

ABSTRACT OF CAPSTONE

Brandon J. Combs

The Graduate School

Morehead State University

March 4, 2016

DISTANCE EDUCATION IN LAW ENFORCEMENT:
EXPLORING KENTUCKY'S BARRIERS

Abstract of capstone

A capstone submitted in partial fulfillment of the
Requirements for the degree of Doctor of Education in the
College of Education
At Morehead State University

By

Brandon J. Combs

Lexington, Kentucky

Committee Chair: Dr. Lenora J. Justice, Assistant Professor

Morehead, Kentucky

March 4, 2016

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The purpose of this study was to examine the barriers to implementing distance learning for law enforcement officers who serve in rural agencies across Kentucky as a means to meeting state mandated annual training requirements. A survey instrument from previous research was selected, and participants were asked 30 questions soliciting demographic data and potential barriers to implementation. A Likert scale was used on 26 of the questions and four open-ended response questions were included to allow for qualitative analysis.

Once all surveys were completed, an exploratory factor analysis was conducted on the coded responses. The exploratory factor analysis identified two factors that represent potential barriers to implementing distance learning for law enforcement officers in Kentucky. Additionally, the qualitative data supported the results of the exploratory factor analysis. This study suggests that there is interest in distance learning as a means through which officers can complete their state mandated training. However, there are potential barriers that should be addressed prior to its implementation. Some of the primary concerns, or potential barriers, include agency resources, agency policies, and instructional support.

After the data from the quantitative and qualitative questions were analyzed, a white paper was developed (Appendix I). The white paper provided results from this

study and recommendations to state law enforcement training administrators as they consider distance learning implementation within Kentucky.

KEYWORDS: Distance Learning, Online Learning, Training , Law Enforcement,
Rural

Candidate Signature

Date

DISTANCE EDUCATION IN LAW ENFORCEMENT:
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By

Brandon J. Combs

Approved by

Dr. Lenora J. Justice
Committee Member Date

Dr. Christopher Miller
Committee Member Date

Dr. Frank Kubala
Committee Member Date

Dr. Christopher Miller
Department Chair Date

CAPSTONE

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DEDICATION

The completion of this work is dedicated to my late mother, Susan Shropshire. Her tireless commitment to children, education, and service provided the moral guidance and work ethic necessary to accomplish all of my goals. It is my hope that she is smiling from above as I complete my doctoral work.

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CHAPTER 1 INTRODUCTION

Background

Education in law enforcement has been a topic of debate since 1967 (Bayley & Bittner, 1984; Carter & Sapp, 1990; President's Commission on Law Enforcement and Administration of Justice, 1967; Sherman, 1978). Carter, Sapp, and Stephens (1989) assert that educational standards in law enforcement should continue to increase as time progresses in order to match law enforcement officer skills with the needs of the community. This discussion includes both raising the standards for police officers from a high school diploma to a baccalaureate degree as a minimum level of education (Carter & Sapp, 1990; Carter et al., 1989; Martin, 2012) and increasing access to education and training when departments are capable of doing so (Clarke & Armstrong, 2012; Leal, 2009; Schmeeckle, 2003; Sherman, 1978).

The Commonwealth of Kentucky requires police officers to “complete forty (40) hours of annual in-service training” in order to maintain their professional certification (Kentucky Revised Statute, 2013a, 2013b, 2013e). These courses must be “certified or recognized by the Kentucky Law Enforcement Council (KLEC)” (Kentucky Revised Statute, 2013b, 2013c). The primary training organization for police officers in the state of Kentucky is the Department of Criminal Justice Training (DOCJT) located in Richmond, Kentucky. Currently, there are no classes offered in

the online learning environment that meet the state's current 40 hour training requirement through the Department of Criminal Justice Training.

As the expansion of technology into the education industry has grown by leaps and bounds, distance education has come to the forefront of the educational technology discussion as a primary discussion point (Howell, Williams, & Lindsay, 2003; Moore & Kearsley, 2011; United States Department of Education, 2011a & 2011b). Growth in distance learning is demonstrated by the increasing number of students enrolling in distance education courses, and the expansion of distance education programs at both the national and state levels (Kentucky Council on Postsecondary Education, 2009; United States Department of Education, 2011a, 2011b). Distance education has become the source of a large body of research due to its flexibility (Mills & Tait, 2001; Threlkeld & Brzoska, 1994).

Flexibility can be demonstrated in distance education from convenience to the student to the application of different instructional perspectives (Robinson, Molenda, Rezabek, 2008; Threlkeld & Brzoska, 1994). Through this expansion, though, several categories of variables have become identified as barriers to the implementation and growth of distance education, such as teacher related barriers, technology related barriers, and student related barriers (Berge, 1998; Cho & Berge, 2002; Clark, 1993; Freberg & Floyd, 1995; Howell et al., 2003; Stinehart, 1988). These barriers represent possible obstacles to the introduction of distance learning when applied to law enforcement professional training.

There is evidence that demonstrates there is no significant difference between distance education instruction and in-class instruction (Allen & Seaman, 2010; Schmeckle, 2003). In these studies, Schmeckle (2003) found no significant difference in learning between those who took courses online versus in the classroom environment. In addition, Schmeckle (2003) asserts the students who completed the online lessons were able to do so in approximately half the time as their counterparts in the traditional classroom setting, without damaging or hindering the student's ability to retain information or to learn.

Translating the educational growth in distance learning to the field of law enforcement demonstrates a natural progression in the conversation of police officer professional development. The growth of distance education has continued to increase year after year for several reasons, including convenience to the student. As police officers around the state are required to travel to one of the fourteen training sites for their in-service training with DOCJT, the benefit of having access to distance education grows beyond convenience to having a financial impact on the various police organizations across the state. Approximately half of all officers travel to Richmond, Kentucky for training, while the other half attend training at one of 21 remote training locations around the state. Distance education would also open the door to flexible learning environments where instructors can present information in a multitude of instructional design models, perspectives, and theories to encourage student engagement and development.

Definition of Terms

The following terms and phrases are defined below as used in this research study:

Department of Criminal Justice Training (DOCJT): As directed by Kentucky Revised Statute 15A.070 (Kentucky Revised Statute, 2013a), DOCJT establishes, supervises, and coordinates training programs and schools for law enforcement personnel, and any other justice or non-law enforcement related personnel. It continually reviews law enforcement training standards, and furthers research in the field of criminal justice.

Kentucky Law Enforcement Council (KLEC): As directed by Kentucky Revised Statute 15.310-15.330 (Kentucky Revised Statute, 2013b), KLEC approves courses, instructors, and learning institutions. It also monitors minimum entry and performance standards for peace [police] officers and telecommunicators [dispatchers] within the state of Kentucky.

Law Enforcement Training Instructor (LETI): LETI is the official working title for all police instructors, who, as ordered by Kentucky Revised Statute 15.350 (Kentucky Revised Statute, 2013d), “conduct, supervise, or teach in courses of police training.”

Distance Education: For the purposes of this research project, *distance education* is synonymous and interchangeable with the terms *online learning* and *distance learning*, and is defined as synchronous and asynchronous interactive learning environments, hosted via the Internet, that bring together students,

instructors, information, and resources with the intention of furthering skills and knowledge (Benson, 2004; Garrison & Cleveland-Innes, 2010; Horton, 2012; Menconi, 2003; Meyer, 2009; Romi, 2000). In short, *distance education* refers to the idea of learning that is facilitated via the Internet.

Rural Police Department: For the purpose of this research project, *rural police department* includes the personnel working for the department and the community they serve. A *rural* police department is an agency with less than 50 officers, or a service population less than 50,000 (Romesburg, 2007). The term *police department* is also synonymous and interchangeable with the term *law enforcement agency*.

Stratified random sampling: For the purpose of this research project, *stratified random sampling* means the method through which participants were selected from around the Commonwealth of Kentucky. The state is divided into 15 development districts, or strata, used by the Kentucky Regional Analysis Project (Kentucky Regional Analysis Project, 2014; University of Alberta, n.d.).

Statement of Problem

Distance learning as a means of professional development is a growing need in the field of law enforcement (Leal, 2009; Schmeckle, 2003; Strock, 2007; Travis, 1995; Donavant, 2009). Leal (2009) asserts that the acceptance of online formatted coursework in law enforcement was slow in the beginning, but shows the potential for quick growth in the area of training advanced police officer skills. Currently, the

state of Kentucky does not afford officers the option of distance learning as a means through which annual training requirements can be met (Department of Criminal Justice Training, 2010).

Distance learning provides officers the opportunities to engage in more training from the convenience of their home jurisdiction, receive the same quality of information and training, and engage in training that is provided via a preferred medium for younger officers (Leal, 2009). As instruction is delivered in a more convenient manner, through the preferred selection, police officers working in rural Kentucky can potentially increase access to the requisite in-service training. Identifying and overcoming barriers, such as teacher, technology, and student barriers, is necessary to fully implement an effective distance learning program.

Purpose of Study

The purpose of this study is to investigate the barriers to the implementation of distance education as a means through which police officers in rural Kentucky can meet the state's annual training requirements. Distance education presents a potential solution to meeting these needs, especially considering the reduction in police budgets across the Commonwealth of Kentucky, continued training as required by law, and the ongoing need for up-to-date information. Implementation of distance education would require changes across the police departments in the Commonwealth, Department of Criminal Justice Training, and the Kentucky Law Enforcement Council. Bringing to light the barriers to implementation allows for a

realistic perspective and understanding as to what must be achieved in order to move forward as well as an understanding of what must be achieved in order to remove them.

Significance of Study

This study explores the barriers to the implementation of distance education as a medium through which peace officers can maintain their annual professional certification requirements in the rural areas of Kentucky. This study fills a gap in research literature with its emphasis on the use of distance education as a means through which officers maintain their professional certifications, and its focus on rural Kentucky. Much of the literature involving education within the field of law enforcement is specific to higher education, or college education, stemming from the President's Commission on Law Enforcement and Justice Administration (1967), where the federal government encouraged the requirement of a baccalaureate degree as a minimum standard for all police officers (Bruns, 2010; Carlan, 1999; Carter & Sapp, 1990; Carter et al., 1989; Martin, 2012; Paoline & Terrill, 2007; Paterson, 2011; Rydberg & Terrill, 2010; Sherman, 1978; Sherwood, 2000; Strock, 2007; Travis, 1995).

This study investigates the professional training environment that provides online in-service training to existing officers in rural Kentucky, and moves a step beyond the initial hiring requirements debate. Furthermore, this study assists in the implementation of distance education in Kentucky, as it elucidates the barriers and

potential ways to change them. This study also has value as a stepping stone for other law enforcement training institutions that are facing similar questions and challenges toward their own implementation of distance education in their training programs. This study has a wide reach as approximately 89.5% of the police agencies in the United States are considered rural, with 50 or less officers, or 50,000 people or less in the service population (Romesburg, 2007).

Research Question

This research question leads this study:

What barriers exist from the participant's perspective that prevent the implementation and use of distance education to meet the annual in-service requirements for police officers in rural Kentucky?

CHAPTER 2 REVIEW OF LITERATURE

This chapter is a discussion of the literature pertaining to distance education in law enforcement including the conceptual framework used through this study, legal requirements of training for peace officers in rural Kentucky, distance education, teacher related barriers, student related barriers, and learning institution related barriers. The barrier types being discussed are provided by Zirkle (2001, 2002, 2004). This study found the implementation of distance education has several primary barriers, including teacher related, student related, and learning institution related barriers.

Legal Requirements of Training

The establishment and provision of requisite training originates in the Kentucky Revised Statutes (KRS) and Kentucky Administrative Regulations (KAR). The minimum standard of in-service training, as directed by KRS 15.404 (2)(a) (2013e), is 40 hours of training as provided by the Department of Criminal Justice Training, or other Kentucky Law Enforcement Council approved organizations. This training is required on an annual basis and includes a wide array of law enforcement related subject areas.

Kentucky Revised Statute 15A.070 (2013f) establishes the Department of Criminal Justice Training (DOCJT) as the primary resource through which all in-service training is to be completed. The DOCJT is located in Richmond, Kentucky,

and holds two institutional certifications of accreditation from the Commission on Accreditation for Law Enforcement Agencies (CALEA) and the International Associate for Continuing Education and Training (IACET). The DOCJT provides both basic and in-service training to Kentucky's peace, or police, officers, court security officers, and public safety dispatchers. Its mission is to further law enforcement education, research, and training.

The Kentucky Law Enforcement Council (KLEC) oversees the governance of all law enforcement training in the state of Kentucky. This includes certifying police instructors, approving or disapproving curriculum, administering Peace Officer Professional Standards (POPS) certification, and monitoring the Kentucky Law Enforcement Foundation Police Fund (KLEFPF). As this agency governs the training of police officers in the state, it has a significant level of influence in how training is provided.

Distance Education in Law Enforcement

Since the President's Commission on Law Enforcement (1967), the subject of distance education has been debated (Donavant, 2009; Glasgow & Lepatski, 2012; Leal, 2009; Rushforth, 2011; Schmeckle, 2003; Strock, 2007; Travis, 1995). The Presidential Commission discussed the recommended minimum hiring standards for police officers entering the field of law enforcement. Since then there has been discussions on the need for advanced degrees to enter the field of law enforcement, the effect of higher education and officer use of force, and the need for distance

education in law enforcement (Carlan, 1999; Mayo, 2006; Paoline & Terrill, 2007; Paterson, 2011; Rydberg & Terrill, 2010; Sherwood, 2000). This study focuses specifically on the need for distance education in mandated law enforcement annual in-service training.

Leal (2009) discusses the need for e-learning, or distance education, in law enforcement for many reasons, including its flexibility in location, cost saving benefits, fail-safe environment, and the ability to standardize mandated training. He continues into a discussion of blended learning environments and their effectiveness to combine both distance and traditional training environments for subject areas that may require both of them (Leal, 2009).

These benefits can be seen as the relative advantage for the implementation of distance education in most environments since they are universally applicable. Cost savings, particularly for institutions that are publicly funded, is an ever-present goal. Because law enforcement officers are mandated to complete 40 hours of annual training, the provider of this training (DOCJT) is located in Richmond, KY and some officers must travel hours from their home jurisdictions, the flexibility in distance education is a highly appealing, practical solution that provides both time and cost savings.

There is also a parallel academic conversation examining the shift in police demographics, andragogy, and the efficacy of distance education (Donavant, 2009; Glasgow & Lepatski, 2012; Rushforth, 2011; Schmeekle, 2003; Tabata & Johnsrud,

2008). With the aging population, the total number of working law enforcement officers is slated to reduce in mass as officers reach retirement age (Glasgow & Lepatski, 2012). With a significant portion of the population retiring out of the system, law enforcement agencies will be forced to hire from the younger generations entering the workforce. Glasgow and Lepatski, (2012) assert this will affect the training environment as many of the young officers will need to receive advanced training to obtain the skills necessary to complete the tasks of their position, and prepare for advancement within their organizations. The training will also need to accommodate the younger generations' preference towards technologically infused training and educational environments (McCurry & Martins, 2010; Montenery, Walker, Sorensen, Thompson, Kirklin, White, & Ross, 2013).

Glasgow and Lepatski (2012) continue by discussing andragogy in law enforcement training. Completing the tasks needed throughout a career in law enforcement requires the ability to assemble evidence and solve problems in such a way to understand the totality of a crime. This problem-based approach is linked to both andragogy and constructivism (Glasgow & Lepatski, 2012). In taking the andragogical and constructivist approaches, there must still be high levels of motivation from the learner, and the time on task must be comparable to what would be achieved in traditional training environments (Clark, 1983; Perry & Pilati, 2011; Schmeeckle, 2003).

Schmeeckle's (2003) assertion that time on task must be comparable to traditional classroom instruction is relevant to the efficacy of distance education in law enforcement. It is not uncommon for time on task to be reduced without effecting student performance and retention, when information is moved from the traditional learning environment to the distance learning environment (Schmeeckle, 2003). However, it is highly important that this transition is done with effective instructional design, including special considerations for learning outcomes, if it is to yield the desired results and skills mastery (Berge, 1995; Rushforth, 2011). Donavant (2009) asserts that online learning can improve student performance if the student completes the course. This idea suggests that the students who prefer technologically enhanced learning environments, especially younger generations, will be more successful than those who do not.

Teacher Related Barriers

At the teacher or instructor level, there are several barriers to the implementation of distance education. These barriers stem from two perspectives of an instructor, personal (i.e., compensation) and attitudinal (e.g. personal beliefs) (Bashir, 1998; Berge, 1998; Berge & Mrozowski, 1999; Berge et al., 2002; Betts, 1998; Cho & Berge, 2002; Clark, 1993; Dillon & Walsh, 1992; Milheim, 2001; Olcott & Wright, 1995; Pajo & Wallace, 2001; Panda & Mishra, 2007; Siaciewena, 1989). These differences represent a concern for both an instructor's personal wellbeing and stake in the educational environment, as well as an expressed concern

for how implementation may affect the instructional aspect and, its effect on student participation and performance.

Personal Barriers

The barriers presented at the personal level focus on the instructor's ability to do the job well and be compensated for their time and efforts. These barriers are more abundant, and include concerns about lack of expertise, time commitment, and adequate compensation (Berge et al., 2002; Inman & Mayes, 1998; Jones & Moller, 2002-2003; Kagima & Hausafus, 2000; Rockwell et al., 1999; Schifter, 2000; Spotts & Bowman, 1995; Wood, Willoughby, Specht, and Porter, 2002). Having subject matter expertise is the route for many entering the world of academe as an instructor; therefore, having the ability to perform the role of instructor is paramount. A change in that role can be threatening because there has been minimal training and development or experience in distance or online learning for the individual (Boettcher, 1999; Chizmar & Williams, 2001; Irani & Telig, 2001; Olcott & Wright, 1995; Wagner, 1993). Most instructors are accustomed to a presentation style of instruction, which does not translate well to the distance learning environment (Wagner, 1993). A role change that alters the fundamentals of being an instructor must be supported by sufficient professional development and training opportunities. Furthermore, the training must be ongoing and frequently available (Hwu, 2011, Higgins & Harreveld, 2013). These can be presented in the form of workshops, seminars, symposiums, individual training, technical support, or organizational

support (Betts, 1998; Daly, 2011; Dooley & Murphrey, 2000; Hayes & Jamrozik, 2001; Lee & Busch, 2005; Pajo & Wallace, 2001; Zirkle, 2001).

