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This work and its defense approved by:

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by

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ABSTRACT

This study examines the satisfaction of two groups of graduate students engaged in the same degree program. These groups vary on the nature of program delivery, with one group participating in distance education and the other in conventional campus-based education. This recognition of indicators of positive outcomes of support systems related to online education is needed to maintain a high level of best practices. The study used extant data gathered through a student satisfaction survey. The survey results of the two groups were compared in an effort to identify any differences reported across groups. Results indicate distance education students and conventional-campus-based students from the same graduate education program were highly satisfied with their experiences. However, results indicate that overall distance education students were more satisfied than their counter-parts enrolled in the conventional campus-based programs.
DEDICATION

With a heartfelt emotion, I write this dedication of immense gratitude in achieving a goal that seemed for so long to remain just out of reach. There were many days when I felt truly challenged to balance family, work, and my research and writing. But for the two most important people in my life I would not have been successful. My sweet, young, very wise and caring children, would wrap their small arms around my neck and say to me, “Mommy it’s okay, you can work, we will wait for another day”.

In profound reflection about myself as a parent, I look back over my shoulder at the memories. I wonder how it happened so soon that my children went from needing me more to me needing them more. This happened too early for me as I balanced my career, family, and all the extra things in my life that weighed so heavily on my conscience.

Insurmountable to my existence and the joy in my world are the little faces of my children, Elysia, age 9, with eyes reflective of great intellect, caring empathy, and patient understanding, and Ben, age 6, with eyes of a great intellect, depth of perception, a caring I will hug you to make it better love, and a quiet patience. Again, without these two beautiful carbon copies of each other honoring me with their unconditional love I would not have “made it” through. They believed in me without demanding any reason to. Elysia and Ben you are my greatest accomplishments in life.

I also want to thank my mom and dad, Don and Shirley Sheets. Dad, you are the kindest guy I know. You would do for anyone, and you are always giving without wanting back. I remember the jokes about me being the child left on the door step because I did not appear to have the traits of anyone else. I did not understand and avoided conceding to being
a “Sheets” as grandma used to say. However, I am wiser now and I see we are a lot alike, and I try hard each day to demonstrate the wonderful qualities a person can possess that you have shown me by living. Mom, I stand proud as your daughter. I try hard to move through life each day as you brought me up with strength, wisdom, manners, ethics, morals and a love for the exquisite beauty of a sunny day. As a very little girl, you told me when I was scared to think about a wonderful yellow field of sunshine and flowers with me in it, and these happy thoughts would take the place of my fears. I have called upon this memory often. Mom, throughout my life I remember you stressed the importance of education, from your words when I was a child, “If you speak good English and have a skill such as typing, you will always have a job”. Well mom, look at me now, with this goal now at my fingertips, I am very proud to be the daughter you have always believed in, no matter. Dad, mom, I love you both dearly.

Finally, I wish to thank my husband, Michael. It has been tough throughout our journey together as our lives grew; the children, our family, work and school have challenged our commitment to each other. Together we have grown stronger and I am grateful for this. I am a better person with you. For the man with few words for me, in this statement to you, I have one “and” (sorry). I have no “buts”. I know you are proud. I love you.

For the grace of God and loving guidance of family and friends I am who I am today. I am truly thankful to know there are a few special people that care for me. Donny, you are a great brother and knowing you support me, whatever I do is special to me. David, you are in my prayers and I am waiting for you to come home, I will be here for you when you do.
ACKNOWLEDGEMENTS

I remember a day long ago when Dr. Lawrence “Larry” Johnson said to me, “You and I are a lot alike”. This gave me pause. In front of me was a person that represented achievement, hard work, humor, strength, and dedication. Those words meant a great deal to me. Since that statement, I completed my Masters degree, and now, am reflecting back on the days that brought me to this place in my education. Thank you Larry for supporting me, mentoring me, giving me words of wisdom, recognizing my potential, and caring. I have learned so much from you. I greatly appreciate your advice and conditioning to face new challenges and believe in what I do. I began my first experience in the field of higher education as your graduate student. I am now culminating my education with you as the chair of my dissertation committee. Your guidance helped me through the final stages to a goal I once did not believe I had the stamina to reach. Thank you Larry, I am eternally grateful for the many experiences you have afforded me.

My committee also consists of Dr. Anne Bauer. Anne, I am deeply grateful for your support, your belief in my abilities, your mentoring, your friendship, how much you really care, and of course the countless reminders to “Get it done!” You have taught me so much about how my work does have an impact to the field of education. I am a better writer by your example. I marvel in amazement when my colleagues compliment me for being a great writer and comment on my abilities to present eloquence in my writing. I remember when I was told I would need to work harder than others sometimes to achieve desired results. I have worked very hard and I am very proud of my skills. I will continue to strive to work to be better. Ann, you are my inspiration for this.
Also, on my committee is Dr. Dorothyann “Dottie” Feldis. Dottie has been a steady support to me. Dottie your wisdom and guidance have helped me to go forth with the confidence to succeed. Your gentle approach of caring has provided me great support throughout my graduate program. I appreciate and hope to emulate your quiet wisdom, patience, and intellectual approach to the complex field of Special Education.

Thank you also to my committee member Dr. James “Jim” Vondrell. Jim you have provided me a new perspective coming onto my committee later. Your collaboration with me on the protocol for distance education gave me confidence that this work is important and valuable. Your professionalism has been a great support to me at this stage of finalizing my work toward this goal.

