being provided.

Working in groups was great and enjoyed that.

The interaction between the students and teachers was a good setup. Allowing the students to figure things out on their own and then having the teachers check to see if they have progressed to where they needed to be within the investigation was good. If the students missed something, the teacher was able to throw in a different suggestion or idea.

[Structured Interviewing Suspects] I think the in-class lecture could have been focused more on skill building in individuals rather than a re-emphasis of the information in the online modules.

In class discussion was too much. The online portion was sufficient. We are all taught a lot of this information in recruit class and on yearly mandatory training. The Online portion was a useful reminder.

I attended most classes being unsure of exactly what I was expected to have completed prior to arriving. During our first in class session, we reviewed one residential break and enter for the entire day. Then in our next in class session, we jumped to source handling /search warrants which seems like a huge step from a break and enter.

I felt unprepared through the entire course and I was always unsure of what was expected of me from one class to the next.

Overall, I found the classroom sessions where quest speakers/experts on the topics came in and spoke to us much more effective and interesting than any of the online modules or other activities in the class.

I feel that a much more effective way of improving note taking during a classroom session would be to have a crown come to class and give examples of how bad note taking practices (and what those might be) can negatively or positively affect an investigation once it goes to court.

I learned more in the 1 ½ the guest speaker was in than I did in the many hours it took to read through the module [Source Handling].

I learn much better by having material in front of me and then discussing the information with the entire class.

I enjoyed the class room aspect o the learning, especially when subject matter expert presented the information. For example the warrant writing and information to obtain session was great. It made more sense after the presentation then simply doing the online proportion. The online was great but a little intimidating.

The one session where we actually worked on the computer at the end of the class was great, since we were able to asked questions to the lecturer. Again this was the warrant and information to obtain session. The group work was also very informative because other classmate had different idea and answer that I didn't think of.

What was difficult was the continuity of the file that we were suppose to be doing, I got a little confused as to time line and dates because of the gap between the sessions. Maybe I should not have focus on the actual continuity of the file. This affected how I was taking notes on our "notebook" made it challenging, I think.

Respondents' Entries: Blended

One of the things that I will use in the future is using my analyst in my investigations. That is one thing I have never done. I have never received nor have I had my analyst make up a crime map for me. I see that as very beneficial. By doing this I can see were other similar crimes are in the area with the same MO. I would have loved to have presentation by an analyst to find out what other information we can get from them. I believe that we often forget who and what resources we have available to us. This course was good for reminding us who you can talk to for assistance and information.

As I mentioned earlier it can be very hard to find this amount of time to spend on this course. Lets just say I am lucky to have an understanding sergeant and staff sergeant due to the fact numerous other supervisors may question why we are spending so much time in the station.

It can also be frustrating when you spend hours on a module which includes completing an online assignment and you don't even hand it in when you get to class. I took a lot of time and effort attempting to complete the search warrant and ITO on the module. I did have a bit of a hard time trying to print it; however, in the end I was able to complete it. Upon going to class we did not even get any feed back on them nor did we hand them in to get feed back on them. I would have also the ITO be related to the example we were doing in class. That way when we did the real one we know what they are looking for.

I have to say I was the most excited for this phase [200-2] of the course. I have written approximately 3 search warrants and three production orders in my 2.5 years of service. With saying that I really wish I had taken this course prior to writing all of the warrants. After taking the course and looking back I have learned that I may have a hard time testifying in court on the warrants I have written. I found my previous warrants did contain a lot of detail; however, a lot of the detail was not needed. The warrant did not flow like it could have. One thing that I loved about this phase was that they took you through a warrant step by step in the classroom. They also provided you with a sample that you could use while you were on the street. After taking the course it has changed my perception on writing a warrant. To write a warrant is no long an intimidating process.

I have already been able to use the information I have learned regarding search warrants in the field. A member in my squad ended up having to do a drug warrant. I was able to assist him with providing him with examples of the warrants we were given in class as well as providing him with information regarding warrants.

When I got out on the street we did actual bail packages and not Show Cause hearings. When the Show Cause package came out on gateway it was difficult to transition. The package on gateway never seemed to ask about primary or secondary grounds. It was nice to take the module and finally understand what the show cause package was asking for. I did not realize how many conditions you could actually give someone. Nor did I realize what kind of conditions you give someone. I enjoyed the presentation we had in class as well. I found that it was much more constructive then the on line module. I enjoyed the activity we did within class which was coming up with our ground for the bail package as well as conditions. It was good to get other officers opinions and ideas on the matter.