Time commitment is a second major concern for instructors at the personal level (Dooley & Murphrey, 2000; Ellis, 2000; Hayes & Jamrozik, 2001; Muilenberg & Berge, 2001, 2005; Pajo & Wallace, 2001; Rockwell et al., 1999; Schifter, 2000). Time commitment factors include the time necessary to design, build, and implement a high quality course, often shifting from a presentation style of instruction to a modular or constructivist based style of instruction (Albrkhill, 2013; Tabata & Johnsrud, 2007; Van de Vord & Pogue, 2012; Wagner, 1993). Instructors making the transition to distance learning also require additional technical support, which takes additional time (Boettcher, 1999; Pajo & Wallace, 2001). There is also time spent conducting the class, which includes discussion boards, assignment grading, and project monitoring. In order to accomplish those tasks, there are expressed concerns about feeling the need to be available all day every day (Tabata & Johnsrud, 2007; Wagner, 1993). This relates to a concern about the use of email as a primary mode of communication. Instructors have expressed concerns about the volume of email and the timeliness of response to those emails (Berger, 1999; Henry, 2002; National Education Association, 1998; Wagner, 1993; Perreault et al., 2002). Beyond the course maintenance, Warburton, Chen, Bradburn, and Zimblar (2002) found that instructors who used technology in either facilitation or communication, such as

through a learning management system, class website, or email, spent more time per week completing the tasks associated with their position.

A third major concern is compensation. Some of the presented concerns and potential barriers include the amount of pay, performance incentives, ability to be promoted, stature within the academic community, and tenure (Bower, 2002; Jones & Moller, 2002-2003; Olcott & Wright, 1995; Rockwell et al., 2000; Wilson, Varnhagen, Krupa, Kasprzak, Huntin, and Taylor, 2003). An increase in work hours, pay, incentives, and benefits are a concern, especially for those who feel they must be accessible at all times (Pajo & Wallace, 2001; Wagner, 1993; White, 2000). There is a potential for barriers to exist as instructors fear the inability to be promoted since their distance learning instruction may be seen as less academic than brick and mortar, face-to-face instruction (Pajo & Wallace, 2001; Wilson et al., 2003). This includes institutions not rewarding instructors for using innovative ideas and methodologies in their instruction (Ellis, 2000).

Minor instructor personal level barriers include: the possibility for organizational change or reorganization, the instructor's ability to successfully evaluate applied skills, social interaction with the students, access to the learning management system and students, legal issues, and student support services (Berge et al., 2002; Black, 1992; Pajo & Wallace, 2001; Panda & Mishra, 2007; Perreault et al., 2002; Taylor & White, 1991). Within these minor level personal barriers is where the

first connection is made to the quality of instruction, level of learning, and the ability for students to have their needs met.

Attitudinal Barriers

Attitudinal barriers refer to the instructor's beliefs or opinions regarding distance education and the potential pitfalls of implementing such a program in their institution (Bashir, 1998; Clark, 1993; Milheim, 2001; Panda & Mishra, 2007; Siaciewena, 1989). These beliefs would include feeling threatened by technology, not trusting distance learning as an educational medium, and fears of inadequacy regarding ability to instruct in the provided format (Pajo & Wallace, 2001; Panda & Mishra, 2007). Support services for students, quality instruction, and technical support for students are all attitudinal factors in the instructor belief structure (Pajo & Wallace, 2001). The beliefs held by instructors at this level have not been demonstrated to be associated with direct, empirical information, but rather emotions or feelings. However, research regarding attitudinal beliefs, as it applies to distance education implementation barriers, has been related to measuring instructors' motivators, both extrinsic and intrinsic (Maguire, 2005; Schifter, 2000). This research suggests that intrinsic motivators carry greater influence in gaining instructor support during initial distance education implementation (Maguire, 2005; Schifter, 2000). In synthesizing the research, the barriers at this level are beliefs held by instructors. Some of these beliefs may be supported by empirical evidence, while

others are personal beliefs; however, with the proper motivation, education, and guaranteed support services for both students and teachers, overcoming the presented barriers can be achieved.

Student Related Barriers

As both the personal and attitudinal barriers include considerations for the quality of instruction by instructors and for students, the next area to be explored includes barriers from the student perspective. There are several types of barriers at the student level to consider including demographics, access, attitude, and communications (Berge, 1998; Berge & Mrozowski, 1999; Githens, 2007; Hillesheim & Galusha, 1998; Knapper, 1988; Sweet, 1986; Tabata & Johnsrud, 2008; Zirkle & Ourand, 1999). These barrier types measure the wide array of potential barriers that may be experienced from the student perspective during the implementation of a distance education or online learning program.

Demographic Considerations

At the demographic level, there are multiple potential barriers that must be considered, including: gender, age, and socioeconomic status (Chen, 1986, 1999; Faith, 1988; Federman, 2013; Rekkedal, 1983; Teo & Lim, 2000; Young, 2000; Zirkle, 2001). Demographic variances, interspersed to both access and attitude barrier types, have the potential to impact multiple facets of the distance learning experience. Both access and attitude barrier types are interspersed in the following sections.

On the basis of gender, research has demonstrated that women have significantly different attitudes and availability in the use of distance education (Bhushan, 2008; Owens, 1998; Pym, 1992). Women also tend to carry additional burdens that their male counterparts do not, such as being a caregiver to a child (Bhushan, 2008; Derrington & Sharratt, 2009; Pym, 1992). In developing countries, this disparity becomes even more pronounced, as women in developing countries have significantly less access to computers and the Internet, and, because of this, there is a greater concern for confidence in technological skills and computer use in those countries (Archibald, Emms, Grundy, & Payne, 2005; Chandrasekhar, 2003; Derbyshire, 2003; Gajjala & Mamidipuni, 2002; Gurumurthy, 2004a, 2004b; Hafkin, 2002; Hafkin & Taggart, 2001; Ng & Mitter, 2005; Ramachandran, 2000).

In the discussion of age as a barrier, research suggests several potential barriers including negative perceptions of older adults, socioeconomic barriers, technical issues, usability, and course design (Githens, 2007; Hale, 1990; Levy, 1996; Russell & Ginsburg, 1999; Safford & Stinton, 2016; Zirkle, 2001). Research has also shown that young people negatively perceive older adults in the educational setting (Githens, 2007; Levy, 1996) and that training environments tend to favor the younger individuals in a workplace (Dychtwald et al., 2004). From a socioeconomic perspective, blue-collar workers, either currently or as a past career, are less likely to participate in higher education initiatives than older adults (Swindell & Thompson, 2000; Timmermann, 1998). Technical problems and distance learning are both

common and frustrating. This is particularly true for older adults entering a distance learning program if they are not as familiar with the technology or have less confidence in their technological abilities (Eliasa, Smith & Barneya, 2012; Hillesheim & Galusha, 1998; Russell & Ginsburg, 1999; VanBervliet, 2004; Zirkle, 2001). From the perspective of usability, multiple studies have investigated the barriers older adults may face (Stoltz-Loike et al., 2005; Swindell & Thompson, 2000; Taylor, Rose, & Wiyono, 2004; VanBiervliet, 2004). Some of these barriers include very specific information, such as font size and line spacing, or the suggestion to move towards audio and video (National Institute on Aging & National Library of Medicine, 2002; Stoltz-Loike, Morrell, & Loike, 2005; Taylor et al., 2004; VanBiervliet, 2004). Research also has demonstrated that older adults prefer a more informal, less hierarchical and linear classroom structure (Sheets, 1992; Taylor et al., 2004).

Socioeconomic status also plays a role in computer access and attitudes towards distance learning (Gladieux & Swail, 1999; Irvin et al., 2010; Timmermann, 1998). Schools on the lower end of the socioeconomic scale, especially those in rural settings, have difficulties hiring and keeping highly qualified instructors (Barbour, 2007; Barley & Brigham, 2008; Beeson & Strange, 2000; Herzog & Pittman, 1995; Holloway, 2002; Lowe, 2006; Monk, 2007). In turn, this lack of access leads to lack of student confidence, reduced student knowledge, and inability to engage in distance learning at the same level as those with different socioeconomic circumstances

(Gladieux & Swail, 1999; Irvin et al., 2010). The digital divide, or the gap between those who readily have access to new technology and those who do not (Compaine, 2001), has been closing and is now to the point where Internet access is less of a problem. As long as the facilities and students have the hardware, they are now capable of entering the distance learning environment.

This discussion demonstrates the importance of demographic level barriers associated with gender, age and socioeconomic status on distance learning. These considerations impact the students' potential to learn and how they engage the distance learning environment, including student access and attitude.

Access Considerations

Distance education has grown year after year since 1999 (United States Department of Education, 2011a & 2011b). This growth is largely associated with the flexibility afforded students in both time and attendance requirements (Epper & Bates, 2001). These benefits are all positive as long as the student has the access and the ability to enter the distance learning environment. Bhushan (2008) reported that females have reduced access to computers and that 57% of those in the study reported feeling their skills were less proficient than their fellow students. Furthermore, women have largely reported being the primary caregiver to the family, which impacts the time available for all types of learning, including distance learning (Bhushan, 2008; Pym, 1992). These access concerns are also seen in the older population when they begin to use distance learning. The older population has

expressed fears their skills are inadequate, they may face the stigma of being the older student in the room, or the course design does not consider their individual learning needs (Dychtwald et al., 2004). In rural, urban, or other low socioeconomic communities, Internet, software, and hardware access may be limited (Hillesheim & Galusha, 1998; Hobbs, 2004; Jimerson, 2006; Keane, de la Varre, Irvin, & Hannum, 2008; Malecki, 2003; Nadelman, 2013).

Similar to the instructors, students also express a concern for access both to technical support and their instructors (Hillesheim & Galusha, 1998; Koohang, 1989). These concerns focus on obtaining help when the student is having technical issues, and is especially prevalent with older students (Githens, 2007; Swindell & Thompson, 2000). With these considerations, students also express concerns about email being a primary point of contact, as it diminishes the social interaction associated with the traditional learning environment (Kirkup & Von Prummer, 1990; Zirkle & Ourand, 1999). For all of these reasons, access considerations have been documented and researched for the purpose of this study.

Attitude Considerations

As with access considerations, attitudes toward skills and technical abilities are a primary concern for many students entering the distance learning environment (Hillesheim & Galusha, 1998; Paris, 2004). There are both positive and negative attitudes to consider. On the positive side, if the distance learning material is of a high quality, students believe that distance learning brings unlimited opportunities

with greater flexibility, collaboration, and engagement (Epper & Bates, 2001). All of these positive attributes are rooted in the idea that high quality distance learning can yield the same learning outcomes as their traditional classroom counterparts, be flexible, and be cost effective (Bernard et al., 2004; Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004; Cooper, 2000; Farinella et al., 2000; McIntosh et al., 1988; Mungania, 2003; Paul, 1989; Russell, 1999; Waxman, Lin, & Georgette, 2003).

There are also negative attitudes to consider. Distance learning students tend to have more insecurity about their ability to learn over their traditional classroom counterparts (Knapper, 1988). Other negative attitudes include feeling intimidated by distance learning, being frustrated with the technical aspects, and not providing effective student learning (Galusha, 1997; Graff, 2003; Hillesheim & Galusha, 1998; Knapper, 1988; Nadelman, 2013). While these may be personally held beliefs and attitudes, the attitudes relating to distance learning must be considered for the purposes of this study.

Communication Considerations

There are several communication considerations to include in the distance learning discussion, such as student feedback, email use, and social interaction (Bray, 1988; Burge, 1990; Kiser, 1999; Loeding & Wynn, 1999; Von Prummer & Rossie, 1988). Students have reported difficulty submitting assignments (Carr, 2000; Githens, 2007) and frustration associated with delayed instructor feedback to their submitted assignments (Galusha, 1997; Hara & Kling, 1999; Hillesheim & Galusha,

1998). This frustration is further exacerbated by email as the primary means of communication for distance learning, which results in lack of timely feedback and reduced social interaction (Hillesheim, 1998; Zirkle & Ourand, 1999). Rosenblum (2000) asserts that instructional design should allow for students to progress through their studies and receive feedback that does not rely on direct instructor intervention or face-to-face contact. Students report the desire for increased social interaction when using a distance learning environment in which they interact with both their peers and instructors (Galusha, 1997; Hillesheim, 1998; Hillesheim & Galusha, 1998; Kirkup & Von Prummer, 1990; Knapper, 1988). These variables are all possible communication barriers when attending an asynchronous, distance learning environment.

Learning Institution Related Barriers

The final set of barriers are related to the learning institution. These barriers are wider-based than the student and instructor barriers, with a high potential of negatively impacting the successful implementation of distance learning programs (Berge, 1998; Berge & Mrozowski, 1999; Berge et al., 2002; Chen, 2009; Cho & Berge, 2002; Lewis, Farris, & Alexander, 1997; Zirkle, 2000, 2004). Cost is the largest factor contributing to negative outcomes in distance learning (Allen & Seaman, 2007; National Postsecondary Education Cooperative, 2004; Waits & Lewis, 2003). The cost to implement distance learning courses is significant because of the capital investment that must be made to enter this market (Hall, 1996; Lewis, Farris,

& Alexander, 1997; Yap, 1996; Zirkle, 2001). These investments include hardware, software, learning management systems, Internet, and program costs (Hall, 1996; Federman, 2013; Lewis, Farris, & Alexander, 1997; Yap, 1996; Zirkle, 2001). Once in place, the institution must continue to fund these investments as a maintenance expense or the program and equipment could fail (Hall, 1996; Lewis, Farris, & Alexander, 1997; Schank, 2000; Zirkle, 2001; Zirkle & Shoemaker, 1999). These costs include the marketing necessary to recruit students to the newly developed program (Arnone, 2001; Zirkle, 2001). Marketing may be particularly difficult if all or part of the population resides in rural areas or areas where access to technology is diminished (Zirkle, 2001).

Once invested, institutions have a new set of variables to address, including training instructors, providing adequate Internet access and networking, developing technical and instructional design support, and developing applicable institutional policies (Berge et al., 2002; Cho & Berge, 2002; Daily, 2000; Hall, 1996; Pajo & Wallace, 2001; Peerani, 2013; Riley & Gallor, 2000; Yap, 1996; Zirkle, 2001). The consistent concern across all sets of barriers is the development and maintenance of technical support at the institutional level (Wagner, 1993; Yap, 1996; Zirkle, 2001; Zirkle & Shoemaker, 1999). Lack of institutional level technical support is a communicated concern and barrier by both instructors and students (Hillesheim & Galusha, 1998; Pajo & Wallace, 2001; Russell & Ginsburg, 1999; Zirkle, 2001). From the cost and capital investment perspective, the institution must also ensure that

the instructors have adequate access to hardware, software and Internet to best prepare them to complete their required tasks (Hall, 1996; Lewis, Farris, & Alexander, 1997; Pajo & Wallace, 2001; Yap, 1996; Zirkle, 2001; Zirkle & Shoemaker, 1999). Once the institution has mitigated all of these aforementioned barriers, it must then provide adequate scheduling for the coursework (Yap, 1996; Zirkle, 2001). Adequate scheduling for distance learning ensures faculty are not overworked, the classes are scheduled as required by various programs, and there are both technical and student support services in place to implement the program (Hall, 1996; Lewis, Farris, & Alexander, 1997; Pajo & Wallace, 2001; Zirkle, 2001).

Conceptual Framework

The introduction and implementation of distance education into the professional training environment of law enforcement in the Commonwealth of Kentucky require the use of a newer and rapidly growing technology, or an innovation. Currently the law enforcement training environment is exploring implementation of distance learning. However, as demonstrated by the lack of distance education being used to allow for officers to maintain their annual training requirement, it is not yet in use (Department of Criminal Justice Training, 2010). The conceptual framework of this study is the theory of Diffusion of Innovations, as researched by Everett Rogers (Rogers, 2003). The Diffusion of Innovations theory covers a wide range of subject areas, cultures, and applications to explain the implementation of innovations. This section explores the process Rogers (2003) uses

to explain a theory involving the characteristics of innovation, and the decision-implementation process. There are five steps to this process including: knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003).

Rogers (2003) defines the decision-implementation process as, “the process through which an individual (or other decision-making unit) passes from gaining initial knowledge of an innovation to forming an attitude toward the innovation, to making a decision to adopt or reject, to implementation of the new idea, and to confirmation of this decision” (p. 168). The first part of this process involves the leader of the organization (i.e., change agent or decision-making unit) becoming apprised of the potential innovation, which represents *knowledge*. The second step is *persuasion* where an opinion is formed about the presented innovation, positive or negative. The third step is *decision* where actions are taken towards making a choice as to whether or not the innovation will be implemented. The fourth step is *implementation* or when the innovation is enacted. The fifth and final stage is *confirmation*, where feedback is sought to confirm the innovation’s success or failure. Modifications or decision reversal are also an option in this final stage. This process is outlined in Table 1.

Table 1

Diffusion of Innovations Theory 5-Step Process for Administrators

Step in the Process	Application to this Study
Knowledge	Administrators becoming aware of distance learning as a viable option (i.e., Introduction sections in this study and white paper).
Persuasion	Administrators form an opinion about distance learning based on the presented information (i.e., review of information contained in this study and white paper, and discussions held with researchers).
Decision	Administrators decide whether or not to implement distance learning.
Implementation	Administrators implement distance learning.
Confirmation	Administrators evaluate the effectiveness of distance learning.

Note. The study contained in this capstone explore the first two steps in the Diffusion of Innovations Theory 5-Step Process, Knowledge and Persuasion.