Finally, there have been individuals that have been supportive of me throughout the days of my education and this journey. These people have supported my acquisition of knowledge, development as a professional, and cared about me as a person. I wish I could mention everyone. The late Professor James “Jimmy” Truitte imparted knowledge in stories, through lectures, through tirades, and through grace. Jimmy demanded excellence and I worked to demonstrate nothing less in his modern classes designed after the legendary Lester Horton technique. Jimmy once said to a student, “If you think you are perfect, you better quit, because it cannot get better”. I do not know if that student felt the impact of the statement but I truly did. I lived by that statement to my benefit and to my detriment. Then, I worked for Jimmy the hardest I ever worked for anyone to this day. I have no regrets. Lastly, I must expressive my gratitude for the friendship of a few wonderful women that have been kind to me since the day I met them, Debby Anania Smith, Cammie Hulett, and Marjorie Harlow. Debby, I miss those days when our children were still in diapers, when
you and I were balancing a different complexity to work/school/home, yet we had some fun too. You have always been a good friend. I am proud to “have a dissertation” in the middle of “having children”, and join the ranks of “Dr.” with you, finally. Cammie, you are an example to want to be. You are a kind friend and you epitomize what I hope others think of me. Marjorie, you accept me for who I am, you continue to believe in me, and you care. The “mom” you are to your lucky kids transcends to those you touch with your caring heart and helpful nature. Thank you for affording this to me too, especially at times when movement through time and space seemed so challenging.
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Chapter 1

Introduction and Purpose

The use of technology allows higher education to reach individuals to whom opportunities would otherwise be inaccessible. This new population of students challenges institutions of higher education to provide quality experiences, highly skilled faculty, and human services to students with little or no face-to-face contact. Maintaining student satisfaction without this contact is a challenge.

Leading industrial and economic nations such as the United States are increasingly applying advances in technology to daily activities. This use has potential for major impact for globalization. This impact is also presenting a strong influence on higher education. Distance education has used technology to remove barriers that conventional education systems cannot overcome. More students’ are pushing institutions to offer quality distance learning opportunities. To do this an examination of how to improve the delivery medium and to provide highly skilled faculty to teach from a distance are necessary. In addition, systems must be set in place to accommodate the array of student services needed to promote highly successful outcomes for students.

Purpose

The purpose of this student is to examine the satisfaction of two groups of graduate students engaged in the same degree program. These groups vary on the nature of program delivery, with one group participating in distance education and the other in conventional campus-based education. Second source data provides overall satisfaction data regarding delivery and support of the College’s programs and services.
Evaluation data were collected initially through the College’s annual student satisfaction survey. The results of this survey contributed to administrators’ efforts to develop a strategic plan. The survey addressed faculty, instruction, courses, student advising and other services, program climate, and other general areas of student satisfaction. Though these two sets of data were available, no statistical analysis was completed to identify any potential differences between the two groups. The purpose of this study was to compare responses of conventional campus-based students and distance education students on categories of the survey. These data may be informative to the growing field of higher education and others offering or considering distance education.

Problem Statement

As the number of distance education programs increases, a need for quality assurance and comparability to conventional campus based program arises. Reinert and Fryback (1997) defined distance education as a set of teaching and/or learning strategies to meet the learning needs of students separated from the traditional classroom setting and sometimes from the traditional roles of faculty. In recent studies, an increasingly positive perception of the potential of online learning has been cited (LeBaron & Santos, 2005). As the growth in pursuit of distance education by institutions and organizations continues, particularly in higher education, more research is needed. Accordingly, a pursuit of information to support accountability specific to parameters of distance education is also necessary. A better understanding of systems needed to support distance education must be identified. This recognition of indicators of positive outcomes of support systems related to online education is needed to maintain a high level of best practices.
Tobin (2004) emphasized institutions valuing their credentials from accrediting agencies in the United States are faced with providing data for evaluating the quality of their courses offered through online education. This evaluation of distance education is necessary as educators face the challenges of departing from teaching in a traditional and familiar classroom to a homogeneous group of students. Willis (1994) stated to be successful distance educators must maintain the outcomes of their courses. This is a challenge when total control over the delivery system is not in the hands of an instructor as in a face-to-face context.

Most American higher education institutions offered some form of distance education courses (Tucker, 2001). Both the institutions and their potential consumers have a stake in the level of quality of the distance education programs and supported courses. The interest in success of distance education transcends across a greater realm of stakeholders, including public policy leaders. Thus, distance education must be prepared to respond to scrutiny from many directions.

Across the field of higher education, more institutions are attempting to enter into online delivery. Still others already providing some online courses are interested in improving their online media of academic program delivery. This research may assist in providing data across categories of program delivery and support to promote accountability in distance education. The research represents secondary source data responses from students matriculated in a large higher education graduate program. It compares the data of students in the program participating fully in a distance education model to students attending classes in a traditional campus-based manner. LeBaron and Santos (2005) research results indicated that well-designed and executed online learning opportunities are as
challenging as onsite counterparts representing similar, or same, learning outcomes and goals. As more higher education institutions offer distance education options, effective systems of support are necessary to maintain assertions such as this. For example, areas of advising and other supports are attempting to infuse technology into their communication and supports (Wagner, 2005). However, how effective these systems are in supporting distance education quality is the question. Building on these data and predictions, this study may provide further insight to some specific components of higher education that may strongly support this statement of needed support for online learning.

Technology continues to grow in increasingly incremental rates. Many people did not perceive this rate of change possible prior to the 21st century. More recently, evidence of technology presents the digital world as the forefront for systemic changes considered by many institutions of higher education. Subsequently, these technology innovations have supported more distance education options. The United States General Accounting Office (GAO) reported in 2000 that 1 out of every 13 postsecondary students took at least one distance education defined course, and by the end of the 2000-2001 academic year, close to 90% of public four-year institutions offered distance education courses. Hence, highly visible global distance education courses have increasingly become available and desired by consumers.