For this assignment they are requesting us to write a narrative, a summary, hand it the photo line up, write an ITO and search warrant, and fill out the source registration package. I do feel this is fair to ask of all of us. I do not believe I will be able to do most of this at work. I do plan to take most of the assignments home and do it on my own time. I am not only doing this because I do not feel I will have time but also I will be able to concentrate more on the task at hand. By not living through the actual event I can no longer work off of my memory. I will have to go through the entire scenario more then once to be able to write a detailed narrative/summary for this final report. I think one of my favorite assignments for this course is going to be the ITO and search warrant. I hope to get lots of feed back regarding the assignment so I can learn the most from my mistakes as well as what I am doing properly. It would have been nice to also

hand in a bail package to get feed back on; however, like I said I do not believe I am going to have a lot of time at work to complete the assignment as it is. Perhaps in the next course we could hand in a small bail package for day three in class training. I did not find it extremely hard to find time to get in the last phase of the modules. Perhaps a small assignment would not be a bad idea

Overall I did enjoy this course. This is the first course I have taken since Recruit Training Class. I do feel it was a valuable course and have learned a lot from it. I would like to take this opportunity to thank everyone for putting in there time and effort in creating this course. I really appreciate having the opportunity to give my opinion of the course and I hope it help develop the course for the better.

All of the work and assignments were completed on work time and none of it was completed during my spare time.

I try to leave anything that has to do with work at work and try to keep my personal life at home. As far as the ISEP goes, it was all completed on work time.

Yes, I feel I was able to benefit from some of the material that was taught at the course. Parts of the course that were beneficial to me was the material based on search warrants, and ITO's, along with some of the crime mapping.

Shortly after the 3 day classes were over, I was able to help out 2 squad mates with information and advice on how to write out a search warrant and an ITO.

Personally, I would have been happy just to learn how to write a search warrant and an ITO. I do not have the time to write out a mock charge report with how busy it is working in Downtown Division.

The order in which the course was set up was great. It was a step by step order just like an actual investigation would have played out. From note taking to crime scene management to interviews to source handling etc.

I think the course would be most beneficial to new recruits first coming out onto the street, more junior that the 18 month requirement. Most of the material, I felt most officers already knew and have completed charge reports and photo line ups etc, many many times during their career. Doing something a hundredth time did not provide any new learning.

I personally liked the group work, the online demonstrations for the online courses eg crime maps, and the templates for the search warrants.

This [source handling] is a subject that is not taught in recruit class and is only taught by experience officers who choose to be a source handler. Therefore this material was new to me as a junior officer. I thought that the online material was useful to review prior to going into the classroom. However I felt that the classroom session was necessary for us to understand the liability and risk associated to it.

The final assignment will be useful to practice some of the skills we have learned. It was also be useful to have the assignment graded and to learn what topics I will need to work on.

I don't feel as though this module was really a blend of online and classroom information as in class we did not discuss just how much ethical decision making is required while being a police officer.

We did not go over much regarding this [note taking] module in class and I don't think this portion of the course was really utilized that well.

I don't know if it is really very effective to "grade" some else's notebook because everyone makes notes in such a way that THEY know what they recorded. Yes, there is specific information that is necessary no matter what; however I don't really feel that I learned anything from having this done.

Again, I don't feel that the classroom portion of this module [Interviewing witnesses and suspects] was utilized at all.

I felt that throughout the entire course, we were jumping around from one thing to the next without really knowing what we were doing and where the investigation was going. It did not seem there was any flow to what were learned. I did not feel that the course was truly blended with both online and classroom sessions. I felt we simply read information on the computer and then attended a class where we did not really discuss or fully learn from what we had read prior to the class.

In comparison to other training/courses I have taken both through EPS and outside of EPS, this really has been one of the most frustrating courses.

It was very difficult to find time to actually finish the modules during work hours. Often the only down time available is between 0300hrs-0700hrs. at the end of a shift when I was tired and it was not very effective to try to complete a module or learn new information at that time. I had to log in and out multiple times to finish any module because of being too busy during work hours to do it all at once. I feel an improvement to this course would be to take the entire course at one time. Completing an online module and then one month later attending the classroom session does not seen like the most effective way to learn. Why isn't the course during three consecutive days? Why don't we omit the online modules and just discuss the information in class like any other investigator class?

The final assignments of the course were also very time consuming. I do not know how the teachers of this course think there is time to do all of the final assignments during work hours. It is completely impossible. Another important point is that our first class was in November and our final assignments are due in April. While it is necessary to have time to actually complete the assignments, why it was necessary for this course to be dragged out over 5 months? Overall, I found the manner in which the online/in class blend of information was taught to be ineffective. Perhaps an online/in class blend would be better for something other than police work and where the information could be given in a much shorter period of time, however in this situation it did not work.

In terms of being able to balance this course with work and personal life, this course made that balance even harder to keep. I often came in early to work to try to finish modules, I had to juggle my schedule because most of the in class sessions were only offered either during my days off or during a set where I was working nights, my workload at work increased a great

amount because I had to take time at works during "reports" to go through modules and organize assignments and I will be unable to sit and completely any of the final assignments at work – they will all have to be done during personal time.

Why can't we read the modules in class and the discuss them right after? The first module I completed will not be discussed for almost 1 month after reading through it…is this the best way we can be learning and teaching this type of information?