In the discussion on distance learning (i.e., the innovation) the process would begin with the change agent, such as an instructor or administrator, discovering the effectiveness of distance learning (i.e., *knowledge*). As the change agent explores the learning management system for distance education, they form an opinion as to its merit, either positive or negative (i.e., *persuasion*). From there, the change agent must make the determination (i.e., *decision*) as to whether or not distance learning is a

viable solution or application within their teaching environment. Assuming the determination is to the positive, and the change agent chooses to adopt distance learning, the innovation is put into place (i.e., *implementation*). Lastly, students use the distance learning environment, yield success, enjoy the environment, and report these measures on the end of course evaluation (i.e., *confirmation*). From there, the change agent will decide whether to proceed with the use of distance learning, make alterations, or discontinue use. These characteristics are illustrated in Table 2.

Table 2

Characteristics of the Innovation that Influence the Rate of Adoption

Characteristics of the Innovation	Application to this Study
Relative Advantage – perceived advantage an innovation could provide.	Potential cost savings, flexibility in training, or reduced duplication costs.
Compatibility – how well an innovation fits within the scope of an organization’s mission, core values, and needs.	Potential to meet the training mission held by the Department of Criminal Justice Training, as approved by the Kentucky Law Enforcement Council.
Complexity – perceived intricacy of an innovation.	Potential implementation difficulties for being too complex or financially burdensome.
Trialability – ability to test or experiment with an innovation.	Potential for a trial run or ability to provide demonstrated success (i.e., telecommunications distance learning successes/failures).
Observability – tangible results are readily seen.	The visibility of distance learning in the training environment and other learning environments (i.e., higher education).

Note. The Diffusion of Innovations Theory posits innovations will be more quickly implemented if they are: seen as having a high value, compatible with an organization’s mission and culture, not overly complex, easily tested, and able to provide readily seen results.

Rogers (2003) also defines elements of the innovation that may impact the rate of diffusion. These elements, or attributes, are *relative advantage*, *compatibility*, *complexity*, *trialability*, and *observability*. In examining these attributes, Rogers (2003) asserts that innovation will likely increase in speed if the innovation is believed to be economically sound, superior to the status quo, aligns with established

values and beliefs, is uncomplicated, can be tested, and has a visible result or outcome.

Relative advantage is a measure of the level of improvement, or perceived level of advantage that the innovation yields over the idea it is replacing. Rogers (2003) claims that relative advantage is often measured in economic advantage (money) or status (social status gained). For the innovation of distance learning in the professional training environment, the relative advantage includes money saved by less instructors and student travel, and the potential for reduced duplication costs of workbooks, handouts, etc. With the widespread growth of distance learning, there is a call for its availability within the law enforcement training environment (Leal, 2009).

Compatibility is a measure of how well an innovation fits within the mission, core values, operational processes, and needs of an organization. The culture of an organization or the adopters can be a barrier to the implementation of the innovation (Rogers, 2003). As an innovation is considered, it will need to be determined if and how well the innovation fits within the values of the organization, and whether it contradicts previous policy decisions. Once approved by the Kentucky Law Enforcement Council (KLEC) as a method to meet the annual training requirements, this consideration could include the Department of Criminal Justice Training's Commissioner, Deputy Commissioner, or Director of Training Operations. If there is

contradiction, these individuals need to decide how that contradiction would be addressed. Rogers (2003) coins the term, *authority-innovation decisions*, to describe organizations with a top-down decision-making approach to implementing innovations.

Complexity is the perceived measure of the intricacy of an innovation. Rogers (2005) claims that the higher the level of perceived complexity in an innovation results in slower diffusion of that innovation. Regarding distance learning, if the potential adopters perceive the innovation to be too great a task, too complicated, or too financially burdensome, the odds of its adoption and implementation are substantially decreased. Furthermore, if perceptions of high complexity exist and the innovation is adopted in spite of those perceptions, the rate of diffusion will also be greatly decreased. Potential adopters will be reluctant to use the innovation because of their perception that the innovation is too difficult to implement or use effectively.

Trialability is the ability for an innovation to be tested, experimented with, and used in a trial run. Rogers (2005) asserts that while some innovations are more difficult than others, high levels of trialability can increase the rate of diffusion of innovation because it alleviates uncertainty and provides the potential adopters with an opportunity to learn an innovation's functionality. In relation to distance learning in law enforcement training, trialability would be achieved by designing and

developing an online classroom environment, allowing students to matriculate through the course, receiving evaluations (i.e., *confirmation*), and evaluating the effectiveness of the test run. Rogers (2005) also notes the trial phase allows for potential adopters to make any necessary adjustments or changes to the innovation prior to the full implementation.

Observability “is the degree to which the results of an innovation are visible to others” (Rogers, 2005, p. 258). It is a measure of the tangible results in the context of the society in which the innovation has been implemented. Applied to distance learning in law enforcement, these observations could be made in the hardware and software available to instructors, enrollment numbers, money saved from less travel, higher student enrollment, or improved officer knowledge and performance. Rogers (2005) asserts that the higher the level of observability to the population effected by an innovation, the faster the rate of diffusion is. If potential adopters can readily see the results from the implementation of distance learning, they are more willing to support its use in the training environment.

Research indicates that accepting an innovation in the educational environment has multiple barriers that are teacher related, student related, and technology related (Bashir, 1998; Berge, 1998; Berge & Mrozowski, 1999; Berge et al., 2002; Betts, 1998; Cho & Berge, 2002; Clark, 1993; Dillon & Walsh, 1992; Milheim, 2001; Olcott & Wright, 1995; Siaciewena, 1989; Pajo & Wallace, 2001;

Panda & Mishra, 2007). Identifying potential barriers to the implementation of distance learning in law enforcement training will assist potential adopters and students in the understanding and decision-making that supports successful implementation.

Survey Instrument

The survey instrument used in this study was developed from the Jasinski (2006) RIPPLES Survey of Australian educators (i.e., resources, infrastructure, people, policies, learning, evaluation, and support). Jasinski's (2006) model is a variation on Surry and Ensminger's (2005) RIPPLES model. Surry and Ensminger (2005) developed the RIPPLES model as a means to measure the enabling factors and barriers to the implementation of web-based learning in higher education environments. The Jasinski (2006) and Surry and Ensminger (2005) RIPPLES model seeks to find barriers in innovation implementation by investigating resources, infrastructure, people, policies, learning, evaluation, and support.

For the research purposes of this capstone, the Jasinski (2006) survey instrument was adapted to measure the influences, both positive and negative, that impact the implementation of distance learning for law enforcement officers as a means to maintain police officer certification in rural Kentucky. The modified RIPPLES Survey, provided in Appendix A, is referred to as the Distance Learning Survey throughout this capstone. The Distance Learning Survey was designed to

measure factors that impede the implementation of distance learning, including all facets of the RIPPLES model (i.e., resources, infrastructure, people, policies, learning, evaluation, and support). There were several initial barriers to implementation identified in the Distance Learning Survey, including: money resources, technology infrastructure, leadership, culture, policies, learning outcomes, learner achievement, and training. Using the elements of the RIPPLES Survey, the Distance Learning Survey measured many factors that enable or impede the implementation of distance learning in law enforcement training.

Synopsis of Review of Literature

Through the lens of the theory of Diffusion of Innovations, distance learning was identified as an innovation in the law enforcement training environment. The review of literature on the implementation of distance learning in professional law enforcement training environment revealed the positive and negative aspects related to implementation. Through the course of this research, a notable lack of research specifically associated with distance learning and law enforcement training was identified. This lack of research suggests few law enforcement training agencies are engaging in distance learning, those who engaged in distance learning training are not actively publishing their work, barriers outweigh the enablers in implementation of distance learning as an innovation, or any combination of these factors. For example, if a law enforcement training organization does not have the financial resources to

make the initial capital investment required for distance learning implementation, it could prevent that organization from ever implementing distance learning.

The literature provided several potential barriers to the implementation of distance learning. Some of these include financial investment, technical and design support as well as marketing, and communication concerns. These are divided into like-type categories on the survey instrument which is discussed in Chapter 3 of this capstone. The survey instrument measures some of the barriers to the implementation of distance learning in law enforcement training at the Department of Criminal Justice Training in Richmond, Kentucky. The Diffusion of Innovation provides the conceptual framework for the survey instrument and research.

CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter discusses the various components and procedures used in this research study. Currently the Commonwealth of Kentucky does not offer in-service distance education training that meets the legally mandated annual training requirements for police officers. This study measures some of the barriers to providing distance education to police officers working in rural police departments.

Research Question

This research question leads this study:

What barriers exist from the participant's perspective that prevent the implementation and use of distance education to meet the annual in-service requirements for police officers in rural Kentucky?

Survey Instrument

The Distance Learning Survey was designed to measure factors that impede the implementation of distance learning, including all facets of the RIPPLES model (i.e., resources, infrastructure, people, policies, learning, evaluation, and support). The Distance Learning Survey began with background and demographic information. The demographic data collected included gender, degree level, years of teaching experience, age, subject area, organization financial resources, infrastructure, support,

policies, and culture. These categories were analyzed to determine what correlations, if any, exist among the various groups, enablers, and barriers measured by the survey instrument. Following the demographic questions, the Distance Learning Survey contained seventeen quantitative questions from all facets of the RIPPLES model (i.e., resources, infrastructure, people, policies, learning, evaluation, and support) and four qualitative open-ended questions. The perceived barriers were analyzed with the demographic data to determine if there are any barriers or enablers that correlate with demographic data.

Focus Group Participants

A pre-survey focus group was facilitated in order to narrow the scope of the survey to make it more applicable to distance learning and law enforcement training within the state of Kentucky. Another purpose of the focus group was to identify any additional barriers to distance learning implementation beyond the Jasinski (2006) RIPPLES Survey in Appendix A. Participants in the focus group discussions were obtained through convenience sampling at the Department of Criminal Justice Training (DOCJT) located in Richmond, Kentucky.

Volunteers were solicited by the Supervisor of the Instructional Design Section, at the request of the Assistant Director of the Training Operations Division. The group of instructors represented the major training sections of the Department of Criminal Justice Training, including, but not limited to, Basic Telecommunications,

Advanced Telecommunications, Advanced Individual Training, Basic (Police) Training, Physical Training/Defensive Tactics, and Leadership Training Section.

Survey Participants

In order to address the barriers for the implementation of distance education for police officers' in-service training in rural Kentucky, there were several law enforcement related populations that must be surveyed in order to gain a thorough understanding of what is necessary for change. These populations included law enforcement officers from across the Commonwealth who work in state, federal, county, city, urban, suburban, and rural service areas. This study focused on those who serve in rural law enforcement agencies with county and/or city jurisdiction.

Within Kentucky's 120 counties, there were 412 law enforcement agencies, of which 18 did not meet the definition of rural police department (Kubala, 2013). Therefore, the initial population included 394 law enforcement agencies that met the definition of rural police department. This study focused on rural agencies because of the high density of rural agencies within the state. The regions represented the Area Development Districts currently researched by the Kentucky Regional Economic Analysis Project, which gathers information, such as population, per capita income, employment and industry earnings for each district. These districts were established by the Kentucky Council of Area Development Districts and serve to improve the economy and quality of life for their respective citizens through mutual aid and

the survey instrument was reviewed by a focus group. The focus group rated all questions based upon question clarity, content, grammar, style, and comprehensiveness. Once the focus group reached a group consensus, the results were applied to the survey.

Focus Group Discussion

Prior to the distribution of the Distance Learning Survey to the sample population, one focus group of Law Enforcement Training Instructors was facilitated to narrow the focus, further validate, and resolve any ambiguity of the Distance Learning Survey (Chioncel et al., 2003; Grant & Davis, 1997; Rabiee, 2004; Vogt & Rossie, 2004). Participants of the focus group were volunteers and based upon convenience sampling from the pool of Law Enforcement Training Instructors at the Department of Criminal Justice Training in Richmond, Kentucky.

The focus group began with participants arriving at the mutually agreed upon time and place. Participants were given a blank copy of the Distance Learning Survey draft document. Participants were asked to rate each question based upon question clarity, content, grammar, style, and comprehensiveness (Grant & Davis, 1997). The draft document provided space for each participant to rate the question on a Likert scale (1 = Unacceptable, 2 = Moderately Unacceptable, 3 = Neutral, 4 = Moderately Acceptable, and 5 = Acceptable) (Jones & Hunter, 1995). Questions that received less than a score of “5 = Acceptable” were discussed to determine the reason

for the reduced rating. After grading was completed, participants were encouraged to discuss each question. The questions were modified during the focus group session until by group consensus, the question received a rating of “5=Acceptable.

Sampling Procedure

Data collected via the Distance Learning Survey was collected between August, 2014 and December, 2015. Members of the selected Department of Criminal Justice Training courses were asked to participate via a printed hard copy survey. The survey was distributed by the researcher to all students enrolled in the course in-person at the training location. Participants were given an introduction to the survey, an explanation for the need for demographic information without name or personal identifiers, and an explanation of the voluntary nature of the survey. All surveys were anonymous, with no documentation of officer name. The anonymity was achieved by collecting surveys in a manila folder upon survey collection without any documentation as to who completed the survey or in what order the surveys were completed. The surveys were also not coupled with any rosters that would identify any survey participants. The schedule of training courses that were surveyed is shown in Table 3.

Table 3

Schedule of Training Locations Surveyed

Course Title	Date Surveyed	Course Start	Course End	Course Number	Hours	Training Location
Field Instructor	06.05.2015	06.01.2015	06.05.2015	1201-13J	40	Richmond, KY
Orientation for New Police Chiefs - Sheriffs	06.05.2015	06.01.2015	06.05.2015	0721-15J	40	Richmond, KY
Forensic Mapping	06.05.2015	06.01.2015	06.05.2035	1760-12J	40	Richmond, KY
Legal Update: Penal Code	06.10.2015	06.08.2015	06.10.2015	0890-15J	24	Richmond, KY
Academy of Police Supervision	06.10.2015	06.08.2015	06.26.2015	1115-15J	122	Richmond, KY
Domestic Abuse	06.10.2015	06.08.2015	06.12.2015	1027-14J	40	Richmond, KY
Kentucky Homeland Security	06.10.2015	06.09.2015	06.10.2015	1349-15J	16	Richmond, KY
Robbery - Sexual Assault	06.11.2015	06.08.2015	06.12.2015	1464-14J	40	Louisville, KY
LEN Incident Prep - Murray	06.12.2015	06.09.2015	06.12.2015	1978-15J	40	Murray, KY
Leadership is a Behavior - Richmond	06.19.2015	06.16.2015	06.19.2015	1620-13J	32	Richmond, KY
Criminal Investigations for the First Responder	06.19.2015	06.16.2015	06.19.2015	1914-14JR	40	Richmond, KY
LEN Incident Response NKY	08.26.2015	08.26.2015	08.28.2015	1978-15J	40	Northern KY
Legal Update: Penal Code	08.26.2015	08.24.2015	08.26.2015	0890-15J	24	Richmond, KY
Criminal Investigation II	08.31.2015	08.31.2015	09.04.2015	1975-15J	40	Richmond, KY

The qualitative open-ended and quantitative closed-ended responses from the Distance Learning Survey were compiled to provide potential barrier types. Each answer, including the open-ended responses, were compiled, summarized, analyzed, and discussed based upon the review of the respondent answers.

Information was analyzed through a multi-step process. First, the survey data was checked for completeness. Completeness checking was used to account for all samples collected. Surveys with at least one question answered and a signed consent form were included in survey results. The surveys that were returned completely blank were documented as participants *refusing to participate*. Those questions that were not answered were documented as *unanswered*. The surveys collected that were identified as not being from a rural agency were excluded for being *outside the scope* of this study. The open-ended questions were analyzed for common themes, barrier occurrence, or areas that might not otherwise be measured in the survey instrument. All submitted surveys were compiled, including those surveys with incomplete responses to questions. Next, each question was examined for frequency of question response levels. An exploratory factor analysis was conducted to explore the participant responses. Once all data was compiled and analyzed, a white paper was completed and provided to the executive leadership staff of the Department of Criminal Justice Training (Appendix I). The white paper summarized the research,

findings, and discussion points to consider in moving towards the implementation of distance education in law enforcement training.

Validity and Reliability

In measuring the validity and reliability of this study, the internal and external threats to validity were examined. The identified potential threats to internal validity in this study included the experimenter effect, selection bias, and instrumentation. The experimenter effect was a potential threat to internal validity because many of those individuals to be sampled in the population may have had an existing professional relationship with the researcher (Kintz, Delprato, Mettee, Persons, & Schappe, 1965). This potential threat was reduced by providing the survey in a group setting, allowing for the participation to be anonymized. Selection bias was also a potential threat to internal validity specifically as it pertains to the focus group discussion (Creswell, 2014). The sampling method was convenience sampling to prevent any biased or preferential treatment from the researcher to the sample population. The third threat to internal validity could potentially be instrumentation. The instrument had some questions reworded and some questions were removed from its original format. These changes have been done to make the questions applicable to the sample population and in an effort to prevent sample fatigue or participants being overwhelmed by the length of the survey. To lessen the threat of

instrumentation validity, a focus group was conducted to clarify questions, wording, and content applicability.

Another potential external threat to validity included over-generalization of the findings to the one that was studied (Creswell, 2014). This over-generalization is minimized through clear articulation that the proposed study is directly related to distance learning in the law enforcement training environment for maintaining annual training requirements in rural Kentucky.

Summary

The RIPPLES survey was selected as the base instrument for this capstone. The RIPPLES survey was adapted for content applicability, question clarity as well as shortening the overall length. Prior to the distribution of the survey instrument, Appendix A, a focus group was conducted to ensure clarity and ease of use of the Distance Learning Survey. This focus group also provided a platform for review of the questions, allowing for potential additions, deletions, or changes to the survey instrument to ensure reliability and accuracy. In addition, the removal of several questions from the original instrument contributed to increased reliability as it reduced the threat of survey fatigue for the participants. The survey instrument measures demographic data, and uses both Likert-type and open-ended questions. The information was collected from all willing participants in the selected Department of Criminal Justice Training courses offered during the sampling

window. The survey was distributed at the annual in-service training location by the researcher. All surveys were anonymous, with no documentation of officer name.