To meet this need, higher education must examine systems of support and preparation for accountability. Boettcher (2006) asserts that to support this, it is necessary for institutions and faculty roles to change. Twigg (2001) emphasized the importance of determining students’ viewpoints of quality education in making decisions. Furthermore, he ardently asserted most students accessing distance education would voice response vastly different
from traditional students. Therefore, to better serve distance education students it is necessary to know their perception of needs to support them. At the Institute for Higher Education Policy in Washington D.C. (Phipps & Merisotis, 1999) a report was written with the purpose of reviewing the contemporary research on the effectiveness of distance education in higher education. In this review, the authors indicated a shortcoming of the body of research of studies. Most research looked at individual courses and not whole programs. Thus, this research provides valuable information to inform and support the rigor necessary to develop programs with prepared faculty to meet the educational needs of working adults from a distance.

**Significance of the Study**

This research study gives the field of higher education a valuable insight on distance education. It provides a comparison of student responses of satisfaction across one large graduate program with a difference of conventional students and distance education students. The areas of interest for differences in perspectives of these two distinct populations are:

(a) Student satisfaction with instructional medium based on access (distance education versus conventional campus-based);

(b) Identification of contributing factors of the student population which might be indicators of satisfaction for individual’s educational experiences (distance education versus conventional campus-based); and

(c) Identification of contributing factors of impact on the educational experiences of students, distance education versus conventional campus-based.

These data will inform the growing field of institutions offering distance education delivery throughout academic programs. These data will also assist institutions providing
distance education courses/programs in further understanding similarities and differences of program design, support, and services. The resulting information will assist in the development of systems to meet the needs of both distance education students and conventional campus-based students.

Research Questions

These following research questions addressed in this study:

1) Is there a difference in overall student satisfaction for conventional campus-based versus distance education students?

2) Is there a difference between student satisfaction ratings of the following program components: faculty performance, class characteristics, and general experiences and program climate?

3) Is there a differential pattern of student satisfaction ratings between distance education and conventional campus-based students’ ratings across the following program components: faculty performance, class characteristics, general areas, and program climate?
Chapter 2
Review of the Literature

An overview of the development of distance education provides a context for this study. Mayadas five pillars of quality for effective distance education, the concepts of interaction theory (Moore, 1989) and transactional distance (Moore, 1990) will serve as the theoretical constructs. The combination of these frameworks will demonstrate the importance of examining how systems interact and impart influence on higher education institutions and individuals as well as how the major changes in technology of the 20th century have forced action and response.

Distance education is defined, grounded in issues of delivery. Variables related to program effectiveness, including faculty, students, facilitators, support services, and administration are described. Finally, a comparison of traditional and distance education course instructional effectiveness is examined.

Introduction of Distance Education into Traditional Education

As technology has advanced, there have been several forms of distance education. One of the first manners of distance education can be traced back to the 1700s and the use of correspondence education (Jeffries, 1996; Wright, Dibiase, Pancake, Wright, & Foote, 2004). This format of education was primarily for males from higher levels of society in pre-industrial Europe. This format was implemented in the United States in the late 1800s by the University of Chicago. This institution was the first major distance education program where a correspondence relationship was introduced with the teacher and learner in different locations. Quality was suspected to be poor in comparison to traditional methods (McIsaac & Gunawardena, 1996).

The use of technology in distance education emerged with the introduction of audio-visual aspects in the early 1900s. These advances increased the potential audience for distance education.
Scholars of the time debated the use of new technology and considerations of distance education where conventional formats only existed. In 1913, Thomas Edison contended that through the use of technology “Our school system will be completely changed in the next ten years” (Saettler, 1968, p. 68).

Throughout the 20th century, education continued to change with the supplemental use of technology. This use of technology in education would later provide a foundation for change from supplemental tools to education to supportive systems of distance education. As early as the 1920s, educators supplemented instruction with slides and movies as helpful learning tools. In the 1930s there was an unfruitful use of radio technology to enhance instruction. Although, invention of television technology as an exciting new medium of information delivery followed, it was not until the decade after WWII that television presented a tool for the educational classroom (Jeffries, 1996). In the 1960s, agencies such as Ford and Carnegie Foundations supported the efforts of using audio/visual instruction. However, according to Reiser (1987) in a sponsored work for The Carnegie Commission on Higher Education, the use of television in the classroom did not produce the anticipated impact on the educational system. Teachers resisted television in the classroom, systems were expensive, and television did not adequately meet conditions to support educational obtainment and learning (Jeffries, 1996).

As advances in technology were considered more applicable to education, distance education also became more feasible. In the late 1960s and early 1970s, microwave technology was developed. Distance education became the subject of conversations as respected organizations voiced their opinions. Levien (1972) in a sponsored study by The Carnegie Commission on Higher Education predicted that more than 80% of off-campus and 10% to 20% of on-campus instruction would take place through telecommunications by the year 2000. According to the National Center
for Statistics (NCES), by the academic year 2000, over 50% of post secondary institutions offered distance education courses. Enrollment across these courses was up to 3.1 million students (Johnson, Killion, & Oomen, 2005).

During this time, Britain’s Open University (OU), the first successful institution dedicated to distance education began. The Open University overcame the boundaries of time and space as well as of nations and nationalities. In 1971, the first “open university” in the United States; New York State’s Empire State College (NYSES) was established and served both distance and traditional students (Nasseh, 1997).