From day 1, I approached this course with the idea that I will attempt to work on the course during my work shifts only. This was motivated by the idea of balancing my work life and family life which involves a 9 month old baby and a 2 year old boy.

When looking at how this work with our classroom activity, for most part I think it work, but I would have like the ability to be more interactive with the instructors and mentors and other class mate. That is to say, I found that sometime you are working on the module, and you are not sure, it would be nice to be able to see who else is working on it that you may chat with and asked questions. The class room activities are good but by the time we have it, I generally forget some of the questions or points I want to address.

Respondents' Entries: Online

I do feel that Ethical Decision making should be one of the first assignments or modules we do. This is mainly for the fact that it is a very important issue. I do think that it is not only important for the officers with 18 months on but it is also important for the officers with many years on the job. Ethics can be a very controversial issue. I think it is important for everyone to be reminded of what is ethical and what is not. Sometimes people can forget these things over the years.

Most of these modules I did enjoy. Note taking was a fantastic course. I don't think it matters how long you have been on the job it is always a good idea to take any opportunity to make your notes better. I have found that numerous officers have been getting questioned about there notes on the stand and by that time it is too late to fix them. I have started to take more detailed notes, that it will help me with my testimony in the future. I do find some of the modules in this course similar to what they taught us in Recruit class. I could see some people getting frustrated due to the fact they may feel that they have already taken or have been informed of this information already.

The crime scene management module was rather frustrating. The reason for this was based on the activity that the module had us complete. In the activity you could go through a break and enter into a store, click on "hot spots" on the monitor and attempt to gather information, evidence and statements. The problem was is that you would get half way through the activity and it would freeze, shut down or reset. Then you would have to complete the entire activity again. The activity stated that at the end of it you would have to print out a form to hand in when we went to class. I believe this activity stated that it would only take approximately 20 minutes to complete. The activity took me approximately one hour to 1.5 hours to complete.

The one module that I did find very boring in this set was the decision making module. I do understand what point they were trying to get across. I just don't believe that this module suited my learning style. When it comes to organizing a large case or a file that requires a lot of members I have found that the best way to learn is to be out in the field doing it.

When I saw the heading mentioned above I had to log back onto ISEP to find out what the module was about. By doing this it showed me that I did not retain most of this module. To make this module better I recommend doing some kind of hands on assignment in class. We could be given a scenario to go through in class, or just have a group discussion.

Collecting a good witness statement can be one of the best skills you can learn on this job. One of the reasons I enjoyed this module was because of the videos through out it. I find the best way to meet my learning style is through a video, hands on, or working through a scenario. What you learned in this module can be applied at work every single day. I have been currently transferred to SW desk. I not only take statements for own investigations, but I now take statements for all the officers in the station. What I found the most frustrating on the street was when someone at the front desk would take a statement for you and it would be horrible. I would then have to do more follow up, and sometimes go collect another statement myself from the complainant. By taking this module it reminds you of all the information you need to collect to not only write a good report but to also conduct a good investigation. The more information you collect at the beginning it is less likely you will have to do follow up later on. Now that I am working at the front desk I try to make sure that the witness statements I collect for both my self and other members in the station are good and do not require any more follow up.

I found this phase [200-2] of the course not only the most time consuming but also the most difficult to complete. When you are working in patrol you are required to take calls, do your follow ups, have same day reporting as well as back up anyone that needs it. As I said in other modules I would attempt to take time out of the day at the end of the shift to complete the modules; however, the street was far to busy and I just had to many files to complete. It got to the point that I had to inform my Sgt. that I still had not completed the course and it was due in three days (which I was off duty). Lucky for me I have an understanding Sgt. who allowed me to stay in the station to complete this phase of the course. This phase of the course took me approximately 9 hours. This includes the time it took to do the one line assignment. I do feel this is a huge problem with this phase of the course. If I did not have an understanding Sgt. I would have to take time out of my day off to come in and complete this phase. I can also list numerous people in the course that did have to take time out of their days off to complete this phase. I do feel this in unacceptable and unfair.

The source handling module was excellent. I had no idea how to handle a source nor did I even realize that I was supposed to register one. I remember specific incidents prior to the course were I would have been able to use this valuable information. I do feel that this entire phase of the course would be good to provide police officers prior to having completed 2.5 years.

The authority to search was a good refresher module. When you are learning everything in block 1 there is a lot of information to retain. Some people come into block one with absolutely no policing or security. Attempting to absorb everything that is mentioned to you in block one can be difficult. If you don't practice it regularly on the job as well you could forget things that you have learned. I did find that the authority to search was good for just refreshing what you have already learned. I enjoyed reading the case law which explains why we do the things we do. It helps me understand things better when an example goes with the explanation.

In the past 2.5 years I have done numerous photo line ups; however, no one has ever explained the exact way to do them like this module had. I have written notes when doing a photo line up.