CHAPTER 4 FINDINGS

The purpose of this study was to investigate the barriers to the implementation of distance education as a means through which police officers can meet the annual training requirements within rural Kentucky. The survey instrument used for this study was designed specifically to measure barriers to implementation of distance education for that purpose.

Focus Group

The researcher reviewed the original survey instrument for relevance and correct verbiage with respect to the intended sample population. Some questions were removed from the survey due to their repetitious nature and to avoid participant fatigue. A focus group of ten participants, gathered through the Department of Criminal Justice Training (DOCJT), were used to narrow the scope of the survey, to make it more applicable to distance learning and law enforcement training within the state of Kentucky.

The focus group was assembled by soliciting voluntary participation by the Department of Criminal Justice Training's Law Enforcement Training Instructors. The administrative scheduling of the focus group, including participant requests, time, and location, were completed by the Supervisor of DOCJT's Instructional Design Section under the direct supervisor of the Assistant Director of Training

Operations. The group convened on November 13, 2014 on DOCJT's campus in Richmond, Kentucky. Instructors taught in a variety of subjects and instructional areas. The meeting location was an executive board room, with a single large table centered and running the length of the room surrounded by leather office chairs.

Every member of the focus group who agreed to participate was provided with a consent form. Each member was asked to review the consent form, ask any questions they may have, and sign. All members agreed to participate by signing the consent forms and returning them to the researcher. The focus group members were then provided a blank copy of the survey instrument and provided detailed instructions as to the purpose and function focus group. The group was asked to read through the questions, scoring each question on a 1 through 5 scale, with 1 representing the question being inapplicable, confusing, and irrelevant, and 5 representing an applicable, easily understood, and relevant question in relation to the research. This first round was completed on an individual basis, with each instructor documenting their scores on their copy of the survey instrument.

Once complete, the researcher facilitated a discussion, where all participants went around the table sharing their scores. For any question that received less than a 5 score from any participant, the researcher facilitated a discussion to draw out why the question did not completely meet that instructor's individual standards. The

discussion included questions regarding clarity, such as what an officer would interpret the word 'tradition' to mean, and whether or not such words should be defined further. The results from the focus group included a need to add examples to some questions to provide potential respondents ideas as to what might be sought in the question. It was agreed by the group that the questions were of high quality, worded well, and relevant; however, some may be broad and, therefore, misunderstood. At the conclusion of the discussion, all instructors were thanked for their participation, and the group was dismissed. Accordingly, the researcher added examples, which were provided by the focus group, to the questions that might require further clarification. The resulting survey can be found in Appendix A.

Survey

Survey distribution occurred between June 5, 2015 and August 31, 2015. The survey was distributed to DOCJT in-service training class participants from around the state. The classes that were surveyed are provided in Table 4.

Table 4

Survey Administration Data

Course Title	Date Surveyed	Total Completed Surveys	Number Excluded	Total	No. Choosing Not to Participate
Field Instructor	06.05.2015	12	9	3	1
Orientation for New Police Chiefs – Sheriffs	06.05.2015	21	8	13	0
Forensic Mapping	06.05.2015	18	9	9	0
Legal Update: Penal Code	06.10.2015	31	8	23	2
Academy of Police Supervision	06.10.2015	19	6	13	1
Domestic Abuse	06.10.2015	27	6	21	0
Kentucky Homeland Security	06.10.2015	23	8	15	1
Robbery – Sexual Assault	06.11.2015	30	13	17	2
LEN Incident Prep - Murray	06.12.2015	25	9	16	4
Leadership is a Behavior	06.19.2015	15	8	7	3
Criminal Investigations for the First Responder	06.19.2015	23	9	14	0
LEN Incident Response - NKY	08.26.2015	34	13	21	1
Legal Update – Penal Code	08.26.2015	30	8	22	0
Criminal Investigations II	08.31.2015	17	4	13	1
	Totals:	325	118	207	16

Table 4 provides the sampling schedule and response rates obtained throughout the course of this study. The survey was administered 14 times at various training locations around the state. On the dates provided, the survey was administered within the first two hours of instruction. Each participant was provided with the Informed Consent document. Upon agreeing to the contents of the Informed Consent, the participants were provided a paper copy of the Distance Learning Survey. No time limit or constraints were attached to survey completion. A total of 341 surveys were administered. Of the 341 administered surveys, 325 agreed to the information provided in the consent form and 16 chose not to participate in the study, providing the study with an overall 95.31% participant completion rate.

Of the 325 submitted surveys, 118 were excluded for not matching the target population for this study, or in other words, 118 surveys were excluded because those participants work in non-rural, state, or federal agencies. In excluding 118 surveys, the remaining 207 surveys were coded with the scales provided in Table 5.

Table 5

Distance Learning Survey Quantitative Question Code Values

1. Strongly Agree	1. High
2. Agree	2. Above Average
3. Neutral	3. Average
4. Disagree	4. Below Average
5. Strongly Disagree	5. Low
	6. Don't Know/Unsure
Used in Distance Learning Sections: Resources, Infrastructure, People, Policies,	Used in Distance Learning Sections: Learning, Evaluation, Support

In other words, questions where participants answered Strongly Agree to Strongly Disagree were given numerical categories 1-5, and questions where participants answered High to Don't Know/Unsure were given numerical categories 1-6.

Three of the four qualitative questions were reviewed and overarching themes were identified for each question. The overarching themes for each question are provided in Table 6.

Table 6

Distance Learning Survey Qualitative Question Overarching Themes

Question 1	Question 2	Question 3
*Resources	*Reduced Travel	*None/No Response
*Other	*Cost Savings	*Improve Course Design
*Computer Skills	*Other	*Acquire/Distribute Resources
*Time Away From Calls	*Convenience	*Increase Course Availability
*None/No Response	*Enhanced Training Opportunities	*Other
*Course Availability	*Flexibility	*Ensure Time Allotment
*Manpower/Shift Coverage	*Resources Already in Place	*Unknown/Not Sure
	*None/No Response	*Hire/Train Instructors
		*Would Not Implement
		*Incentivize Distance Learning

For Open Ended Question 4, coding was not possible due to responses being too dissimilar or participant's choosing not to share anything further. Of the 110 responses, 62 participants indicated there was nothing further they wished to share. All responses are available in Appendices E, F, G, and H with answers ranging from words of praise for implementing distance learning to apprehension at distance learning's effectiveness.

Demographic Results

The demographic data collected for this survey was Gender, Highest Degree Level Achieved, Prior Online Coursework and how many, Years Certified as a Law Enforcement Officer, Age, Ethnicity, Race, Bluegrass Area Development District, and Agency Type. All coded surveys for this study included demographic data for each participant. The participants proved to largely identify as male (97.58%) and white (99.03%).

Bluegrass Area Development District

Participants were asked to provide their county of jurisdiction. Their responses were used to determine whether or not their agency fits into the rural scope of this study, and their agency's assigned Bluegrass Area Development District as provided by the Kentucky Regional Analysis Project (Kentucky Regional Analysis Project, 2014). The participants' Bluegrass Area Development District were coded as Purchase = 1; Pennyrile = 2; Green River = 3; Barren River = 4; Lincoln Trail = 5; KIPDA = 6; Northern Kentucky = 7; Buffalo Trace = 8; Gateway = 9; FIVCO = 10; Big Sandy = 11; Kentucky River = 12; Cumberland Valley = 13; Lake Cumberland = 14; and Bluegrass = 15. Table 7 illustrates the responses from each Bluegrass Area Development District.

Table 7

Number of Participants by Development District

Bluegrass Area Development District	District Number	Number of Participants
Purchase	1	19
Pennyrile	2	9
Green River	3	8
Barren River	4	10
Lincoln Trail	5	16
KIPDA	6	21
Northern Kentucky	7	27
Buffalo Trace	8	3
Gateway	9	8
FIVCO	10	4
Big Sandy	11	15
Kentucky River	12	7
Cumberland Valley	13	19
Lake Cumberland	14	14
Bluegrass	15	27

Agency Type

The agency type was coded as Police = 1; Sheriff = 2; Constable = 3; State Agency = 4; K12 School = 5; and University = 6. With the focus of this study focusing on *rural* agencies, all participants from the State Agency, K12 School, and University categories were excluded for not meeting the scope of this study (Romesburg, 2007). Table 8 illustrates the response by agency type.

Table 8

Agency Type of Survey Respondents

Agency Type	Count
Police	131
Sheriff	75
Constable	1
State Agency	0
K12 School	0
University	0

Gender, Age, Race & Ethnicity

Gender identification was coded as either Male or Female. Those who identified as male were coded as 1, and those who identified as female were coded as 2. Table 9 illustrates the response by gender.

Table 9

Gender of Survey Respondents

Gender	Count
Male	202
Female	5

Participants were asked to provide their age. It should be noted that in Kentucky the earliest age an individual can become a law enforcement officer is 21 years of age, as per Kentucky Revised Statute 15.382 (2013g). The answers were grouped in 10 year intervals beginning with 0. Table 10 illustrates the responses by age.

Table 10

Age of Survey Respondents

Age	Count
21-25	10
26-30	20
31-35	20
36-40	25
41-45	35
46-50	39
51-55	33
56-60	11
61-65	4
66-70	4
70 or more	1

Race was coded as American Indian or Alaskan Native = 1, Asian = 2, Black or African American = 3, Native Hawaiian or Pacific Islander = 4, and White = 5.

Table 11 illustrates the response by degree Race.

Table 11

Race of Survey Respondents

Race	Count
American Indian or Alaskan Native (1)	0
Asian (2)	0
Black or African American (3)	2
Native Hawaiian or Pacific Islander (4)	0
White (5)	204

Ethnicity was coded as Hispanic or Latino = 1 and Not Hispanic or Latino =

2. Table 12 illustrates the response by Ethnicity.

Table 12

Ethnicity of Survey Respondents

Ethnicity	Count
Hispanic or Latino (1)	1
Not Hispanic or Latino (2)	204

Years Certified

Participants were asked to provide the total number of years certified as a law enforcement officer. The answers were grouped in 10 year intervals beginning with

0. Table 13 illustrates the response for years certified.

Table 13

Number of Years Certified of Survey Respondents

Years Certified	Count
0 to 9	57
10 to 19	76
20 to 29	58
30 to 39	10
40 or more	3

Highest Degree Level

The highest level of degree achievement was coded as High School = 1, Associate Degree = 2, Bachelor = 3, Master = 4, Specialist = 5, and Doctor = 6.

Table 14 illustrates the response by degree achievement level.

Table 14

Highest Degree Achievement of Survey Respondents

Highest Achievement Level	Count
High School	134
Associate	3
Bachelor	56
Master	10
Specialist	3
Doctorate	0

Prior Online Coursework

Prior online coursework experience was coded as either Yes or No. Those who identified as Yes were coded as 1, and those who identified as No were coded as 2. Table 15 illustrates the response for prior online coursework experience.

Table 15

Prior Online Coursework of Survey Respondents

Prior Online Coursework	Count
Yes	179
No	28

Amount of Prior Online Coursework

Prior online coursework experience was coded as either Yes or No in the previous question. Those who answered this question as either Yes were asked to provide the number of online courses they had taken in the past. The answers were grouped in 10 course intervals beginning with 0. Table 16 illustrates the response for prior online coursework experience.

Table 16

Number of Prior Online Courses of Survey Respondents

How Many?	Count
0 to 9	133
10 to 19	44
20 to 29	15
30 to 39	3
40 or more	1

Exploratory Factor Analysis

The data analysis began by coding all participant responses so they could be run in SPSS. Once coded, an Exploratory Factor Analysis was performed. The Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity of the exploratory factor analyses was .709, meaning the sample size was adequate for the scope of this study. The scree plot for the data is provided in Figure 2. The exploratory factor analysis yielded two factors that, when combined, account for 26.813% of the total variance.

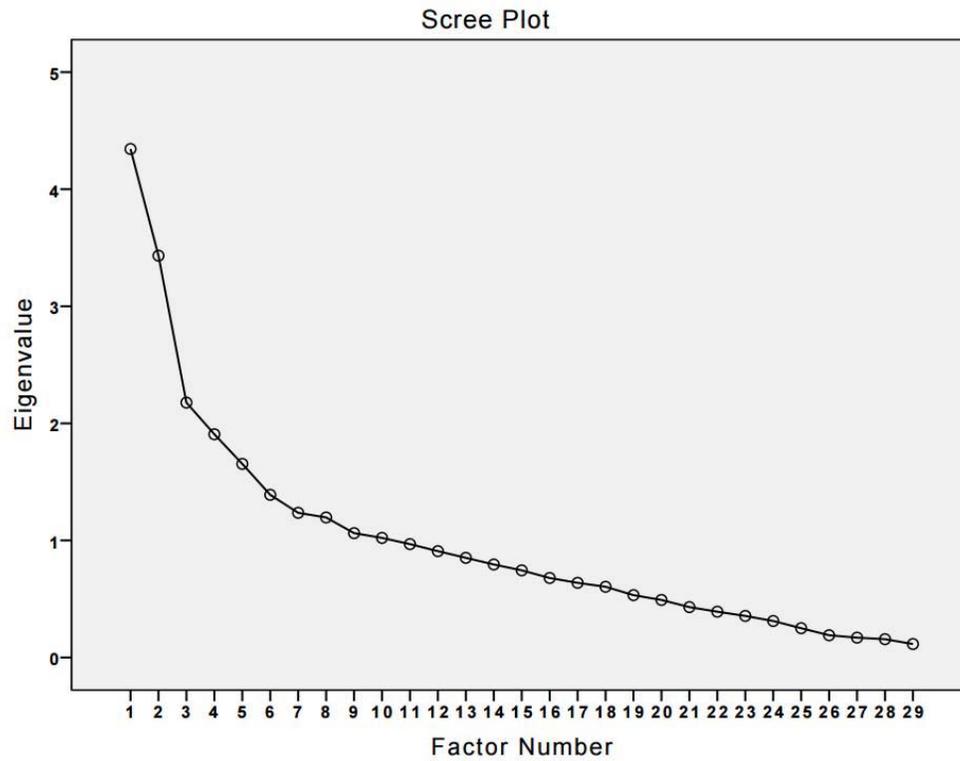


Figure 2. Scree Plot. Scree plot from Exploratory Factor Analysis with dataset developed from the Distance Learning Survey within this study.

Quantitative Results: Barriers

The exploratory factor analysis, as illustrated in Figure 2 Scree Plot above, identified two significant factors, or potential barriers, in implementing distance learning for law enforcement training. Each of the two factors had eight primary components.

Factor 1

The first factor consisted of eight components and accounts for 14.977% of the total variance. The components within the first factor are illustrated in Table 17.

Table 17

Factor 1 Components

Question Number	Factor Component	Component Value	Mean
15	Working Computer	0.773	2.9
16	Software	0.756	2.88
14	Internet	0.704	2.75
20	Written/Unwritten Rules	0.646	3.49
21	Daily Practices	0.568	3.08
22	Tradition	0.54	3.35
13	Money	0.528	2.74
19	Coworker Attitudes	0.45	3.01

Factor 1 consists of eight components. The first component was: Access to a working computer with sufficient operating capabilities (i.e., hardware) is a barrier to the use of distance learning (DLS #15). The mean response was 2.9 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree. The second component was: Access to software (e.g., video files, PowerPoint files) used through distance learning is a barrier to the use of distance learning (DLS #16). The mean response was 2.88 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree. The third component was: Access to the Internet with sufficient download speed is a barrier to the use of distance learning (DLS #14). The mean

response was 2.75 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree. The fourth component was: The written and unwritten rules of your organization presents a barrier to the implementation of distance learning (DLS #20)? The mean response was 3.49 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree. The fifth component was: The daily practices of your organization presents a barrier to the implementation of distance learning (DLS #21)? The mean response was 3.08 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree. The sixth component was: The traditions of your organization presents a barrier to the implementation of distance learning (DLS #22)? The mean response was 3.35 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree. The seventh component was: Financial resources (money) are a barrier to the use of distance learning (DLS #13). The mean response was 2.74 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree. The final component of Factor 1 was: The attitudes of your coworkers presents a barrier to the implementation of distance learning (DLS #19)? The mean response was 3.01 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree.

Factor 2

The second factor consisted of eight components and accounts for 11.835% of the total variance. The components within the second factor are illustrated in Table 18.

Table 18

Factor 2 Components

Question Number	Factor Component	Component Value	Mean
27	Training Support	0.722	2.37
28	Technical Support	0.684	2.89
29	Instructional Support	0.623	2.4
25	Course Material	0.584	2.81
17	Accomplish Goals	0.505	1.9
18	Improve Skills	0.48	2.11
23	Learner Needs	0.465	3.1
24	Organizational Commitment	0.447	2.86

Factor 2 had eight components. The first component, measured in Distance Learning Survey question 27, was: How would you rate the training support available? (i.e., DOCJT training, department sponsored training). The mean response was 2.37 on a rating scale of 1-6, with 1 being High, 5 being Low, and 6 being Don't Know/Unsure. The second component was: How would you rate the technical support available? (i.e., desktop and LMS support) (DLS #28). The mean response was 2.89 on a rating scale of 1-6, with 1 being High, 5 being Low, and 6 being Don't Know/Unsure. The third component was: How would you rate the instructional

support available? (DLS #29) The mean response was 2.40 on a rating scale of 1-6, with 1 being High, 5 being Low, and 6 being Don't Know/Unsure. The fourth component was: To what extent do you think the material in the course can be achieved by distance learning? (DLS #25) The mean response was 2.81 on a rating scale of 1-6, with 1 being High, 5 being Low, and 6 being Don't Know/Unsure. The fifth component was: Distance learning can help officers accomplish their professional goals. (DLS #17) The mean response was 1.90 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree. The sixth component was: Distance learning can improve officer skills (DLS #18). The mean response was 2.11 on a rating scale of 1-5, with 1 being Strongly Agree and 5 being Strongly Disagree. The seventh component was: To what extent do you think the needs of learners are considered when selecting, using, and training for distance learning? (DLS #23) The mean response was 3.10 on a rating scale of 1-6, with 1 being High, 5 being Low, and 6 being Don't Know/Unsure. The final component of Factor 2 was: How would you rate the commitment of your organization to using high quality distance learning? (DLS #24) The mean response was 2.86 on a rating scale of 1-6, with 1 being High, 5 being Low, and 6 being Don't Know/Unsure.