In the 1980s, schools in America saw an increased introduction of computer tools for students and teachers. In 1982, the International Council for Correspondence Education changed its name to the International Council for Distance Education in respect to developments in the field of distance education (McIsaac & Gunawardena, 1996). Although growth in distance education in the United States came later than some nations, it grew quickly toward the end of the 1980’s. In 1987, less than 10 states promoted distance education to some extent; however, by 1989 practically all states were involved in some distance education programs (The United States Congress, Office of Technology Assessment, 1989).

In the 1990s, networked computing and two-way interactive video technology came along with the increasingly competitive market for higher education. These innovations promoted more rapid growth and a greater number of institutions undertaking distance education (Wright, Diabiase, Pancake, Wright & Foote, 2004). NCES (2000a) predicted that as the year 2000 approached, approximately one third of all two- and four-year postsecondary institutions in the United States would offer distance education courses. Furthermore, these would have estimated enrollments in distance education courses just shy an estimated one million seven hundred thousand students.
As the 21st century approached, events in the world changed higher education. The US economy was changing due to the impact of changes in technology. The advances were so great that in testimony to Congress, Allen Greenspan, Chairman of the Federal Reserve Board of the United States, predicted technology would affect the economy to the extent only seen a couple of times in a century. He compared the impending change to the shift from agriculture to industry. He went on to state the impact would result in higher value for companies as inclusion of technological advances reduced production and distribution costs. In addition to changes world-wide, policy makers locally, at state levels, and federally emerged as advocates for the use of information technology for teaching. This movement greatly affected higher education expansion of distance education (Saba, 2001). Thus, higher education institutions may need to restructure, organize and set goals for distance education (Saba, 2002).

Presently, distance education programs continue to implement a wide range of approaches. Further research on the effectiveness of the mediums of distance education is vital to determine further considerations for successful implementation. Greater understanding may assist educators and other stakeholders in the process in learning how to foster learning at a distance. Today, the phenomenon of distance education continues to grow exponentially across the worlds’ institutions of knowledge and education.

Theoretical Perspectives

In higher education, distance education represents a change from conventional campus-based education. Mayadas five pillars of quality for effective distance education, the concepts of interaction theory (Moore, 1989), and transactional distance (Moore, 1990) provide the theoretical grounding of this study. The combination of these frameworks will demonstrate the importance of examining how change representing advances in technology has influenced higher education
institutions and individuals. These major changes in technology of the 20th century have forced action and response, resulting in consideration and implementation of distance education.

The Sloan Consortium and Mayadas’ Five Pillars of Quality

The five pillars of quality (see figure 1) are documented as supportive of the most important concepts to include for maximizing the effects of distance education. These are defined for higher education as well as for corporation training environments. See Table 1.

Table 1. The Five Pillars of Quality

<table>
<thead>
<tr>
<th>Quality Principle</th>
<th>Defined for Higher Education</th>
<th>Defined for Corporations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning effectiveness</td>
<td>• New knowledge</td>
<td>• Productivity</td>
</tr>
<tr>
<td></td>
<td>• Applied theory</td>
<td>• Improved</td>
</tr>
<tr>
<td></td>
<td>• Continuous feedback from stakeholders</td>
<td>• Operations</td>
</tr>
<tr>
<td>Cost effectiveness and institutional commitment</td>
<td>• Brand recognition</td>
<td>• Cost Savings</td>
</tr>
<tr>
<td></td>
<td>• Scalability</td>
<td>• Brand</td>
</tr>
<tr>
<td></td>
<td>• Public service and influence</td>
<td>• Market capture</td>
</tr>
<tr>
<td></td>
<td>• Prestige</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Funding</td>
<td></td>
</tr>
<tr>
<td>Access to all desired courses, degrees,</td>
<td>• Wider access including international communities</td>
<td>• Market Growth</td>
</tr>
<tr>
<td>programs and accompanying support services</td>
<td>• Greater research and development opportunities</td>
<td>• Distributed Team Work</td>
</tr>
<tr>
<td></td>
<td>• Faster response to new fields of study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Capacity enrollment</td>
<td></td>
</tr>
<tr>
<td>Faculty (employee) satisfaction</td>
<td>• New populations of students and colleagues</td>
<td>• Competition</td>
</tr>
<tr>
<td></td>
<td>• Greater satisfaction with teaching and Learning</td>
<td>• Competitive intelligence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Understanding</td>
</tr>
<tr>
<td>Student (customer) satisfaction</td>
<td>• Learner and teacher satisfaction and loyalty</td>
<td>• Recruitment and retention</td>
</tr>
<tr>
<td></td>
<td>• Career opportunities including OJT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Internships</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Mentorships</td>
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</table>

(Mayadas, 1997; Moore, 2005)
Quality of learning effectiveness of distance learning should be determined comparable to conventional campus-based learning. The institutional goal of cost effectiveness should be paired with continuous improvement of services. All learners who wish to access distance education opportunities should have the opportunity to be successful. Faculty should be supported in satisfaction and achievements in teaching distance education courses. Finally, students should be supported to be successful in distance education in order to promote their satisfaction (Moore, 2005). Figure 1 provides an illustration of these five pillars.

Figure 1. The Five Pillars of Quality

According to Mayada (1998), NCES (2002), and Lorenzo & Moore (2002) distance education through asynchronous learning of instructor lead courses that include these important considerations has the greatest potential for success. This concept of Asynchronous learning
networks (ALN) is now commonly referred to as online learning or e-learning. Frank Mayada, Program Director for the Alfred P. Sloan Foundation, supported the Sloan Consortium (Sloan-C) invitational workshop in 2002 to gather perspective and document comments on the five pillars for quality online education. The event resulted in a statement of two achieved goals: the sharing of knowledge to promote examination and successful replication of online education programs and to substantiate and assert online education works across disciplines and institutions.