My notes usually consisted of what time it started, what time it finished and what number of photo the person picked if they picked any. It was good to actually have a little training on it. I just feel that I received the training a little to late. I feel like I have now said this numerous times but I do wish I received this training earlier. I do realize that this course is for the officer with 18 months experience, but I am thinking you could move this course down to people who only have a year experience. In my block two I did numerous photo line ups. It can be frustrating to find out that you have been doing something for the past few years and the way you did it was not exactly wrong, but there was a better way it could have been done.

Report Writing was an informative module. As you can see by reading my information above one of my biggest weaknesses is my grammar and spelling. This is one module I have been attempting to use not only at work, but in my every day activities. I do think that both myself and numerous people rely on computers for fix there spelling and grammar. Nowadays even when you are typing your computer will automatically fix the word for you. Half the time I do not even know that I have misspelled the word. I enjoyed this module because it gave us examples we could learn from as well as activities to complete. I am trying my best to break the bad habits that I have learned since elementary school.

Court Testimony was one of the most important modules with in this entire course. I have been to court approximately 25-30 times and yet I have only testified three times. Testifying in court is something we do not seem to learn until we get on the stand and do it in real life. I did enjoy this module because it gave tips on what the defense might say to trick you or to make you angry. I did have some testimony training in block one. We conducted mock impaired investigations and then we did mock trail with both a crown and a defense lawyer present. It was really good because you were able to practice testifying, you could watch other people testify, you were able to prepare for what both the defense and the crown might ask, and you were able to learn from both your mistakes as well as other people within the class. This was the best court testimony training I have received so far with the Edmonton Police Service. The module was good as well but the actual mock trails were much better. When we went for the in class training court testimony was never even mentioned. I would have liked to have some time devoted to it.

The interview suspect's module was my favorite module in this phase. I have interviewed two suspects and have had both of them confess; however, it was never really that difficult. I enjoyed hearing how a detective would interview a person. One thing I would have enjoyed would be doing mock interviews. Like I have mentioned many times I do prefer to do hands on training rather then online or listening to presentations. I do find that I learn the most this way.

The online computer modules were good but some were quite lengthy.

The orientation was straight forward and user friendly. However I did have some difficulties figuring out how to bookmark the modules so that I could come back to them in the future. The ethical decision making module was useful and the interactive (i.e. videos) activities. I think however a discussion in class to follow up on this would have been good. Even if even a few minutes.

The videos in the Risk effective decision making… etc. module was interesting. However, I think the longer classroom session for this module was required to get the skills across. The in

class Scenario was useful; however appeared to move very slowly. I liked the initial part of the scenario being online to refer to again and to work through the initial stages.

Note taking was a good reminder from recruit class. I also think it was a good idea to have this module online, prior to entering class. This way the expectation for the quality of notes for assignments (in and out of class) was clear from the beginning.

The content of this module was useful for identifying patterns of behavior for criminals. It is also nice that it was all completed in an online module rather than in class. If all of this material was completed in class it would be very dry. In addition, I was able to read and study this at my own pace.

The scenario in this online module was a unique way for me to learn this material without having to read it from a page. Helps that it is more real life, than reading an IDENT or forensic unit tips sheet. However, some of the scenario pieces were too small to see and notice. The evidence did not stand out very well on the screen. Therefore, I almost always missed objects or evidence that I would not in real life.

Again….a lot of material to cover and was nice to complete online, prior to attending class. The officers in this course are at various different experience levels and as a result some of the material would be too much review to complete all in-class. In this online module, the example videos were very useful as these techniques cannot always be observed or trained while learning while on the street. I think I will be able to use some of the examples and mannerisms of the officer in my own interviews. As if I was monitoring the interview myself.

The exercise for the Search Warrant Drafting was confusing and the wording was not familiar to me. I would have liked to have a lesson on this in class prior to the online modules. This way the skills could be practiced once I understood the topic.

Excellent module. The online activities (i.e. creating your own photo line-up) made me realize how closely I needed to match my subjects in a photo-line up. I learned a few things from this course on why certain steps in completing the photo line-up that had not been doing before. This activity may have taken a lot longer to complete on computers in class.

I liked how the online module [report writing] forced you to complete narratives based on the information provided. This activity was useful. Again, this would have taken up too much in-class time and would be a review for most people.

I thought the elevator/floor activity [court testimony] was not user friendly; however it did provide a break between the different topics. It took too much time to enter and exit each topic… maybe fewer things to click on. Also, I found that it was difficult to determine which items in the room we were supposed to click on. I think it could have been easier if the items stood out more.

Excellent videos that I can use in the future to mirror my own interviews. I liked that a large part of the course focused on this topic. This is a topic that we don't have a lot of training in. It was useful to review the information as well as the videos, prior to being in class with the expert lecturer.

This module [Orientation] simply gave an overview of what the entire course will consist of. I don't feel as though this module [Ethical Decision Making] was really a blend of online and classroom information as in class we did not discuss just how much ethical decision making is required while being a police officer. The module did outline possible situations that a police officer could encounter during their career.