No other factors accounted significantly to the variance in participant ratings. This is notable because, based on the exploratory factor analysis, participant response was similar across the board irrespective of demographic data.

Qualitative Results: Barriers

The Distance Learning Survey contained four open response questions which allowed participants to report on factors that may have not been included in the prior survey sections. Those questions were as follows:

1. In your opinion, what are the two biggest barriers that prevent people from using distance learning at your agency?
2. In your opinion, what are the two main reasons that make it easier for people to use distance learning at your agency?
3. If you were in charge of putting distance learning into action, and you had unlimited resources, how would you do it?
4. Is there anything else you would like to share?

The answers for these questions were analyzed for overarching themes. The participants who responded to quantitative questions, but chose to leave the all of the qualitative question blank have been excluded from the qualitative analysis.

Question 1

Question 1 in the qualitative section of the Distance Learning Survey read as follows: In your opinion, what are the two biggest barriers that prevent people from using distance learning at your agency? As provided in Table 19, Time and Resources were deemed to be the two largest barriers. Specifically, Time accounted for both Time on shift to complete the training activities as well as Time away from

family or other obligations. Resources included computers, equipment, money, or other logistical needs that must be met to ensure training completion. A complete list of responses can be found in Appendix E.

Table 19

Qualitative Question 1 Responses

Theme	Count	Percentage
Time	35	24.65%
Resources	25	17.61%
Other	24	16.90%
Computer Skills	21	14.79%
Time Away From Calls	15	10.56%
None/No Response	11	7.75%
Course Availability	7	4.93%
Manpower/Shift Coverage	4	2.82%

Question 2

Question 2 in the qualitative section of the Distance Learning Survey read as follows: In your opinion, what are the two main reasons that make it easier for people to use distance learning at your agency? As provided in Table 20, Reduced Travel and Cost Savings were deemed to be the two largest motivators. Specifically, Reduced Travel referred to the requirement that officers attend training at one of the designated training sites around the state, as provided by the Department of Criminal Justice Training. Cost Savings, which included travel expenses, hotel costs, gasoline costs, food costs, and per diem costs all comprised the obvious cost savings that the

use of distance learning could provide. A complete list of responses can be found in Appendix F.

Table 20

Qualitative Question 2 Responses

Theme	Count	Percentage
Reduced Travel	26	18.84%
Cost Savings	24	17.39%
Other	15	10.87%
Convenience	14	10.14%
Enhanced Training Opportunities	7	5.07%
Flexibility	31	22.46%
Resources Already in Place	5	3.62%
None/No Response	16	11.59%

Question 3

Question 3 in the qualitative section of the Distance Learning Survey read as follows: If you were in charge of putting distance learning into action, and you had unlimited resources, how would you do it? As shown in Table 21, most participants elected not to respond to this question. Those who did respond indicated they would improve course design to make it more engaging, acquire and distribute resources (i.e., computers, Internet), and increase overall course availability. A complete list of responses can be found in Appendix G.

Table 21

Qualitative Question 3 Responses

Theme	Count	Percentage
None/No Response	27	24.32%
Improve Course Design	18	16.22%
Acquire/Distribute Resources	15	13.51%
Increase Course Availability	15	13.51%
Other	13	11.71%
Ensure Time Allotment	6	5.41%
Unknown/Not Sure	6	5.41%
Hire/Train Instructors	6	5.41%
Would Not Implement	4	3.60%
Incentivize Distance Learning	1	0.90%

Question 4

Question 4 in the qualitative section of the Distance Learning Survey read as follows: Is there anything else you would like to share? As shown in Table 22, the difficulty in analyzing this question for themes is demonstrated. Of the 110 responses, 50 participants indicated they had nothing further to provide or left the question blank. Answers range from putting all classes online to incentivizing training more than it already is to not implementing distance learning in any form. A complete list of responses can be found in Appendix H.

Table 22

Qualitative Question 4 Responses

Theme	Count	Percentage
No	26	52.00%
None/No Response	24	48.00%

Summary of Analyses

An exploratory factor analysis was used on the survey data, yielding significant results. Additionally, the open-ended questions were analyzed for overall themes. The open-ended questions provided results similar to those achieved in the exploratory factor analysis.

The exploratory factor analysis found two primary factors, each consisting of eight components. Those two factors accounted for 26.813% of the total variance in the data. The first factor included the following components: working computer, software, Internet, written/unwritten rules, daily practices, tradition, money, and coworker attitudes. The second factor included the following components: training support, technical support, instructional support, course material, accomplish goals, improve skills, learner needs, and organizational commitment.

The open-ended questions analyzed for themes found similar results to those in the exploratory factor analysis. Open-ended question #1 identified the following potential barriers: time, resources, other, computer skills, time away from calls, none/no response, course availability, and manpower/shift coverage. Open-ended

question #2 identified the following potential benefits: reduced travel, cost savings, other, convenience, enhanced training opportunities, flexibility, resources already in place, and none/no response. Open-ended question #3 explored how participants would implement distance learning if they had unlimited resources, and found the following: none/no response, improve course design, acquire/distribute resources, increase course availability, other, ensure time allotment, unknown/not sure, hire/train instructors, would not implement, and incentivize distance learning. Open-ended question #4 asked participants if there were anything else they would like to share, and over half indicated they had nothing further to share or left the question blank.

CHAPTER 5 IMPLICATIONS

Summary of Study

The Commonwealth of Kentucky requires police officers to receive 40 hours of training annually, most of which is administrated by the Department of Criminal Justice Training located in Richmond, Kentucky (Kentucky Revised Statute, 2013e, 2013f). The Department of Criminal Justice Training supports all agencies within the state; 96% (n=394) of which are considered rural as defined by the U.S. Department of Justice (Romesberg, 2007). The large proportion of rural agencies is significant within this study as 89.5% of the police agencies in the United States are considered rural (Romesburg, 2007).

Many researchers have explored the implementation and effectiveness of distance education (Berge, 1995; Donovan, 2009; Rushforth, 2011; Schmeekle, 2003). However, at present, there are very few studies that explore the implementation of distance education in the law enforcement training environment. The purpose of this study is to investigate the barriers to the implementation of distance education as a means through which police officers can meet the annual training requirements within rural Kentucky. The survey instrument used for this study was designed specifically to measure barriers to this implementation. The survey instrument was distributed to police officers between August 2014 and

December of 2015 at various training locations around the state of Kentucky. Then an exploratory factor analysis was conducted on the quantitative responses to identify factors contributing to barriers in implementing distance education. Additionally, the open-ended questions were analyzed to identify emerging themes.

Summary of Findings

Overall, every characteristic from the Diffusion of Innovations theory is present in this study. Rogers (2003) Diffusion of Innovations theory has five characteristics of the innovation. Those steps are knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003). This study demonstrates that administrators and officers have *knowledge* of distance learning as a training mechanism and a *persuasion*, or opinion, about its efficacy. This research and subsequent discussions represent the *decision* step, where administrators will move forward in deciding whether or not the innovation will be implemented. These steps being present throughout the study indicate the innovation, distance learning, is ready to diffuse, and the target populations are ready to diffuse it.

The exploratory factor analysis identified two primary factors, each of which was comprised of eight components. The first factor was comprised of the following components: Working Computer, Software, Internet, Written/Unwritten Rules, Daily Practices, Tradition, Money, and Coworker Attitudes. This factor is largely related to the resources, environment, and policies that exist at an officer's home agency, and

addressed the *compatibility* of this innovation. The second factor was comprised of the following components: Training Support, Technical Support, Instructional Support, Course Material, Accomplish Goals, Improve Skills, Learner Needs, and Organizational Commitment. This factor is largely related to the support, instruction, and material provided by the course instructors and training agency, and addressed the *complexity* and *trialibility* of this innovation.

Participants were given four open ended questions in which they could identify the two biggest barriers in implementing distance education for Kentucky's law enforcement officers, the two main reasons distance education would make training easier, how the participant would implement distance education with unlimited resources, and if there were anything else they would like to share. "Time" was identified as the two biggest barriers. This referred to both time to complete training and time away from calls (combined, 35.21%). The second largest barrier identified was resources, such as computers and Internet (17.61%).

The two most identified benefits to implementing distance learning were Reduced Travel (18.84%) and Cost Savings (17.39%), which speaks to the *relative advantage* of implementing distance education. With unlimited resources, participants said they would Improve Course Design (16.22%), Acquire/Distribute Resources (13.51%), and Increase Course Availability (13.51%), which speaks to this innovation's *complexity*, *compatibility*, and *observability*.

Several points of the quantitative and qualitative responses align. Factor 1, which is largely concerned with a department's resources, are discussed in the qualitative responses of both Question 1 (17.61%) and Question 3 (13.51%). In addition, Factor 2, which largely speaks to support, instruction, and material provided by the course instructors and training agency, was identified in Qualitative Question 3 through Course Design Improvement (16.22%) and Increasing Course Availability (13.51%). This connection between quantitative and qualitative responses strengthens the validity of the findings.

The survey instrument collected demographic data, as well. This included the following:

1. Gender
2. Highest degree level
3. Have you taken online courses before?
4. How many?
5. Years certified as Law Enforcement Officer/Instructor
6. Age
7. Ethnicity
8. Race:
9. County of Jurisdiction

It is of note that the demographic data was not tied to either factor or their respective components in the exploratory factor analysis. In other words, regardless of gender, age, education, experience, ethnicity, race, or part of Kentucky, the factors that could prove to be barriers in implementing distance education for law enforcement officers in Kentucky are similar. This lack of connection made to demographics is likely related to the sample population being largely male (97.58%) and white (99.03%).

Limitations

Several limitations arose in completing this study. Online limitation was distance and travel time among the various locations where the training classes are held. The time spent traveling was a limitation because it caused schedule conflicts. For example, the Department of Criminal Justice Training is housed in Richmond, Kentucky and most classes are scheduled there. However, there are also 21 training sites strategically located around the state where DOCJT Instructors travel to in order to conduct training sessions. On the day when the survey was administered in Murray, Kentucky, it could not be administered to multiple classes in Richmond, Kentucky, as there was a 4-hour, one-way travel time. With classes typically being scheduled 8 a.m. to 4:30 p.m., multiple classes offered in Richmond were not able to be surveyed because there was not sufficient travel time during training hours to meet with all scheduled classes at the two locations. However, the trade-off allowed for this study to include surveys from the western Kentucky officers.

Another limitation was audience and participant composition. The surveys were administered at each training session to the entire student roster. Students who were not in the intended target audience had to be removed from the sample prior to data analysis. As a result, each survey was reviewed and responses from any individual from a non-rural agency, university, state agency or K12 agency were removed. In addition, there was the possibility that a student completed the survey

more than once because they had been enrolled in multiple classes which created the potential for coding error. The potential for coding error was avoided by coding all responses, then moving those chosen for the sample population to a separate spreadsheet for data analysis.

A final limitation was the generalizability of the data to the wider population of law enforcement throughout the United States. This study is focused on agencies which fit the definition of rural, with 50 or less officers, or 50,000 people or less in their service population. Within the United States, this study could be applied to approximately 89.5% of existing law enforcement agencies (Romesburg, 2007). Accordingly, this study could not be generalized to the remaining 10.5% of the agencies. Future research could address this gap in the literature by performing a similar study in suburban and urban area law enforcement agencies.

Recommendations

This section of Chapter 5 is divided into four subsections: recommendations for future research, recommendations for instructors, recommendations for training administrators, and recommendations for law enforcement agency administrators. All sections provide suggestions to assist future implementation of distance education for rural law enforcement agencies in Kentucky.

Recommendations for Future Research

This study covers an existing gap in literature; however, it can be expanded in several ways. A potential future research option for expanding on this study could explore the participants' perceptions of taking the courses and course types being taught by DOCJT. It was indicated in the open response questions that skills type classes (e.g., firearms) might not be as effective in an online environment. Exploring the root of that perception would assist DOCJT and other similar training organizations to make informed decisions for their constituency. This study was focused on law enforcement officers in the rural law enforcement agencies of Kentucky. Expanding the sample size to explore the rural law enforcement populations of other states, especially those without a centralized training agency, could yield other potential barriers. In addition, a comparative study could be done within the state of Kentucky to see how law enforcement officers of various non-rural agency types (i.e., police, sheriff, constable, university, state, etc.) would respond to the same questions.

Recommendations for Instructors

Instructors should consider the intention for their course and how the material is being presented. One barrier which emerged from this study was a concern for improving instructional design. Consequently, instructors should work towards providing the highest quality online learning environment. There should also be

sufficient courses available to meet the needs of officers seeking knowledge, skills, and abilities to move through their daily activities and up the promotional ladder.

The training will need to consider the younger generations' preference towards technologically infused training and educational environments (McCurry & Martins, 2010; Montenery, Walker, Sorensen, Thompson, Kirklin, White, & Ross, 2013). This is especially true as many of the young officers will need to receive advanced training to obtain the skills necessary to complete the tasks of their position and prepare for advancement within their organizations (Glasgow and Lepatski, 2012).

Recommendations for Training Administrators

Training administrators, such as those within the Department of Criminal Justice Training, have a dual role in supporting both the instructors within their agency as well as the law enforcement agencies around the state. These dual responsibilities increase the importance of training administrators to be aware of the identified barriers and actively work to reduce them for both instructors and agencies.

The first recommendation is increased support, staff, and resources for instructional design. This study identified course availability, instructional/course design, training support, and instructional support as potential barriers. To minimize these barriers, sufficient staff and resources need to be in place to move forward with a comprehensive distance education program. Instructors who teach in distance learning need time dedicated to their teaching activities, which should be the same as

the time allotted for a traditional course. DOCJT should also consider expanding the Instructional Design team to ensure there is sufficient support for the instructors and students as course offerings increase. This resource set would also support traditionally taught classes exploring alternative presentation methods, such as facilitation, group projects, and individual presentations.

Another recommendation for future research would be exploring how distance education can benefit other states' police training agencies and how it should be implemented at their home agency. This study identified Time and Time Away From Calls as major barriers to the implementation of distance education. It is important that Law Enforcement Agency Administrators understand that distance education is a viable alternative for training; however, the participants must be allotted the time and space complete it. Officers should not be taking calls for service while completing online training. Online training should be treated the same as any training course that would be taken at DOCJT, with officers having time away from calls for service and other administrative tasks. Agencies should also ensure they have the appropriate resources (i.e., computers, Internet) to facilitate successful distance education experiences at their home agency.

Recommendations for Law Enforcement Agency Administrators

The first recommendation for law enforcement agency administrators is to consider implementing distance learning into the training of their officers. The

relative advantage for agencies is significant, and includes cost savings, reduced travel time, reduced time away from the agency, and an enhanced learning environment. This study revealed that officers were concerned about taking calls while trying to complete training and having the appropriate resources to complete the training in a timely, effective manner. To minimize this issue, administrators will need to train those tasked with conducting training to ensure officers are receiving the dedicated time away from taking calls for service.

The second recommendation is to ensure that officers have both the time and quiet space away from calls and administrative tasks to complete the online training. This training should be completed while on duty, but away from distractions.

Lack of resources, particularly technology, is a major barrier that was identified through the course of this study. So, it is further recommended that all agencies ensure they have the appropriate resources (i.e., computers, Internet access) prior to registering officers for distance learning classes.

Conclusions

Currently, the state of Kentucky does not offer distance learning as a means through which annual police officer training requirements can be met. This research has identified some of those barriers, including resources, training support, and time away from calls for service. An exploratory factor analysis identified two primary factors, each consisting of eight components. The first factor was related to

departmental resources, traditions, and attitudes. The second factor identified training support provided by DOCJT. These two factors account for 26.813% of the total variance in the results. The qualitative data supported the exploratory factor analysis, where officers identified resources, training support, and time away from calls for service and administrative duties as barriers to implementing distance learning.

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Appendix A

Distance Learning Survey**Demographic Questions:**

1. Gender: Male or Female
2. Highest degree level: High School, Bachelor, Master, Specialist or Doctorate
3. Have you taken online courses before?: Yes or No
4. How many?: Self reported
5. Years certified as Law Enforcement Officer/Instructor: Self- Reported
6. Age: Self-Reported
7. Ethnicity: Hispanic or Latino, Not Hispanic or Latino
8. Race: American Indian or Alaskan Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, White
9. County of Jurisdiction: (All 120 Kentucky Counties Listed; Select One)

Resources (i.e., money)

Financial resources (money) are a barrier to the use of distance learning.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

Infrastructure (i.e., technology, hardware, software)

Access to Internet with sufficient download speed is a barrier to the use of distance learning.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

Access to a working computer with sufficient operating capabilities (i.e. hardware) is a barrier to the use of distance learning.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

Access to software (i.e. video files, PowerPoint files) used through distance learning is a barrier to the use of distance learning.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

People (i.e., goals, skills, and opinions of employees)

Distance learning can help officers accomplish their professional goals.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

Distance learning can improve officer skills.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

The attitudes of your coworkers presents a barrier to the implementation of distance learning?

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

Policies (i.e., written and unwritten rules, practices, traditions, and regulations)

The written and unwritten rules of your organization presents a barrier to the implementation of distance learning?

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

The daily practices of your organization presents a barrier to the implementation of distance learning?

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

The traditions of your organization presents a barrier to the implementation of distance learning?

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

Learning (i.e., instructional outcomes of a training program)

To what extent do you think the needs of learners are considered when selecting, using, and training for distance learning?

High
Above Average
Average
Below Average
Low
Don't Know/Unsure

How would you rate the commitment of your organization to using high quality distance learning?

High
Above Average
Average
Below Average
Low
Don't Know/Unsure

To what extent do you think the material in the course can be achieved by distance learning?