The application of standards outlined by the five pillars of online learning is applicable to any type of institution or program. Regardless the order of the five pillars, it is important that each are incorporated into an institution’s strategic plan of systems design to support the implementation of either medium of education, conventional campus-based or distance.

Determining the effectiveness of the element of student satisfaction is contingent on three indicators: (a) level of interaction with faculty and other students, (b) learning outcomes matching course descriptions, and (c) adequacy and appropriateness of technology support. Faculty satisfaction includes successful implementation and measurement of three main activities: the ability to sustain and increase faculty participation in online teaching, the success at expansion of faculty awareness of and satisfaction with online teaching, and successful integration of faculty teaching online and face to face with the purposes and practices of online education. A third element of access is the goal to establish that all qualified learners are set to successfully complete an online course, courses, or programs across disciplines. Learning effectiveness represents a measurement of quality in online learning that is as good as or exceeds the equivalent traditional course or programs. Finally, the element of cost effectiveness is necessary to measure. An online program must demonstrate cost effective business in delivering high quality education (Woolsey & Rodchua, 2004). According to Moore (2005) over 95% of institutions for-credit, degree-oriented instruction in
the United States follows the Sloan-C ALN model of five pillars of quality principles. This represented 2.5 to 3 million learners in the academic year of 2001 and 2002.

*Learner Content Interaction*

Educators continue to debate systems of implementation and supports for distance education. In order to promote successful considerations and supports systems of the delivery of learner content, it is important to identify the various meanings interaction may have for individuals. In 1989, a panel of higher education representatives met to debate the questions surrounding defining and setting successful interaction systems in place to support distance education.

Moore (1989) contributed identification and definition for three types of interaction between educators and students when media is a factor. These were learner-content interaction, learner instructor interaction, and learner-learner interaction. Learner-Content represents a defining characteristic of interaction between the learner and the subject matter, resources, and content model. Technology growth astoundingly amazes and often confuses educators that do not actively learn about new ways to reach learners. Often, individuals struggle to catch up and need professional development to support their acquisition of the array of electronic systems available. Learner-Instructor Interaction is important to deliver curriculum in a stimulating, interesting manner to individuals that need great supports and high levels of interaction as well as to self-driven and self-motivated students. Although, interaction is greater in this type, there remains a high degree of learner autonomy. Instructors of distance education curriculum must bridge the gaps often lost by a lack of visual ascertaining of student mastery. Instructors must evaluate individual students’ communication and products. When successful, they can effectively pull from a variety of response mechanisms to promote outcomes of learning, e.g., clarification, elaboration, simplification, extensions, analogies, and supplemental resources. The final type of interaction identified by Moore (1989) is Learner-Learner Interaction. Peer-group interaction most affectively assists the less
self-motivated individual who otherwise may not be successful in learning through distance education and might opt to return to a traditional campus-based program.

**Transactional Theory**

Moore (1991) continued to define transactional distance as pedagogical theory. He stated that distance education is not simply a geographic concept; it is a process that requires specific organizational structures and teaching procedures. He provided a continuum of distance education from the “most distant” representing low dialogue and low structure with the “least distant” defined as representative of high dialogue and high structure. Thus, the focus is not on distance as defined by a geographic measure; rather it is distance as defined by its infrastructure of system of supports. Another dimension of this is the degree of autonomy of a learner. Autonomy was defined by Moore (1990) as “the extent to which in a programme the learner determines objectives, implementation procedures, and resources and evaluation” (p. 13). The greater the transactional distance requires a greater responsibility on the learner. The complexity of the notion of autonomy in distance education; though, is controlled by teachers and the level of structure and learning materials they choose to implement. Moore (2002) outlined three variables to consider when examining transactional distance. Structure is the design of the course, the organization of instruction, and what communication media are utilized. Dialogue might be two-way or learner internalized. Then autonomy of the learner might range from vast to little ability or requirement to be self-directed. Autonomy is less of a personal responsibility when dependent on teacher control and when moving further from an origin of control, to result in success, autonomy must increase.
Theory in Summary

Considerations of the five pillars of quality will support models of delivery. Within this structure of accountability are the close look required on the interaction process and the continuum of the transactional model of distance education implemented.

Defining Distance Education

Distance education represents various models of delivery of content; similar to each is the inclusion in the model of full separation of instructor and student. The Indiana Higher Education Telecommunications (IHET) defined distance education as a formal learning activity necessarily implemented and supported when students and instructor are separated by geographic distance or by time, and supported by some communications technology. For the separation to be successful, the group defined standards for faculty, institutional attention to student services and necessary resources. Six key elements of distance education include: (a) separation of teacher and learner; (b) an educational organization; (c) media to link teacher and learner; (d) two-way exchange of communication; (e) individual rather than grouped learners, and (f) educators as an industrialized form (Keegan, 1980).

The United States Distance Learning Association (USDLA, 2006) defined distance education as distance learning through the acquisition of knowledge and skills through mediated information and instruction. The USDLA described required components as an instructional process, content delivery, interaction, practical application of content, and assessment.