I had difficulties with the crime scene not working in the criminology [Crime Scene Management] module. I was unable to go through it and finish the exercise that was expected. I did find the information that was given in both Criminology and Crime Scene Management was interesting and useful for everyday police work, especially for newer members who may not know the most effective way to approach an investigation.

[note taking] The online module basically gave an overview of good tips for what is important to record in our notebook as well as how to be professional while doing so (all of which is very important during investigations). We also watched a short video and recorded notes on the video for our investigation and were then evaluated on the notes we made.

I personally have not had any experience with source handling. I found the information given interesting to learn about, however I do not have any personal experience to rely on while reading through the module (although some police officers taking the course did). I did not feel that the information in the online PBL was any different than just reading about it from a manual.

I anticipated the online learning portion of this module being more than just reading off of computer screen instead of out of a book.

I often forgot what I had just read about by the time I came to the end of a slide and had to click back and forth multiple times through the pop-up screens before I was able to process all of the information (which was actually really annoying). I also had to log in and out multiple times because the information is only available at work and it was impossible to do the entire module at one time.

I don't think that on-line learning is an effective way to learn about a subject such as this [Source Handling].

I think most police officers have already been taught the basic information about sources handling in recruit training (which is what we read throughout the module), however the tricky part is discussing how to do it and what to do and not to do.

I feel that this [authority to search] information is very important and applicable to routine patrol members. I thought that the examples given to explain the information were accurate as to what would be encountered on patrol. I learn much better with examples such as these. We are faced with making decisions as to who/what and when we can search all the time.

However, I found this [authority to search] module very long. I don't think there was any difference between the "online learning" of this material and reading it out of a manual. It was impossible to sit and read the entire module in one sitting without being interrupted or having to leave to take a patrol call. I do not think that clicking on certain arrows to have more text pop up on the screen makes this particular module any different from just reading the information out of

a book. I'm pretty sure the information was just transferred directly from a manual or book into the module.

I had to log on and off multiple times before I was able to finish the entire module and I had often forgotten what I had already read by the time I was done reading the slide, causing me to have to re-read and then become very frustrated by the amount of time it took to get through the module.

I found the information in this online learning module interesting and useful. I have not written up a search warrant on patrol yet and I feel this exercise and the information given will definitely help me out when that time comes.

The information given in the module [Photographic Lineup] was good information; however I do not see what the point of the assignment was. How is that assignment going to be used in our investigation?

As a whole, the information given in all the online modules in ISEP 200-3 was useful and practical.

Part of the strategy was to access the on-line learning sessions when there is a down time on shift. Since I was on the Front Counter at Southeast Division, I had a computer readily available at the desk. One of the problems I encounter was that one of the computers did not have the program install to allow me access to the on-line modules. This would have been fine but since there are only 4 available for 4 members, often I am unable to access the modules.

In the first two modules [Ethical Decision Making and Orientation], I found them to be straight forward and quick to go through. This works out really well since at the Front Counter you are often interrupted. The Ethical Decision Making I felt took longer than anticipated. I found that the video and audio components slowed me down. Not that is a bad thing, since it allowed a break up from reading the content. For most part the control are intuitive but I find that depending on your display screen, the information can be clipped and requires constant scrolling and panning.

The Criminology section was very well put together, I found that it was just the right amount of information and pace of learning for being at the Front counter. There were lots of visual diagrams and media to emphasize and explains theory and concept. I also like the little quiz questions that help to emphasize the content. I was able to finish the module within the shift that was busy. The chunking of information to process was just right. This was important because I was interrupted frequently with people coming into the station to file reports. I also got a chance to see and understand how some of our crimes mapping tools are being applied at our divisional operation level.

With the Crime Scene Scenario, I found that I was struggling trying to get the navigation to work for me. A large part of the problem was that for some reason, I would accidentally reset the scenario and start from the beginning if I click in the perimeter. This was quite annoying and delayed me from completing the module sooner. I find it very frustrating and was just grateful when I was finally able to complete the scenario. I think it is great to have interaction but when it does not work properly, it sure raises the frustration level.

Working on the note taking scenario was difficult. I found that my concentration was constantly interrupted and had to go back quite a few time. With no control for pause, fast forward and review, it became time consuming. But overall, this was a great module since it helps me hone in my note taking. I think the one thing that I can take away is the emphasis in taking your time to do your notes.

In the Interviewing module, the volume for the interview at the end was very soft therefore made it impossible to hear and understand what the officer was talking about. I also found the module to be very informative and have subsequently used some of the techniques or at least be very conscientious about my questions when I conduct an interview. This module took a little longer or felt like it was longer and I had to visit in multiple seating.

The R.E.D.M. & Case Management I found the layout of the R.E.D.M. example was great for information. I was able to process the information and be interrupted and return and continue with no problems.

This was a large section [Section 2: 200-2, Source Handling, Authority to Search, Search Warrants Drafting]; I had a lot of trouble finishing this section mostly because it seemed too long for and was the first time I had to work on the course on my days off. However, I enjoyed the mini tests and quizzes, which were interactive and great at getting to the important points. Also the contents of this section is so important and huge, it was very intense to get through.