High
Above Average
Average
Below Average
Low
Don't Know/Unsure

Evaluation (i.e., assessment of student goals, cost/benefit)

To what extent do you think quality evaluation/assessment would be a problem with distance learning?

High
Above Average
Average
Below Average
Low
Don't Know/Unsure

Support (i.e., training, technical support)

How would you rate the training support available? (i.e., DOCJT training, department sponsored training)

High
Above Average
Average
Below Average
Low
Don't Know/Unsure

How would you rate the technical support available? (i.e., desktop and LMS support)

High
Above Average
Average
Below Average
Low
Don't Know/Unsure

How would you rate the instructional support available?

High
Above Average
Average
Below Average
Low
Don't Know/Unsure

Opinions

1. In your opinion, what are the two biggest barriers that prevent people from using distance learning at your agency?

Open Answer Format. Answers will vary.

2. In your opinion, what are the two main reasons that make it easier for people to use distance learning at your agency?

Open Answer Format. Answers will vary.

3. If you were in charge of putting distance learning into action, and you had unlimited resources, how would you do it?

Open Answer Format. Answers will vary.

4. Is there anything else you would like to share?

Open Answer Format. Answers will vary.

Appendix B

Informed Consent

Protocol Title: Distance Education in Law Enforcement: Exploring Kentucky's Barriers

Please read this consent document carefully before you decide to participate in this study.

Purpose of the research study:

The purpose of this study is to investigate the barriers to the implementation of distance education as a means through which police officers can meet the annual training requirements within rural Kentucky.

What you will be asked to do in the study:

You will be asked to complete a survey (either electronic or paper). No personal data will be shared with anyone and will be removed from the data before it is analyzed (see the confidentiality section for more information).

Time required:

A maximum of 30 minutes

Risks and Benefits:

There is minimal risk since this survey is a standard electronic survey. You may not personally benefit from this survey. However, this survey has the potential to identify barriers to using distance education in your agency's training.

Compensation:

There will be no compensation for participating in this research.

Confidentiality:

Your identity will be kept confidential to the extent provided by law. To ensure your confidentiality, your name will not be tied to this information. Additionally, your name will not be used in any report or publication.

Voluntary participation:

Your participation in this study is completely voluntary. There is no penalty for not participating.

Right to withdraw from the study:

You have the right to withdraw from the study at any time without consequence.

Whom to contact if you have questions about the study:

Brandon Combs, 410 Sara Leigh Drive #1, Richmond, KY 40475, 859-227-4715.

Jeannie Justice, Morehead State University Research Advisor, EdD, Foundational and Graduate Studies in Education, 503 Ginger Hall, Morehead, KY 40351, 606-783-2261.

Whom to contact about your rights as a research participant in the study:

Office of Research and Sponsored Programs, Institutional Review Board, Morehead State University, 901 Ginger Hall, Morehead, KY 40351, 606-783-2010.

Agreement:

I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.

YES / NO

Participant: _____ Date: _____

Appendix C

Survey Responses

Survey Responses Answers Choices	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A	Respon se Count	Mean
Resources (i.e. money)								
Financial resources (money) are a barrier to the use of distance learning.	25	76	44	52	10		207	2.74
Infrastructure (i.e. technology, hardware, software)								
Access to Internet with sufficient download speed is a barrier to the use of distance learning.	37	64	36	54	16		207	2.75
Access to a working computer with sufficient operating capabilities (i.e. hardware) is a barrier to the use of distance learning.	32	61	30	64	20		207	2.9
Access to software (i.e. video files, PowerPoint files) used through distance learning is a barrier to the use of distance learning.	26	67	35	63	16		207	2.88
People (i.e. goals, skills, and opinions of employees)								
Distance learning can help officers	65	108	23	6	3		205	1.9

accomplish their professional goals.								
Distance learning can improve officer skills.	51	100	36	16	2		205	2.11
The attitudes of your coworkers presents a barrier to the implementation of distance learning?	11	64	54	63	13		205	3.01
Policies (i.e. written and unwritten rules, practices, traditions, and regulations)	9	28	39	111	17		204	3.49
The daily practices of your organization presents a barrier to the implementation of distance learning?	25	46	34	87	13		205	3.08
The traditions of your organization presents a barrier to the implementation of distance learning?	7	34	55	98	11		205	3.35
	High	Above Average	Average	Below Average	Low	Don't Know/	Response Count	Mean
<hr/>								
Learning (i.e. instructional outcomes of a training program)								
To what extent do you think the needs of learners are considered when selecting, using, and	8	40	117	19	5	16	205	3.1

training for distance learning?

How would you rate the commitment of your organization to using high quality distance learning?

22 45 99 26 5 8 205 2.86

To what extent do you think the material in the course can be achieved by distance learning?

18 55 102 16 5 9 205 2.81

Evaluation (i.e. assessment of student goals, cost/benefit)

To what extent do you think quality evaluation/assessment would be a problem with distance learning?

11 22 119 24 15 15 206 3.27

Support (i.e. training, technical support)

How would you rate the training support available? (i.e. DOCJT training, department sponsored training)

49 83 49 10 4 11 206 2.37

How would you rate the technical support available? (i.e. desktop and LMS support)

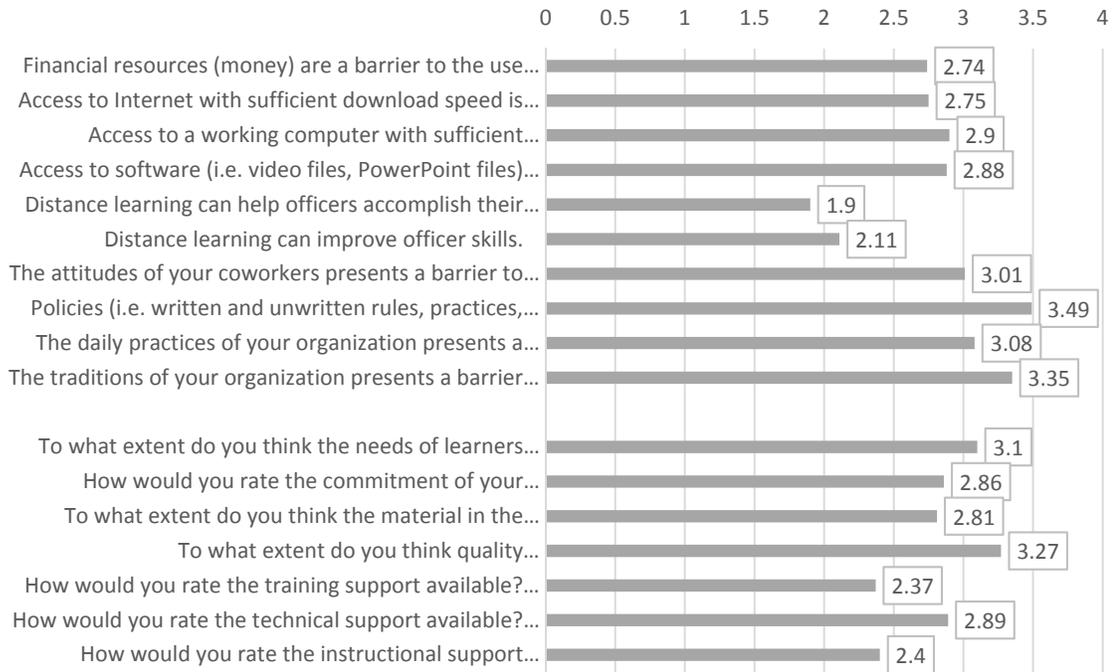
27 61 75 15 6 22 206 2.89

How would you rate the instructional support available?

39 87 61 7 2 10 206 2.4

Appendix D

Average Rating by Question



Appendix D. Average Rating by Question. This chart demonstrates the average rating of each quantitatively measured question from the Distance Learning Survey in this study.

Appendix E

Open Ended Response Question 1 Answers

In your opinion, what are the two biggest barriers that prevent people from using distance learning at your agency?	
Time	Time to complete training; Breaks in training
Computer Skills	Computer Literacy for some
Computer Skills	Knowledge & Fear
Course Availability	Availability; Limited courses available
Course Availability	Availability of training designed to meet needs
Resources	No computers; no internet
Time & Manpower	Time; Manpower
	Having the agency look at time spent on distance learning is the same as actually working (i.e. not answering calls for service while you're taking a class). The agency making it well known that it supports officers taking on-line courses.
Time Away	
Time Away	Agency allowing time out of patrol
Engagement	It's usually so boring that everyone hates doing it.
Time	Time allotment to conduct those; quality
	Money. We are required 40 hours for our monthly check from KLEF, but any more mandatory training we should get extra klef [sic] money no questions asked. This is the main complaint.
Resources	
Computer Skills	Length of training; Computer Skills
Time	Time; Uninterested
Resources & Time	Lack of money, too few employees, overworked.
Resources	Cost
Time Away	Time: Time needs to be made available while on duty- not all but portion; Software: costs of purchasing
Computer Skills	Knowledge of computer use
Time	Time

Computer Skills	Computer skills. People just don't like online classes.
Computer Skills	Older officers tend to distance from change and computer technology.
Time Away	Not seeing the distance learning as an actual class.; Finding time while on shift to complete the class.
Other	Family; Obligations
Time & Resource	Time; Money
Computer Skills time	Some people don't like computers Time; Opportunity
Computer Skills	A new phenomenon to older generations; Access to computer with high quality internet.
Time Away	Shorthanded (not time to do so); Different Shifts
Time Away	Department size; What online classes that are taken have to be completed on regular shift. No \$\$ for OT and staff/extra staff to assist.
Computer Skills & Resources	Working knowledge of computers; Not enough personnel to train and cover shifts
Resources * Time	Understaffed - No time for training with creating problems for the rest of the department; Department lacks adequate technology (computers, software)
None	I don't see any. My department would love to do our training online.
Time & Other Resources Manpower	Anti-technology belief; Time Budget and cities lack of knowledge Manpower
Time Away From Calls	The agency does not supply you time to use distance learning (get this done on your own time); The technology available is adequate.
Time	Time; Limited use of computer
Time & Other	Time allotted and distractions
Other	Accountability - Proof of who did the online course
None/No Response	Do not believe any barriers exist.

None/No Response	My agency is good about distance learning. We are small, so the flexibility of distance learning helps us with manpower issues.
Resources	Money; Resources
Manpower/Shift Coverage	Not enough employees; No time to take off
Time	Time and motivation
Resources & Manpower	Money; Manpower
Time	Lack of interest; Lack of time
Time	Not enough time during a shift to focus on learning the material presented.
Computer Skills	Computer skills
Other	They aren't used to it
Time	the dedicated time to complete the online training and internet connection
Computer Skills	Ignorance of machines; Admin must allow appropriate time to complete course
Computer Skills	Technological literacy; Unwillingness to change
Other	I feel the problem isn't the department, it's the programs. Also human habits.
Resources	Equipment, taking the training serious, internal distractions i.e. called out for a service run, peers distracting, supervisors interruptions, etc.
Computer Skills	Peoples understanding of how to use computers; Use of software
Computer Skills & Time Away	There are still a large number of LEO's that have very little experience in use of computers. Also, LEO's in small agencies are told to do this while responding to calls for service.
Resources & Time	Hardware; Time
Other	Laziness of deputy; Limited education of some older deputies.
Resources & Course Availability	Internet speed; Variety of class topics being low.
Computer Skills	Computer software programs; Personal skills of some officers
Time & Other	Time & Family
Time & Resources	Time; access to internet

None/No Response	I'm not aware of any such barriers at my agency.
Resources & Time Away	Money; Time off work
Time	Time; Commitment
None/No Response	N/A
Time Away & Other	Time during work; Internet issues in course Available options (classes); Time given, internet courses are considered to be completed on your own time off duty.
Course Availability & Time	Time taken away from other duties and support when issues come up.
Time	Taking the time to do it; Doesn't provide the same level of training, especially for skill oriented courses.
Time & Other	Different people learn different ways. Some require face time while others can accomplish task online. Lack of feedback and conversation. The amount of training available online which counts towards in service
Other	When class is online officers have to work it into their shift, therefore more than often they have to log out go take a call come back log in and try to pick up where they left off. This breaks attention and often the last call is still on officers' minds. This affects ability to learn.
Course Availability	Classes offered; Tradition
Time Away	Time; Technical abilities
Course Availability & Other	N/A We use distance learning. We make time for it.
Time & Computer Skills	Blank
None/No Response	Attitude ("Old School"); Relevant courses based on agency need.
None/No Response	Some not computer savvy
Other	Cost; Time
Computer Skills	The hardware in the field (computers); Programs that are useful to our mission.
Time & Resources	Time Allotment
Resources & Course Availability	
Time	

Time	1. Old school employees that are used to traditional classroom settings. 2. Taking time off the schedule to complete an online class as opposed to blocking off a day to traditional training
Time	Blocking off time.
Other & Time Away	Officer attitude. and time availability on shift
None/No Response	None
Time	Making time for it.
Other	Attitude
None/No Response	I cannot think of any.
Time Away	Time/schedule
Time Away	Time to do the training and a location that is quiet.
Computer Skills & Resources	Knowledge of using the net; Funding
Other	We don't have any training to do.
Time & Computer Skills	Time; Computer Skills
Resources	Equipment/Money
Other & Time Away	Mindset/attitude; Availability of time to be in office.
Other	Attentiveness and time management
Resources & Time	Money, small department, time
Resources & Other	Access to computers; the need for hands on
Other	No person contact or questions (immediate response)
Resources	Bandwidth or software/version issues if having to complete at home. If employees are required to complete during working hours, I could see where shift coverage and safety of officers/deputies could become an issue.
None/No Response	None
Computer Skills	Computer Skills; Awareness
Other	Lack of trust in quality of course; People won't take it serious.
Resources	Computer and bandwidth
Time	Time and Time

None/No Response
Resources
Other & Resources
Time

unknown
Budget money and usefulness of the course.
Travel; Budget
Time

Appendix F

Open Ended Response Question 2 Answers

In your opinion, what are the two main reasons that make it easier for people to use distance learning at your agency?	
Reduced Travel & Cost Savings	Travel Requirements; Cost Effective
Reduced Travel & Cost Savings Convenience	Travel expenses are non-existent; don't have to leave convenience
Enhanced Training Opportunities Flexibility	Rural location (not much training provided in area); technology is good (should have technical resources) Time Management/Accessibility
None/No Response Flexibility	None All it takes is an email to facilitate training
Flexibility & Cost Savings	The ability to work ahead of the timeline; The saves for department not spending money on travel/food/&rooms Own Pace; Scheduling
Flexibility	Flexible with schedule; No travel
Flexibility & Reduced Travel	Doesn't require officers to miss shift/OT for coverage; Being able to do it at any time of the day
Flexibility	Saves money for the agency.
Cost Savings	Distance Out
Other	
Enhanced Training Opportunities	Making classes readily available
Resources Already in Place	We have computers and internet.
Enhanced Training Opportunities	Can focus on training.
Resources Already in Place	Computers available; And internet access
Enhanced Training Opportunities	Computer friendliness
Flexibility	They are home and do it on their time.
Reduced Travel & Cost Savings	Do not have to leave home; cheaper
Other	Easy programs and in house training that are department members

Flexibility	The class is taken at your own pace; Comfort of being at home.
None/No Response	N/A
Flexibility	Availability; Access
Reduced Travel & Flexibility	No travel and can do it on my schedule
None/No Response	Blank
Other	Allows officers to continue working the streets (lack of manpower)
None/No Response	Unsure
None/No Response	Nothing can make it "easier" in my opinion due to what is listed above.
Cost Savings	No travel expenses; All other expenses that would be placed on the department
Flexibility	Self-paced; no travel from home
Convenience	Time, easy access.
Other	Access; Support
Flexibility	Less leaving preparation; prevents small department from being understaffed.
None/No Response	Unknown
Convenience & Flexibility	It is convenient; You are able to do it at your residence.
Flexibility	Can do it on your time; Go at your own pace.
None/No Response	I don't feel distance learning makes it easier
Convenience	Time course can be taken when available;
Reduced Travel & Cost Savings	Convenience - Course can be stopped and restarted
Flexibility	Avoid travel and associated expenses.
Flexibility & Convenience	Flexibility in scheduling; Flexibility in when you have to complete it.
None/No Response	Agencies short on manpower; Time
Other	N/A
Cost Savings	Accessibility and accessibility
Convenience	Availability; Money
Reduced Travel	Ease of any testable material; Shortness of online class (no officer likes 3-4 hours at a computer)
Cost Savings	Not having to travel to attend training.
	Cost; Time

Other	It's a learned behavior; Practice
Convenience	Not being able to get to Richmond and completing it at your convenience
Enhanced Training Opportunities	Setting may be more conducive to learning; Various learners may be more comfortable with distance learning (work at own pace)
Convenience	Convenience; Availability
Cost Savings & Flexibility	Money in attending classes, officers available to make runs and come back to testing. Lazy! Have someone who took the class provide assistance i.e. answers. Don't want to be held accountable being part of the process i.e. asked questions. Be present. Participate.
Other	?
None/No Response	
Other	Training on how to use computer.
Convenience	They are lazy and don't want to go anywhere or they can sit at home.
Flexibility	Can remain in office while training. Can take more time to cover a point that is causing them difficulty.
Flexibility	Time management; Learning at own pace
Reduced Travel	Travel time; No distractions
None/No Response	Don't know
Reduced Travel & Cost Savings	Travel; Money
Convenience	Convenience. Able to complete at times that are beneficial to the officers.
None/No Response	Blank
Cost Savings	No Travel expenses; Easier
Resources Already in Place	Command emphasis on completing DL; Plenty of computers.
Reduced Travel	Don't have to travel
Reduced Travel	Would have to travel to learn.
Reduced Travel & Flexibility	Don't have to travel, can often complete over the course of several days.
Flexibility & Reduced Travel	Keeps people close to home; Flexible with schedule.