The definition of distance learning may vary with the institution of higher education. To promote success in higher education courses and programs through distance education, systems of student supports beyond instructor-student communication are needed to be included in the vision and mission.
Delivery of Distance Education

The technology inputs for distance education are categorized into areas: voice, video, data, and print. Voice represents instructional audio tools that may be either interactive or passive technologies. Interactive technologies include audio conferencing, for instance conversation via telephone services. Passive technologies include audio tools that are one-way. Video represents tools such as slides, videotape, and real-time moving images combined with audio conferencing with one-way video combined with two-way audio. Data includes computer technology and instructional tools. The computer applications that support these include Computer-Assisted Instruction (CAI), Computer-Managed Instruction (CMI), and Computer-Mediated Education (CME). CAI uses the computer as a self-contained tool to present information. CMI uses the computer to organize records and progress and is often delivered in combination with CAI. CME uses computer applications that support instruction such as electronic mail, fax, real-time conferencing, and Internet applications. Finally, print represents the formats that support the foundation of a distance education course. This includes technology support documents, syllabi, workbooks, etc. (Willis, 1994)

Effectiveness of Distance Education

There are two main bodies of research on the effectiveness of distance education, descriptive case studies and learner achievement. The descriptive studies represent anthropological testing of the newness of the concepts and result in presentations of descriptions. The learner achievement studies represent comparisons of teaching and learning in conventional campus-based courses versus distance education delivered instruction and comparisons of resulting learner satisfaction and achievements. The descriptive studies help promote understanding of the parameters of learning in different contexts such as through a distance medium. The latter research supports the direction of providing both arenas to represent quality instruction. This research has found there are no
significant differences in the success of learners based on the environment and the medium of instruction (Old Dominion University, 1999).

There are many known benefits to distance education. The audience may be wider; students that may not normally be able to attend courses in a traditional setting may access distance education courses. In addition, a wider instructor base may be included. Finally, many individuals from different social, cultural, economic and experiential backgrounds may be connected (Willis, 1994).

Systems of Distance Education

Logistical support, student support, faculty support, and evaluation are essential to distance education (Willis, 1994). Distance programs should define who the targeted audience is to be successful. This population must be either set up for success already or supported adequately to promote the ability to learn from a distance (Willis, 1994).

Faculty members teaching in distance education, like faculty in the traditional campus-based classroom are the responsible party when gauging successful course instruction. Faculty who endeavor to teach from a distance must understand the challenges of the students that the medium may present. These may necessitate accommodating teaching to consider unknown diverse audiences, being adept at the needed technology while remaining focused on the role of teaching, and embracing a dual role of facilitator and content provider (Willis, 1994).

Although not all distance programs have facilitators, this role is an asset for instructional understanding. These individuals may not have content knowledge but can still promote the course goals by assisting with the technology, organization of information, operate as proctors, and mediate where they see necessary (Willis, 1994).

The “silent heroes” of distance education are support staff. These individuals assist in program success by providing services to students such as registration assistance, textbook ordering,
processing grade records, and management and interfacing with technological resources. The administrators of distance education programs work to insure technical capacity, support the academic mission, and support the development of faculty that meet the instructional needs of distant students (Willis, 1994)

*Students Perspectives of Distance Education*

Studies of student satisfaction of experiences in distance education instruction have supported the overall success of the medium for instructional delivery. These have examined high school and higher education distance education. There have been successful programs at both levels.

Jackman & Swan (1996) studied high school students enrolled in distance education with interactive video network facilitation. He found that students were pleased with the experience. The medium was an effective way of learning. Also, the process was determined as effective as traditional methods.

A comprehensive review of studies found higher education was successful at implementing distance education. Student responses regarding reasons they chose a distance experience in higher education identified predictors of satisfaction with distance education. These predictors included quality interaction with the instructor. In addition, the nature of online delivery was important, and within this, ranking highest was the perception of many advantages of flexibility, convenience and access. Also, self-efficacy for technology was found significant. Finally, the determination of an individual as an extroverted personality type correlated with the desire for online education experiences. Satisfaction of individuals enrolled in distance education courses increased with the greater number of courses accessed online (Johnston, Killion & Oomen (2005).
Many factors influence effective teaching in higher education. Instruction should support acquisition of relevant content, engage the learner in the topics introduced, promote the learner to desire further understanding and application of information and measure the understanding and practical application of the knowledge presented. These instructional designs should be understood and accepted by instructors. Thus, educators that wish to teach distance education courses must consider these identified challenges that face-to-face instruction must meet as well as the additional challenge of the technology that replaces the traditional classroom structure. Riedinger & Rosenberg (2006) asserted, of the number of individuals teaching in higher education, only a few full time faculty have embraced online education. Furthermore, individuals that do engage in distance education must demonstrate all the best qualities of teaching. These include: curiosity, flexibility, and dedication to innovative learning. The remaining online instruction examined was largely completed by adjuncts. It was found that although adjuncts are typically hardworking and enthusiastic; they may vary greatly in training, preparation, and experience.

Online teaching coupled with good course design results in solid delivery of information. When facing the challenge of training instructors, it is necessary to have examined their understanding and use of technology effects and online course design. Administration and trainers should assist in helping instructors improve their work and make the technology aspect transparent to students. Riedinger & Rosenberg (2006) categorized candidates for online instruction into four areas, “Bouncing Bunnies”, Teacher-Centrics”, “Technobohes”, and “Teaching Newbies”. The “Bouncing Bunnies” were those instructors that had a great deal of technical flash but had limited course content and substance to the material. The “Teacher-Centrics” described those instructors that simply replicated the classroom theater by taping themselves lecturing and posting online notes.
The “Technophobes” were instructors dragged into online instruction with great resistance and unwillingness to enter the online classroom. Finally, the “Teaching Newbies” were the more inexperienced individuals that needed help with pedagogy and course management. Understanding these categories is important for institutions that promote online course development and delivery to also provide training that continues over time.