Authority to Search was a great refresher to the things we have been doing on the street and more. But the warrant was all new to me and was daunting. I noted that occasionally when I click on the next section nothing comes up and so I have to click on it again. Minor but makes me wonder sometime if I miss something. I like the layout of the information and the explanation of the module.

Search Warrants drafting allowed me to understand search warrants and ITO better. Also with the practice I'm a little less hesitant to do one later on. As of yet I have not done a warrant on the street yet, although a couple of time at the Front Counter I thought I might have to do a Production Order. The practice exercise was wonderfully laid out and great to work with. Good interactive and good use of the media.

I found the Photographic Lineup assignment a little disappointing. The problem was trying to simulate a photographic lineup with someone who did not witness the crime and therefore can not choose the suspect. My test subject was confused and I was too as to how to implement the lineup. If the idea is to practice the note taking during the photographic lineup then it was acceptable. But trying to understand how it would apply to our overall assignment was misleading and confusing.

Again I found this section [Section 3: 200-2, Photographic Lineup, Structured Interviewing: Suspects, Judicial-Administration, Report-Writing, Court-Testimony] to be intense and lengthy for working at the Front Counter. The continuous interruptions make finishing the modules difficult. Again, I actually had to come into work on my days off to be able to do the modules. Furthermore with work my shifts are 12 hrs long, it makes it very difficult to learn pass certain time. There was multiples revisit to the module on many shifts. I think being able to access the course at home would have greatly relief some of the work load and be able to concentrate more

especially on sections like this one. But then it would hamper my attempt to achieve work balance too.

I was less attentive as I tried to finish the Report Writing and Court Testimony modules. Also for some reason, these last modules launch within the TRACCESS CI framework and therefore cut of the module and require you scroll and pan to see all of the information. With the previous modules, they would launch in a separate browser. I find this a bit distracting as I am constantly scrolling and panning in order to see the information.

I definitely like the online work aspect of the course for most part. It allowed me to work at it when there was time, but this was also created problems for me because I was getting too many interruptions. When compounded with a lengthy module, it made it even more difficult to go through it. The other great thing about the online is the ability to go back at any point and review and go through the information.

Overall, the program is fantastic; my only complaint is the minor technical issues, like volume and display of information (screen display clipping). Other minor tweaks are like the navigation sometime is finicky but I'm not sure if it is a result of the computer I am on.