Cost Savings & Flexibility	No travel expense. If distance learning is available 24/7 so the officer may not need to change schedules.
Flexibility	Long distance drives; Flexible availability to log in and complete training during slow or down time
None/No Response	No travel
Other	Computer literacy; Education
Reduced Travel & Enhanced Training Opportunities	No need to travel; being able to review
Flexibility	Allowing time to complete task. Having officers on shift to cover for you.
None/No Response	Blank
Flexibility	Manpower issues; Geographical issues.
Convenience & Reduced Travel	Convenient; Keep resources at home.
Cost Savings	Short classes; Cheaper classes
Reduced Travel & Cost Savings	Logistics - travel to regular learning centers; Cost savings
None/No Response	Unknown I haven't done it enough
Flexibility	1. Can do the training any time of the day or shift (activity, and schedule depending). 2. Can occasionally do/complete quicker than allotted time.
Cost Savings & Reduced Travel	Money and time away.
Cost Savings & Flexibility	No travel cost. Convenience.
Convenience & Reduced Travel	Convenience - complete at your own pace and availability. No need to travel.
Reduced Travel	It is much easier than traveling away.
Flexibility & Resources Already in Place	Available time; computer access
Reduced Travel & Cost Savings	Less travel and cost.
Resources Already in Place	Availability of computers/ease of use
Reduced Travel & Cost Savings	No travel; No fees
Other	Heavy workloads; Underman
None/No Response	N/A

Convenience	Convenience - work from home; Saving of time.
None/No Response	Don't Know
Flexibility & Convenience	Available at officers leisure/as schedule & calls permit to start. Ease/convenience - can pause and restart as often as needed.
Reduced Travel & Flexibility	No travel; Done at leisure
Other	When available I'm sure it's fairly easy
Cost Savings	Time spent on training; Money
Reduced Travel	Remote location
Cost Savings	Save money for financial burden (i.e. travel/per diem, etc.). Very practical and convenient on a lot of material.
Reduced Travel	Transportation
Enhanced Training Opportunities	Computer based programs; Ease of use
Cost Savings & Other	Cost savings; Boost in morale for not having to go to Richmond for training.
Flexibility	less time away from jurisdiction availability
Reduced Travel	Don't have to travel. Can do it at home.
Reduced Travel & Cost Savings	It's not necessary to travel, lower cost.
Cost Savings & Other	Money; usefulness
Other	Access; Time
Other	Time; Manpower

Appendix G

Open Ended Response Question 3 Answers

If you were in charge of putting distance learning into action, and you had unlimited resources, how would you do it?	
Acquire/Distribute Resources	Create a resource center set up with computers, video, comms [sic]
None/No Response	?
Hire/Train Instructors	with competent help
Increase Course Availability	Provide a wide selection of courses; use software that would ensure training is done properly
None/No Response	DOCJT has a workable method in place
Acquire/Distribute Resources	Buy computers and internet
Would Not Implement	With unlimited resources I would not do distance learning. I would stay away from it.
None/No Response	Blank
Ensure Time Allotment	Give enough time
Improve Course Design	It has to be changed on the teaching side to make it more appealing and engaging.
None/No Response	No Idea
Incentivize Distance Learning	Pay more to officers!
Other	Implement It
None/No Response	Uncertain
Increase Course Availability	Make available a list of classes officers can take.
Other	Try to be cost effective.
Ensure Time Allotment	1 hour a day would be devoted to learning while on duty, quiet place to work no interruptions, good software and fast computer with fast internet. Online instructions available for help.
None/No Response	Unsure
None/No Response	N/A
Other	Unless it was a class that had skills, it would be offered online.

Increase Course Availability	Keep it simple and offer a large selection to choose from.
Improve Course Design	I would continue making the courses better and short at the same time.
None/No Response	Unsure
Other	Assess the individual officers needs
Acquire/Distribute Resources	Quite [sic] area with no distractions
Improve Course Design	Short online classes.
Improve Course Design	Review and quiz after each sections followed by exam; Add an in-service portion (hybrid)
None/No Response	Unsure
None/No Response	Complex question I will leave open.
Increase Course Availability	I would do all I could to make all classes each year for any officer available.
Hire/Train Instructors	Send DOCJT reps to individual/county agencies; thus reduce state expense
Ensure Time Allotment	I would make a schedule for each unit to do his learning so we could not have to work the road.
Other	Training; Equipment
Other	Communication with agencies [sic]
None/No Response	Unknown
Acquire/Distribute Resources	I would create a central location for instructors with video relays and students would sign in and participate in closed circuit television and computers for interactive instruction like college.
Ensure Time Allotment	Plenty of time to complete course.
None/No Response	No comment
Would Not Implement	I would not except for minor passing on of new information such as legislation on case law changes.
None/No Response	Blank
Increase Course Availability	I would expand distance learning.
Acquire/Distribute Resources	By contacted [sic] the people that would make it possible

Other	Everyone would go far away to get away from the hell hole city we patrol to relax and enjoy policing again.
Other	Call KSP 101
None/No Response	Unknown
Increase Course Availability	Many online classes available; No tests, only participation (seminar type training)
Improve Course Design	Only certain classes would be offered online; Some courses have a need for a student-teacher setting.
Increase Course Availability	Run things pretty much as they are, offer computer classes for officers that do not have good computer skills.
Unknown/Not Sure	Not sure, examine agencies that are already using it. Look at other types of companies and how they do it.
Unknown/Not Sure	I don't have any idea.
Other	Network within the Commonwealth and agencies; Market it as a tool, not a barrier or requirement
Acquire/Distribute Resources	Provide computers to all users that incorporated identification functionality such as facial recognition to ensure security and integrity.
None/No Response	Blank
Acquire/Distribute Resources	Location with a classroom environment, minimal interruptions, supervisor, class monitor, a supervisor who takes learning seriously. Proper equipment for every officer i.e. computers, etc.
Hire/Train Instructors	On hand instruction; readily available help (close by instead of calling or emailing)
None/No Response	No Response
Other	Require it for department certifications
Increase Course Availability	Convert approximately 75% of all in service training to distance learning.
Acquire/Distribute Resources	Increase internet speed for all departments using and hardware to make the process faster.
Acquire/Distribute Resources	Make sure that the programs were compatible to most.
None/No Response	Not for sure.
Improve Course Design	Classroom discussion format
Improve Course Design	Video conference type classes.

Unknown/Not Sure	Probably
Would Not Implement	I wouldn't! I am a hands on learner and had rather do it than read it!
Improve Course Design	Ensure each officer trained has a unique ID# to minimize cheating
Improve Course Design	Not really sure how to change. It works fairly well at this moment. Be more entertaining versus very monotone.
Increase Course Availability	Try to put all available classes offered at DOCJT online.
Improve Course Design	Make sure the site is well maintained and ran. Make sure things are set up to load and instructions are easy to follow.
Hire/Train Instructors	I would hire the best professors and computer programmers to collaborate on the projects.
Improve Course Design	50/50 participation; Have an area for training
Improve Course Design	There would need to be flexibility in the time allowed to take the course and non-PowerPoint type instruction to hold the attention of students.
None/No Response	Blank
Hire/Train Instructors	Roll out courses with top instructors allowing ample time.
Unknown/Not Sure	Not sure; Don't like computers
Other	If it were up to me, Kentucky law enforcement officers would not have to do any type of "in service" training after the academy unless they chose to
None/No Response	Blank
None/No Response	N/A
Acquire/Distribute Resources	Create a training lab so multiple officers could train together.
Improve Course Design	Asynchronous; KY Officers no charge at any KY university
Increase Course Availability	I would have more classes available of which officers were given options of classes that would benefit their career path.
Improve Course Design	Utilize videos and photos as a means to convey information
None/No Response	Unknown.
Increase Course Availability	Monthly

Improve Course Design	A system like Blackboard with FaceTime capabilities.
Increase Course Availability	Offer more classes in this format and give full credit for the hours including leadership development courses.
Ensure Time Allotment	Schedule time for all to receive distance learning.
Acquire/Distribute Resources	Upgrade the IT and computer departments
Hire/Train Instructors	Advise the department and training them how to use the resources. Have someone trained to teach others.
None/No Response	Blank
Ensure Time Allotment	Computer location free of interruption or have officers work from home for that time period.
Acquire/Distribute Resources	Create a small library for it
None/No Response	N/A
Other	Create my own webpage; Advertise
None/No Response	Don't Know
Increase Course Availability	Schedule officers interested in these classes at different times so there's no conflict.
Acquire/Distribute Resources	Make sure all equipment up to date; Block of specific time for course
Unknown/Not Sure	That's not a question I can answer in a short time.
Other	Begin with larger police agencies.
Would Not Implement	would not
Improve Course Design	The class/program would have more than sufficient information and material for the students to enable them to apply it in their day to day duties, without requiring high internet speed or software constraints. Obviously a lot of funding would be involved to create such a class. I believe the students would greatly benefit.
Unknown/Not Sure	No comment. I'm not sure about that.
Acquire/Distribute Resources	Purchase a T3 line, the greatest laptops ever, and hire the most prestigious software programming company.
Improve Course Design	Have the officers meet at the PD in training room and everyone do it together to ensure that it is taken seriously and so that we can discuss things.

None/No Response	?
Improve Course Design	Get better talking instructors. Nobody really listens to instruction because it sounds boring.
None/No Response	?
Increase Course Availability	Find courses that would benefit my community.
Increase Course Availability	Online.
None/No Response	N/A

Appendix H

Open Ended Response Question 4 Answers

Is there anything else you would like to share?

None

No, Thank you!

No

No

Much of the recommended training or required in the case of accreditation could be easily facilitated through online training ensuring quality and consistency

Our city is way behind the times

When completing distance learning while on shift I would compair [sic] it to watching television, doing the dishes, walking the dog, and mowing the yard all in 4 hours. With agencies [sic] that require officers to answer calls and perform regular dutys [sic] and complete distance learning, an officer can't focus on the training.

I would not do away with actual classroom training. Many people are hands on learners and need that physical interaction to learn.

No

No

No

Each class added over required 40 hours should be paid!

Distance learning is a good thing for rural departments

Unsure of the interest as a whole in distance learning. Attention span of student.

Not everyone is aware what's out there.

No

Great way to obtain education.

None

No

No

No

None.

Not at the time.

No

No

No

In class allows officers time to get away from internal stress (police department) and streets for a few days. Department may also make us work while we complete online course on our own time.

No

Ask KY LEO's in general what classes they suggest be available in this format.

Not at this time.

Needs increased availability of "skills" classes as officer safety/liability have increased significantly.

I think it would truly be a great thing for this to happen and I believe other officers would feel the same way I do.

No

No

No

It would be difficult to have certain topics covered by distance learning.

No

Distance learning appears to becoming the new trend, however I personally feel that traditional classroom setting allows for more retention of the covered materials. Officers need hands on for most skills especially dealing with people evaluation of proficiency is also needed.

No

No thanks

No

No

Overall the classes I have taken have been informative but not always practical.

Distance learning neglects the person who has to "do" something to learn.

Unknown

So much of the time officers don't pay attention except to what is testable, seminar type training is more effective

No

No

I worked for BMW for 16+ years and saw them switch to almost all on-line training.

No

Would think this would make for a remarkable tool for agencies and DOJT

Once legitimacy of established, distance learning is the wave of the future.

I think it is the way of the future. I feel there are lots of reasons to attend classes. I understand the need. Programming needs to work.

Not everyone learns from this type of classes. I for one do not do well in online classes. I am finished my undergrad and my online classes I did terrible. In my regular attendance classes I have an A average grade.

No

I think distance learning is unacceptable and can never replicate real training. Some subjects can be used and quickly taught by computer. Some need classroom after distance. I believe if you do good follow up and surveys you can find them out.

If people can get a college degree by distance learning why not most in-service?

Nope.

No

No

No

No

No

No

No

No

No.

The biggest problem is when you have issues during off hours (between 4p and 8a). It is hard to get anyone to correct the issues. You often have to wait until the next day which then pushes your other responsibilities back.

Nope.

No

The best example I can think of is a legal update class available each year to keep officers up to date on new laws/current court decisions. These often do not get disseminated by our agencies.

I feel from my observations very few classes should be taught in this manner.

Officers generally do not take it serious and attention is minimal.

DOCJT has a weakness in distance learning support.

No

No

No

No

Big fan of DL.

University of the Cumberlands has one of the cheapest online programs in the nation.

I have benefited from distance learning programs.

In my opinion police work, (Street) is perfect for adult add people. Distance learning is not. You misinformation asked by other students and probably won't ask yourself. Reading material is next to impossible and watching a talking head is almost worse.

Look forward to more training.

None

Distance learning with meeting once for discussion, questions, and practical would be a good idea.

Nothing replaces a good classroom discussion.

No.

No

Nothing.

No

Not at this time.

No

No

This saves money/time. My son takes distance learning classes to college/ He is a sophomore in high school. Great idea.

No

No

Distance learning can be a good tool However I think most learn better in classroom/hands on setting.

Distance learning is great. However who recognizes it and what is the benefit of it. I think with certain things if you put effort into it should count for promotion and salary.

There is a need for both types of training.

I personally do not want to rely on (distant) learning!

i have enjoyed the DL Classes I have had to take through DOCJT and I commend them for wanting to make it better for officers/deputies, etc.

I haven't been here in years. It's much improved. This facility is really nice. I think eastern Kentucky university has a premiere academy for law enforcement professionals.

Distance learning is how I earned my degree.

Distance learning loses classroom discussion and idea sharing from others' experiences.

None

No.

No

No

No

No

BARRIERS TO IMPLEMENTATION WHITE PAPER

Distance Education in Law Enforcement:
Exploring Kentucky's Barriers

A White Paper will be presented to the Director of Training Operations of the Department of Criminal Justice Training (DOCJT). The Objective, Methods, Findings, and Conclusion of the Capstone Project were completed in Partial Fulfillment of the Requirements for the Doctor of Education Degree at Morehead State University

Executive Summary

According to the 2015 Distance Learning survey data, there are two primary factors that need to be considered when exploring the implementation of distance learning for law enforcement officers in rural Kentucky. Each of these two factors include eight components. Rural agencies were selected because 89.5% of the agencies in the United States and 95.63% of Kentucky agencies meet the definition by having 50 or fewer officers, or serving a population of 50,000 or less.

The first factor indicated a potential barrier to implementing distance learning was access to resources and existing departmental policies. This factor includes the following components: a working computer, software, Internet access, departmental written/unwritten rules, daily practices, departmental tradition, money, and coworker attitudes. This factor is significant and accounted for 14.977% of the total variance in the exploratory factor analysis.

The second factor indicated a potential barrier to implementing distance learning was training support. This factor includes the following: training support, technical support, instructional support, course material, ability to accomplish training goals, ability to improve skills, consideration of learner needs, and organizational commitment to distance learning. This factor is significant and accounted for 11.835% of the total variance in the exploratory factor analysis.

The open-ended questions also indicated that time away from calls for service, computer skills, and course availability should be considered. The open-ended questions also indicated that potential benefits include cost savings, reduced travel, convenience, and flexibility.

Introduction

This white paper has been developed to communicate the potential barriers to implementing distance learning as a means through which Law Enforcement Officers in rural Kentucky can meet their annual training required by law. Annual training requirements in Kentucky require that law enforcement officers complete at least 40 hours of in-service training to maintain their certification as a peace officer in the Commonwealth. Most training occurs at the Department of Criminal Justice Training (DOCJT) in Richmond, Kentucky. However, there are regularly scheduled training sessions on select subject matter held in other locations around the state. With this mandate in place and budgets strained during the recent difficult economic times, this researcher explored distance learning for officer training because it represents an option to traditional classroom learning that is both effective and cost-saving.

In exploring distance learning for law enforcement officers, this researcher conducted a survey to explore the barriers to implementation that exist or may arise in the future. The survey instrument was based on the RIPPLES survey, a validated instrument used to explore barriers to implementing innovation. The results of this

survey were analyzed using an exploratory factor analysis. This analysis provided factors and components that will need to be addressed when implementing distance learning for law enforcement officers.

Methodology

The Distance Learning Survey used in this study was based on the RIPPLES survey, a validated survey instrument used to measure barriers to innovation. Paper copies of the surveys were administered by this researcher in person. The courses that were surveyed are:

Course Title	Date Surveyed	Course Start	Course End	Course Number	Hours	Training Location
Field Instructor	06.05.2015	06.01.2015	06.05.2015	1201-13J	40	Richmond, KY
Orientation for New Police Chiefs - Sheriffs	06.05.2015	06.01.2015	06.05.2015	0721-15J	40	Richmond, KY
Forensic Mapping	06.05.2015	06.01.2015	06.05.2035	1760-12J	40	Richmond, KY
Legal Update: Penal Code	06.10.2015	06.08.2015	06.10.2015	0890-15J	24	Richmond, KY
Academy of Police Supervision	06.10.2015	06.08.2015	06.26.2015	1115-15J	122	Richmond, KY
Domestic Abuse	06.10.2015	06.08.2015	06.12.2015	1027-14J	40	Richmond, KY
Kentucky Homeland Security	06.10.2015	06.09.2015	06.10.2015	1349-15J	16	Richmond, KY
Robbery - Sexual Assault	06.11.2015	06.08.2015	06.12.2015	1464-14J	40	Louisville, KY
LEN Incident Prep - Murray	06.12.2015	06.09.2015	06.12.2015	1978-15J	40	Murray, KY
Leadership is a Behavior - Richmond	06.19.2015	06.16.2015	06.19.2015	1620-13J	32	Richmond, KY
Criminal Investigations for the First Responder	06.19.2015	06.16.2015	06.19.2015	1914-14JR	40	Richmond, KY
LEN Incident Response NKY	08.26.2015	08.26.2015	08.28.2015	1978-15J	40	Northern KY
Legal Update: Penal Code	08.26.2015	08.24.2015	08.26.2015	0890-15J	24	Richmond, KY
Criminal Investigation II	08.31.2015	08.31.2015	09.04.2015	1975-15J	40	Richmond, KY

118 student surveys were excluded because they were outside the scope of the target population. For example, those individuals worked at University, state, or large law enforcement agencies. In addition, the results excluded the 16 participants who elected to not take the survey.