Two primary forms of communication utilized in distance education instructional delivery are synchronous and asynchronous. The primary difference between these is whether the teacher and learner are communicating at the same time or not. Synchronous communication is accomplished by “real time” interaction of teacher and student; either through video conferencing or live chats via computer communications. Asynchronous communication occurs when the teacher and student remain separated in time and instruction. Various mediums such as broadcast video, webstreaming, and computer applications support asynchronous systems of communication.

Traditional Campus-Based Versus Distance Education

As more institutions consider distant education or increase their efforts and resource allocation to distant education efforts, the question of comparability emerges. Traditional classrooms allow the teacher to alter delivery to meet the needs of students at a particular moment in time. In contrast, teachers in distance education have very few visual cues (Willis, 1994). Souder (1993) contends, however, that distance education has surpassed traditional education in effectiveness and satisfaction of students. Test achievement has been higher for distance education students over campus-based students while there is no difference in course material (Souder, 1993). Finally, to be successful distance education instruction should include five critical elements for teaching, enthusiasm, organization, commitment to student interaction, technology, and support personnel. Instruction with these considerations has been stated as better organized and delivered than traditional instruction (Egan, Sebastian, & Welch, 1991; Mielke, 2000).
Distance Education Students Demonstrate Higher Achievement

A study in 1999 at East Carolina University compared distance education versus traditional campus-based factors of course delivery medium. The instructor was the same for both a course conducted both onsite and online, each course had same content, used the same materials, had the same assignments, and had the same time allotment and frames for completion of work. The enrollment in each course was almost identical in number of students (one more in the distant section); although the average age in the traditional course was twenty three years old and the average age of student in the distant course was thirty eight years old. The results concurred with the general body of knowledge that distance education can be as good as traditional face to face classroom education. In addition, although there were no significant differences between the two groups scores on testing, it was noted that distance education students outscored the campus-based students overall in all three instances of assessment conducted (Tucker, 2001).

Conclusion

The number of students taking advantage of distance education availability is growing. Therefore, it is important for individual institutions to study the medium of distance education delivery of traditional coursework to serve this growing body of students. Institutions of higher education that implement distance education need to also examine their vision, mission, and plan to support the efforts of individual instructors and programs. In addition, these institutions of higher education with distance education courses and programs must communicate their system of support of quality and accountability measures for them. Higher education institutions will find instructors and students at their doors asking for distance education. If they open the door, they will need to be ready to support it.
Chapter 3

Methodology

In this chapter research design, instrument development, subjects, procedures, data sources, and data analysis are described. Quantitative methods are used. The aim of the design was to compare satisfaction of students in the same educational program, with one group receiving the program in a conventional campus-based setting and the other through distance learning.

Research Design

The design of this study used data gathered through a student satisfaction survey. Students were coded as conventional delivery or distance education students. The survey results of the two groups were compared in an effort to identify any differences reported across groups.

The Student Satisfaction Survey was designed to provide insights into student satisfaction with key college services. Only the discrete questions are included. In 2005, questions that were not applicable to distance learning students (e.g. parking, building cleanliness) were omitted from the distance learning survey. The survey has been used annually, during winter quarter, since 2000. Each year the college’s Assessment and Evaluation Board review the survey.

Instrument Development

The University of Cincinnati, College of Education, Criminal Justice, and Human Services wanted to understand levels of satisfaction of its key service areas to students enrolled in its degree programs and courses. A survey was developed using both quantitative and qualitative questioning.
The purpose of the survey is to provide indicators for administrators to inform the development of the college's strategic plan. The survey yields feedback on faculty, instruction, courses, student advising and other services, and program climate. Through respondents were identified as conventional or distance education delivery, no previous efforts were made to compare the groups.

In 2005 the survey designed for a conventional campus-based population (See Appendix A) was reviewed for a distance population (See Appendix B). Changes to accommodate question formation considerations for the medium, conventional or distance were made. The college used these data to inform key stakeholders its effectiveness in meeting students’ needs and satisfaction with their experiences.

Subjects

The subjects of this study are those students who completed student satisfaction surveys for the college in academic years 2000, 2001, 2003, 2004, 2005, and 2006. Data were not available from 2002. Students were randomly selected from the pool of students who had been matriculated for at least one year. Until 2005, the same survey was used for all students, with the intent that distance learning students would mark those items related to the physical campus itself as not applicable. In 2005, those items were eliminated on the survey for distance learning students. The respondent rate for traditional students over the five years (N = 103) provided a comparable data set to the total respondent rate for the one year of distance learning students (N=163). See Table 2.
Table 2. Participants, Conventional Campus-based and Distance Education Students

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Campus-based</td>
<td>103</td>
<td>39.20</td>
</tr>
<tr>
<td>Distance Education</td>
<td>160</td>
<td>60.80</td>
</tr>
<tr>
<td>Total</td>
<td>263</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Demographic information was collected from all participants. The data included the following fields of interest: method of accessing education online or onsite, student status full or part time; class status, e.g., freshmen, graduate, etc.; gender; age; academic program; number of quarters completed at the university; race/ethnicity; transfer student status if applicable; and hours worked while enrolled in classes. Also, it was noted if students completed the survey electronically or with pen/pencil and mailed.

Procedures

The following procedures encompassed the steps to implementing the study. These include data collection and data source. An external agency, The University of Cincinnati, Evaluation Services Agency collected the original data for the College of Education, Criminal Justice, and Human Services. Data collection procedures are described. Secondary data source acquisition is described.