Figures

Figure 1.0 Investigative Skills Education Program

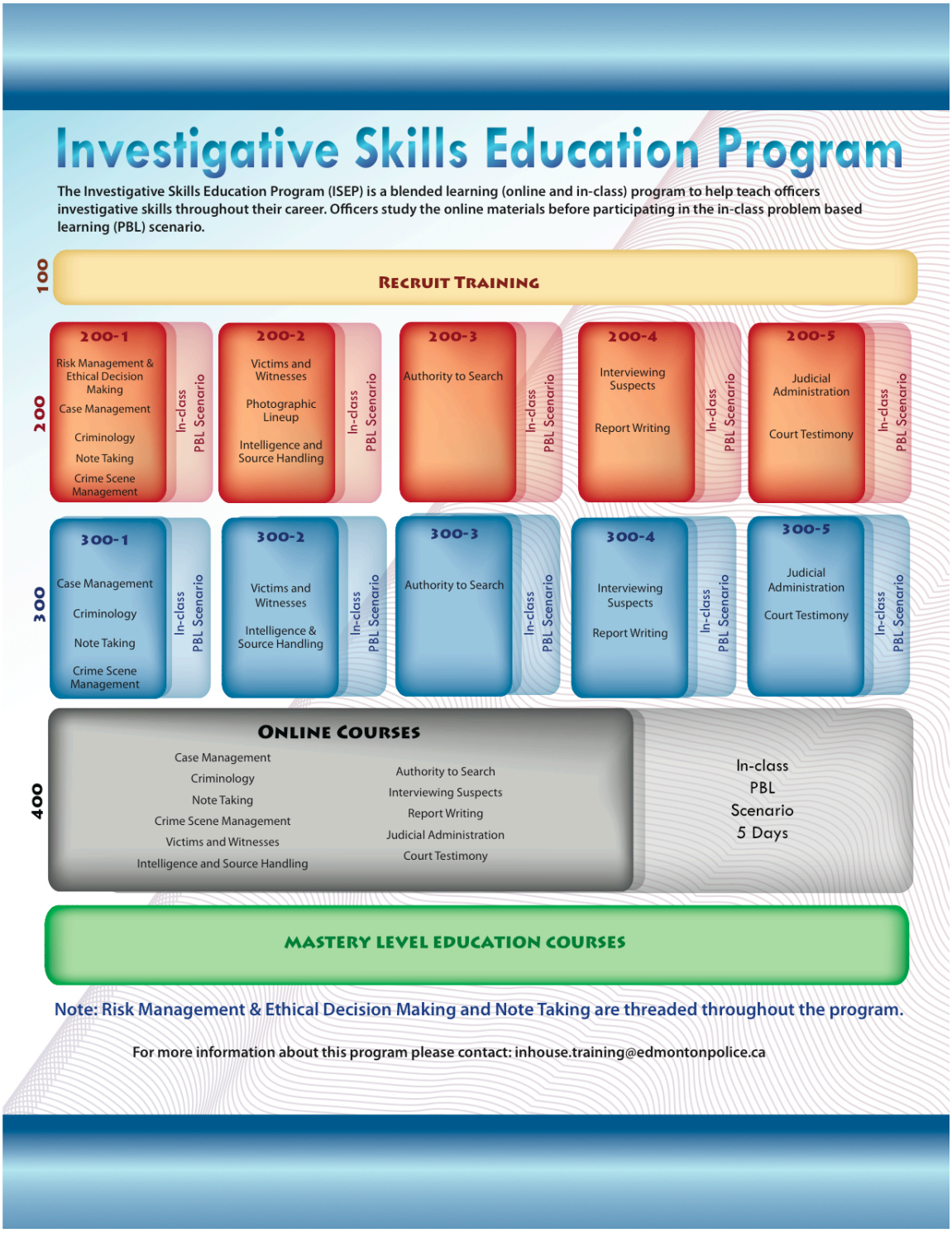


Figure 2.0. ISEP Level 200 Overview

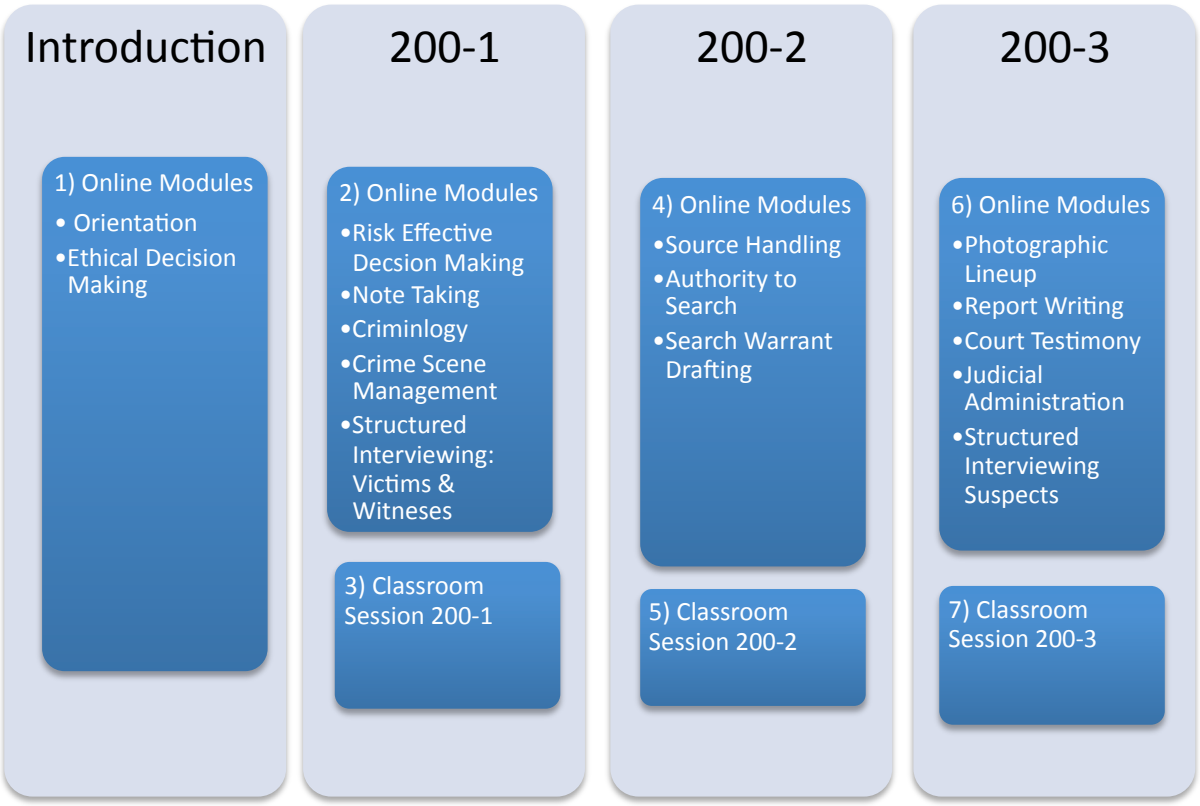


Figure 3.0 Summary of Research Design

Figure 4.0 Concepts Related to the Quality of Learning in a Police Context

This figure is adapted from Ginns & Ellis (2007).

References

Albrecht, B. (2006, June 6). Enriching student experience through blended learning. *EDUCASE Centre for Applied Research ,* (12). Bolder Colorado, US.