Terms and Statistical Measures

Definitions of terms and examples of what was being sought in the survey were provided to the survey participants. Prior to the distribution of the survey, a focus group was held to prevent misinterpretation of questions. This focus group consisted of ten instructors. The group of instructors represented the major training sections of the Department of Criminal Justice Training, including, but not limited to, Basic Telecommunications, Advanced Telecommunications, Advanced Individual Training, Basic (Police) Training, Physical Training/Defensive Tactics, and Leadership Training Section. This group worked to narrow the focus of the questions and reviewed the language used within them to ensure the clearest communication of meaning to the participants.

Results

The results from the Distance Learning Survey are available below. This includes an examination of the demographic data, quantitative (multiple choice) questions, and qualitative (open-ended) questions.

Demographics

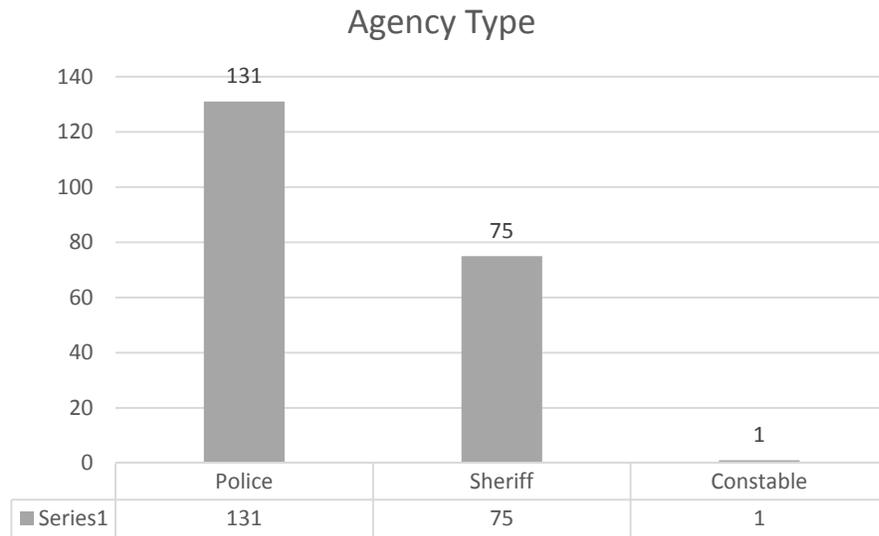


Figure 1. Responses by agency type.

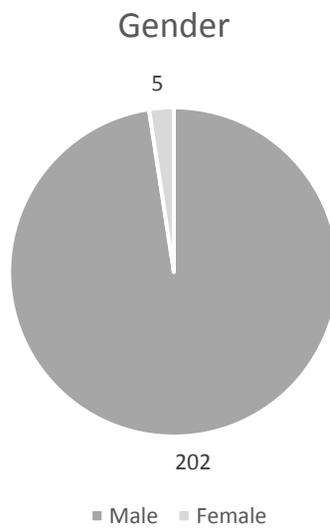


Figure 2. Responses by gender.

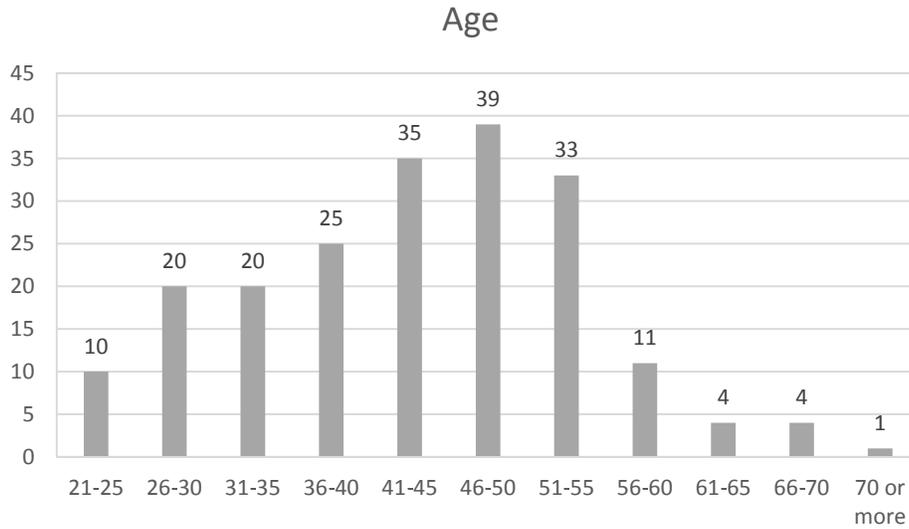


Figure 3. Responses by age.

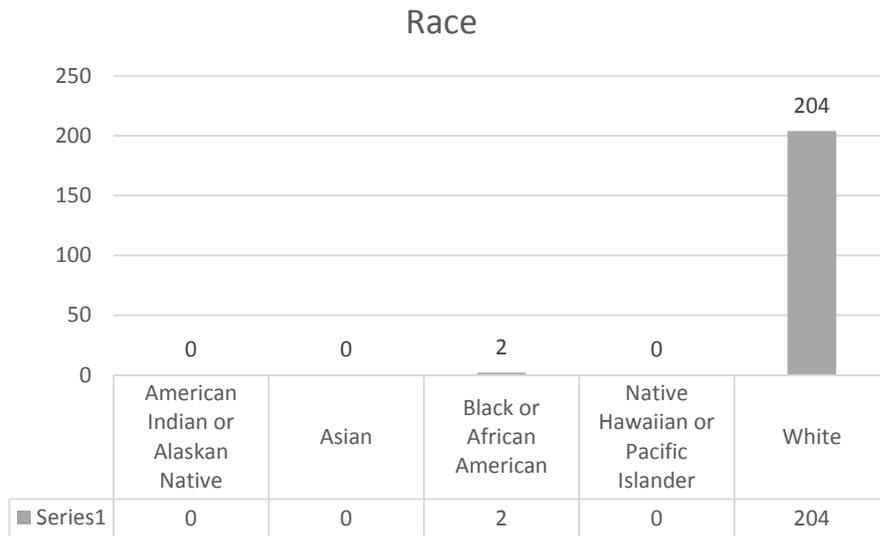


Figure 4. Responses by race.

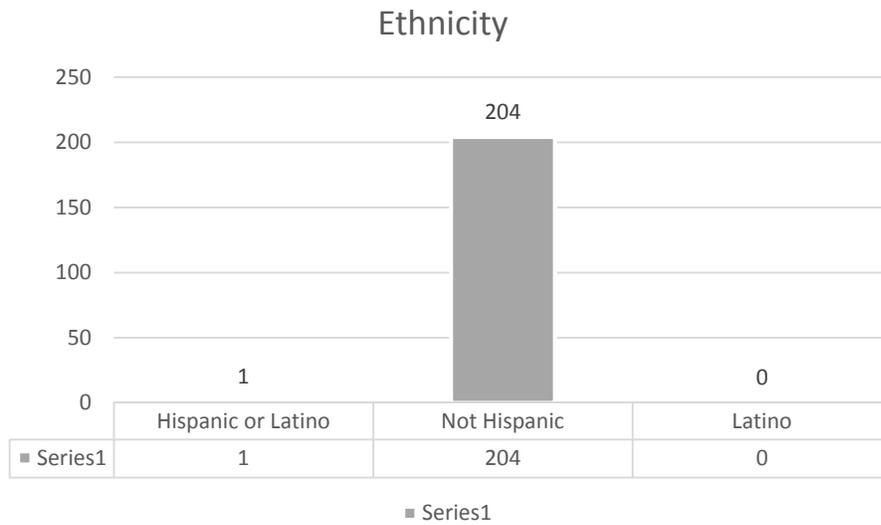


Figure 5. Responses by ethnicity.

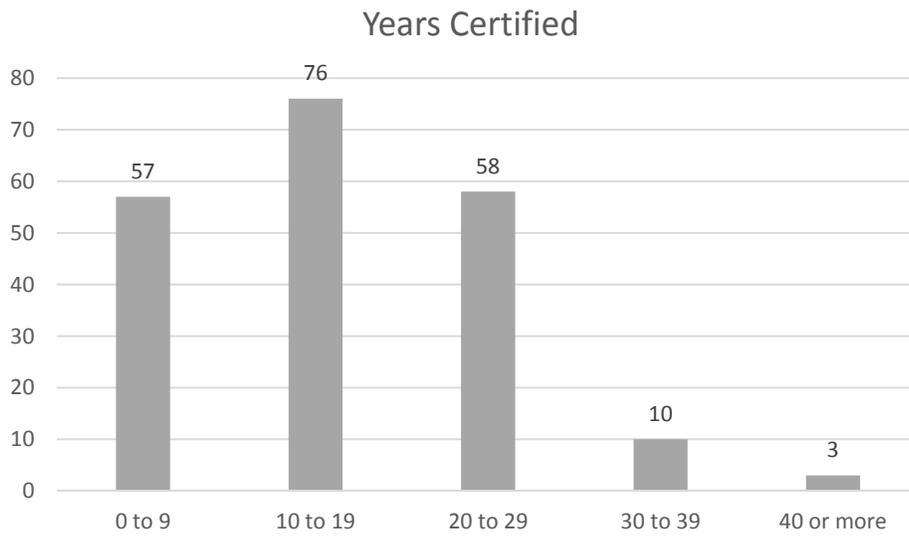


Figure 6. Responses for total years certified.

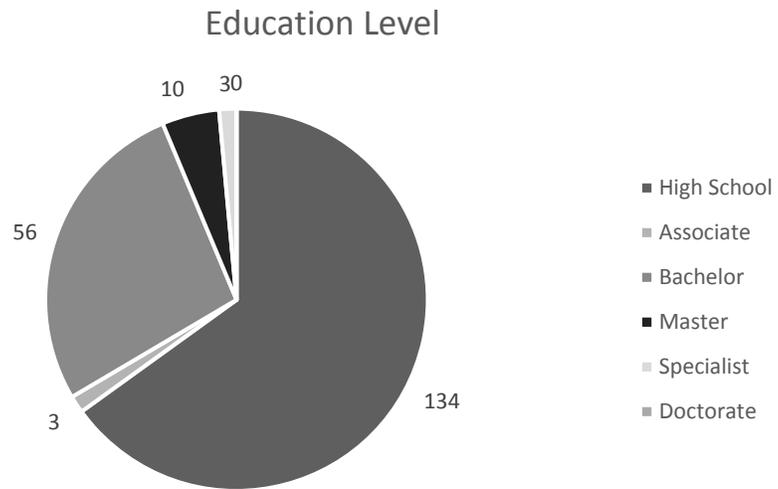


Figure 7. Responses by educational level.

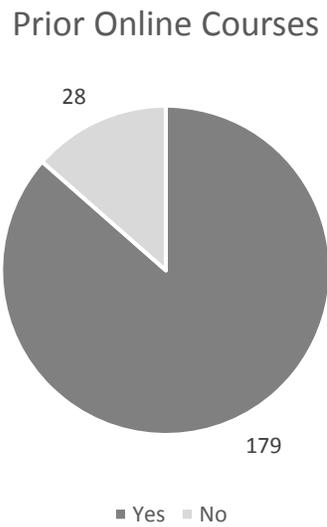


Figure 8. Responses for those who do and do not have prior online course experience.

Quantitative Results (Multiple Choice): Factor 1

Table 1

Factor 1 Components

Question Number	Factor Component	Component Value	Mean
15	Working Computer	0.773	2.9
16	Software	0.756	2.88
14	Internet	0.704	2.75
20	Written/Unwritten Rules	0.646	3.49
21	Daily Practices	0.568	3.08
22	Tradition	0.54	3.35
13	Money	0.528	2.74
19	Coworker Attitudes	0.45	3.01

Quantitative Results (Multiple Choice): Factor 2

Table 2

Factor 2 Components

Question Number	Factor Component	Component Value	Mean
27	Training Support	0.722	2.37
28	Technical Support	0.684	2.89
29	Instructional Support	0.623	2.4
25	Course Material	0.584	2.81
17	Accomplish Goals	0.505	1.9
18	Improve Skills	0.48	2.11
23	Learner Needs	0.465	3.1
24	Organizational Commitment	0.447	2.86

Qualitative Results: Question 1 – Barriers

Table 3

Qualitative Question 1 Responses

Theme	Count	Percentage
Time	35	24.65%
Resources	25	17.61%
Other	24	16.90%
Computer Skills	21	14.79%
Time Away From Calls	15	10.56%
None/No Response	11	7.75%
Course Availability	7	4.93%
Manpower/Shift Coverage	4	2.82%

Qualitative Results: Question 2 – Benefits

Table 4

Qualitative Question 2 Responses

Theme	Count	Percentage
Reduced Travel	26	18.84%
Cost Savings	24	17.39%
Other	15	10.87%
Convenience	14	10.14%
Enhanced Training Opportunities	7	5.07%
Flexibility	31	22.46%
Resources Already in Place	5	3.62%
None/No Response	16	11.59%

Qualitative Results: Question 3 – How to Implement

Table 5

Qualitative Question 3 Responses

Theme	Count	Percentage
None/No Response	27	24.32%
Improve Course Design	18	16.22%
Acquire/Distribute Resources	15	13.51%
Increase Course Availability	15	13.51%
Other	13	11.71%
Ensure Time Allotment	6	5.41%
Unknown/Not Sure	6	5.41%
Hire/Train Instructors	6	5.41%
Would Not Implement	4	3.60%
Incentivize Distance Learning	1	0.90%

Recommendations & Conclusion

Recommendations from this report are divided into three sections:

Recommendations for Instructors, Recommendations for Training Administrators, and Recommendations for Law Enforcement Agency Administrators. The recommendations are followed by the conclusions drawn from this research study.

Recommendations for Instructors

Instructors should consider the purpose of their course and how the material is being presented. One barrier which emerged from this study was a concern for improving instructional design. Consequently, instructors should work towards providing the highest quality online learning environment. There should also be

sufficient courses available to meet the needs of officers seeking knowledge, skills, and abilities to move through their daily activities and up the promotional ladder.

The training will need to consider the younger generations' preference towards technologically infused training and educational environments.

Recommendations for Training Administrators

Training administrators, such as those within the Department of Criminal Justice Training, have a dual role in supporting both the instructors within their agency as well as the law enforcement agencies around the state. These dual responsibilities increase the importance of training administrators to be aware of the identified barriers and actively work to reduce them for both instructors and agencies.

The first recommendation is increased support, staff, and resources for instructional design. This study identified course availability, instructional/course design, training support, and instructional support all as potential barriers. To minimize these barriers, sufficient staff and resources need to be in place to move forward with a comprehensive distance education program. Instructors who teach in distance learning would need time dedicated to their teaching activities, which should be the same as and, perhaps, more than, the time allotted for a face-to-face course. DOCJT should also consider expanding the Instructional Design team to ensure there is sufficient support for the instructors and students as course offerings increase. This

resource set would also support traditionally taught classes by instructors who might be exploring alternative presentation methods, such as facilitation, group projects, and individual presentations.

Another recommendation would be to reach out to all agencies to discuss how distance education can benefit their agencies, and how it should be implemented at their home agency. This study identified Time and Time Away From Calls as major barriers to the implementation of distance education. It is important that Law Enforcement Agency Administrators understand that distance education is a viable alternative for training. However, the participants must be allotted the time and space to complete it. Officers should not be taking calls for service while completing online training. Online training should be treated the same as any training course that would be taken at DOCJT, with officers having time away from calls for service and other administrative tasks. In addition, agencies should ensure they have the appropriate resources (i.e. computers, Internet) to facilitate successful distance education experiences at their home agency.

Recommendations for Law Enforcement Agency Administrators

The first recommendation for law enforcement agency administrators is to consider implementing distance learning into the training of their officers. The relative advantage for agencies is significant, and includes cost savings, reduced

travel time, reduced time away from the agency, and an enhanced learning environment. This study revealed that officers were concerned about taking calls while trying to complete training, and having the appropriate resources to complete the training in a timely, effective manner. To minimize this issue, administrators will need to train those tasked with administering training to ensure officers are receiving the dedicated time away from taking calls for service.

The second recommendation is to ensure that officers have both the time and quiet space away from calls and administrative tasks to complete the online training. This training should be completed while on duty, but away from distractions.

In addition, it is recommended that all agencies ensure they have the appropriate resources (i.e. computers, Internet) prior to registering officers for distance learning classes. Lack of resources, particularly technology, is a major barrier that was identified through the course of this study.

Conclusions

Currently, the state of Kentucky does not offer distance learning as a means through which annual officer training requirements can be met. The research in this study has identified potential barriers to consider when exploring the implementation of distance learning. Two factors, each consisting of eight components, identified that resources, agency policy, and instructional support are areas to be explored prior to implementing distance learning. The benefits of implementing distance learning in

this context (cost savings, flexibility, convenience and reduced travel time) were discussed in the open-ended qualitative results. This study revealed that the benefits provide a counterweight to these implementation barriers.

VITA

BRANDON J. COMBS

EDUCATION

May, 2010	Bachelor of Science University of Louisville Louisville, Kentucky
August, 2011	Masters of Science Eastern Kentucky University Richmond, Kentucky
May, 2014	Masters of Arts in Education Morehead State University Morehead, Kentucky
Pending	Doctor of Education Morehead State University Morehead, Kentucky

PROFESSIONAL EXPERIENCES

2014-Present	Assistant Director of University Assessment University of Kentucky Lexington, Kentucky
2013-2014	Law Enforcement Training Instructor Commonwealth of Kentucky Department of Criminal Justice Training Richmond, Kentucky
2006-2013	Communications Supervisor University of Kentucky Police Department Lexington, Kentucky

HONORS

- April 2014 Award of Merit: Poster Presentation
Morehead State University Celebration of Student Scholarship
Morehead, Kentucky
- April 2013 Kentucky Colonel
Commonwealth of Kentucky
Frankfort, Kentucky
- October 2009 Chief's Commendation
University of Kentucky Police Department
Lexington, Kentucky

PUBLICATIONS

- Combs, B. (2014). Police officer: Body worn cameras. *Kentucky Law Enforcement Magazine*. Richmond, KY. (February 2014), 12(5).
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