Ahamad, W., F., Shafie, A., B., & Janier, J., B. (2008). *Students' perceptions towards blended learning in teaching and learning mathematics: Application of integration*. Retrieved May 6, 2009, from http://atcm.mathandtech.org/EP2008/papers_full/2412008_15274.pdf

Biggs, J. (1999). What the Student Does: teaching for enhanced learning. *Higher Education Research & Development*, *18*(1), 57-75. doi:10.1080/0729436990180105

Chandra, V., & Fisher, D. (2009). Students' perceptions of a blended web-based learning environment. *Learning Environments Research*, 12(1), 31-44. (ERIC Document Reproduction Service No. EJ829937) Retrieved from ERIC database.

Clark, R., E. (1985). Reconsidering research on learning from media. *Review of Educational Research*, *53*(4), Retrieved from http://rer.sagepub.com/content/53/4/445.short

Clark, R., E. (1994). Media will never influence learning. *Educational Technology Research and Development*, *42*(2), Retrieved from http://www.springerlink.com/content/681t5680047393j5/

Cleveland, G. (2006). Using Problem-Based Learning in Police Training. *The Police Chief: The Professional Voice of Law Enforcement. Retrieved from http://www.policechiefmagazine.org/magazine/index.cfm?fuseaction=display_ar*

h&article_id=1051&issue_id=112006

Creswell, J., W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd Edition). Sage.

Drucker, P. (1999). Knowledge worker productivity: The biggest challenge. *California Management Review,* Winter, 41(2).

Donavant, B. (2009). The new, modern practice of adult education online instruction in continuing professional education setting. *Adult Education Quarterly*, 59(1), Retrieved from http://aeq.sagepub.com.login.ezproxy.library.ualberta.ca/content/59/3/227.full.pdf+html

Dunham, G., R. & Alpert, P., G. (2010). *Critical issues in policing: Contemporary readings* (6thed). Long Grove, IL: Waveland Press, Inc.

Dziuban, C., Hartman, J., & Moskal, P. (2004). Blended learning. *Educause Centre for Applied Research.* (7), Retrieved from http://www.educause.edu/search?quick_query=blended+learning&Image1.x=34 Image1.y=12

Garrison R., & Archer, W. (2000). *A transactional perspective on teaching and learning: A framework for adult and higher education*. Oxford: Elsevier Science Ltd.

Garrison, R., & Shale, D. (1990). *Education at a distance: From issues to practice*. Florida: Robert E. Krieger Publishing Company, INC.

Garrison R., D., & Vaughan, N., D. (2008). *Blended learning in higher education: Framework, principles, and guidelines.* San Francisco: John Willey & Sons Inc.

Ginns, P., & Ellis, R. (2007). Quality in blended learning: Exploring the relationships

between on-line and face-to-face teaching and learning. *Internet and Higher Education,* volume 10, issue 53. Pages 53-64.

Haberfeld, M., R. (2002). *Critical issues in police training.* Upper Saddle River, NJ: Prentice Hall.

MacDonald, J. (2006). *Blended learning and online tutoring: A good practice guide.* Burlington: Gower Publishing Company.

Mayring, P. (2000). Qualitative content analysis. *FQS Forum: Qualitative Social Research Sozialforchung*, *2*(1). Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/1089

Ryan, J., (2006). *Summary of legal issues in the training function.* Retrieved from http://www.llrmi.com/articles/legal_updat/liabilitytraining.shtml.

Rydberg, J., & Terrill, W. (2010). The effect of higher education on police behavior. *Police Quarterly. Volume 13, Issue 1. p. 92-120.*

Picciano, G., (2006). *Blended learning: Implications for growth and access.* Sloan-C, Volume 10 Issue 3, July. Retrieved from http://www.sloan-c.org/publications/jaln/v10n3/pdf/v10n3_8picciano.pdf

Schooley, C. (2005). *Use blended learning to get dealer action: New techniques and technologies help dealers and OEMs make training stick.* Forester Database. Retrieved from http://www.forrester.com/Research/Document/0,7211,36759,00.html

Schooley, C. (2008). *How to create a comprehensive, high impact learning strategy.* Forester Database Retrieved from http://www.forrester.com/rb/Research/create_comprehensive%2C_high-impact_learning_strategy/q/id/45598/t/2

Schooley, C. (2009). *The ROI of elearning.* Forester Database. Retrieved from http://www.forrester.com/Research/Document/0,7211,53282,00.html

Singleton Jr., R., A. and Straits, B., C. (2005). *Approaches to social research* (4th Ed.). New York: Oxford.

Public Works and Government Service Canada. (2005). *Tri-council policy statement: Ethical conduct for research involving humans.* Retrieved from http://webdocs.cs.ualberta.ca/~wfb/ethics/TCPS_Oct2005.pdf

Thorne, K. (2003). *Blended learning: How to integrate online & traditional learning*. Philadelphia, PA: Kogan Page Limited.