Data Collection

A survey was posted on the college website. Students from random samples across degree programs for the college were directed to the survey through a system of
informational mailing. A post card was sent to each student. The post card directed the student to a link to the website that allowed access to the surveys. The cards were color coded by medium of access delivery of each individual student’s program, blue for distance education and pink for campus-based. The post cards were coded with a unique number for each individual to enter when beginning the survey. This was done so that the evaluators could eliminate future mailings to respondents once they had completed the survey. A second post card directing students that had not yet completed the survey to the website link was sent approximately three weeks after the first mailing. Finally, a third mailing was conducted and included a hard copy of the survey and postage paid return envelope. This mailing asked the student to consider completing the survey and returning in the provided postage-free envelope. All distance education participants returned surveys electronically. Conventional campus-based students returned surveys both electronically and hard copy via postal service.

Data Source

The data the college received via the website was converted to a database. The data received on hard copy was entered into a database. The data were cleaned of original identifiers such as person’s name. The data files were provided for the purpose of this study to be examined in a new manner for comparison of conventional campus-based versus distance education students’ perspectives of satisfaction.

Data Analysis Procedures

The data were cleaned of questions not appropriate for comparison. Questions specific to either population, distance education or conventional campus-based were removed from consideration for analyses. The remaining data was set up for analyses on satisfaction
overall, and from the separate perspectives of distance or conventional campus-based students. Relevant questions to both populations were analyzed. The responses were analyzed using quantitative and qualitative data methods of analysis. Quantitative data was entered into the Statistical Package for Social Sciences, SPSS 13. Analysis was completed by field isolation and subsequent statistical tests. This method of analysis relied on the breadth of response and statistical review analysis of the data.

The quantitative responses of the campus-based students were coded to include the field category of “conventional” for campus-based students. The distance education students were coded to include the field category “distance”. The two data bases were combined into one data base representing all respondents. This data base was used for analyses that isolated each distinct population by access to courses as well as for both populations combined together.

Analysis to determine a reliability coefficient of the extent in which the questionnaire items were related to each other was completed. This Cronbach Alpha model of internal consistency of reliability test was used. The coefficient was very high, thus allowing for subsequent analyses to be conducted with satisfaction of reliability of items.

A syntax file of written scripts to run descriptive analyses and to manage groups for each category of questions was completed. The syntax file provided ease is determining the accuracy of the data file. Manipulation of the data from the syntax file was completed to create output of analyses.

Descriptive Statistical analyses were completed on the entire group of respondents’; conventional campus-based and distance education students. Additional data isolation into sub-sets of each distinct population was run. Then, analyses to determine central tendency
for measures of dispersion were completed to calculate means and standard deviations for both demographics and survey content questions. In addition, computation of new variables was completed to allow for analyses of groups of indicators of a survey category were completed to determine overall category means and standard deviations.

In order to determine if parametric techniques, more powerful statistical analysis could be used, additional analyses of items independently had to be completed. This determined if data could be analyzed for differences among more than two means and if the Pearson Correlation Coefficient was run. A Pearson correlation coefficient will range from -1.00 to +1.00. The resulting coefficients for the categories in the survey were sufficient in establishing relationships for comparison. This analysis was necessary to support the decision for subsequent analyses as dependent tests of variance rather than the use of independent t-tests for variables.

The analysis of variance (ANOVA) was completed to compare differences among the means. This multiple linear regression was calculated to determine levels of significance. Conclusions from regression analyses determined if a prediction equation could be obtained. If a relationship was significant, the analyses provided the direction of the relationship and the equation.

One-way mixed between and within groups analysis of variance (ANOVA) looked at the impact of the independent variable of access to course work, distance or conventional on the dependent variables. This analysis was completed to determine if between the groups there was difference and if there was a main effect with statistical significance. This analysis was completed to also determine interaction within factors and if there was an effect with statistical significance.
Effect size was interpreted by standards set by Cohen (1988). Eta squared is the proportion of variance of the dependent variable that is explained by the independent variable. Strength is determined based on guidelines: .01=small strength, .06=moderate strength and .14=large effect.
Chapter 4

Results

Results include demographic for both conventional campus-based and distance education students. Reliability analyses are presented to support subsequent statistical analyses. Descriptive data of the survey questions are presented for indicators of faculty, classes, general experiences, and climate. In addition, parametric statistics support the research questions results with statistical significance of the main effect and interaction effects. A summary of results concludes this chapter.

Demographics

Demographics of participants collected included gender, race/ethnicity, age, enrollment status (full or part time students), and number of quarters of study completed at the university. Number and percentages of respondents in each of these categories are included in the following tables.

Table 3 presents respondents by gender. There were slightly more females than males in both groups. The difference in percent of females was greater for the conventional campus-based group than the distance learning group.

<table>
<thead>
<tr>
<th>Table 3. Gender: Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance Education and Campus-Based Criminal Justice Graduate Students</td>
</tr>
<tr>
<td>Distance Education Academic years 05-06 and Conventional Campus-Based Academic Years 00-01, 01-02, 03-04 and 05-06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographics- Gender</th>
<th>Distance</th>
<th>Conventional Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=160</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>77</td>
<td>48.1</td>
</tr>
<tr>
<td>Female</td>
<td>82</td>
<td>51.3</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>.6</td>
</tr>
</tbody>
</table>
Table 4 presents the number of respondents by race/ethnicity. The majority of respondents across both categories distance education (65.6%) and conventional campus-based (86.4%) self-reported their race/ethnicity as white, non-Hispanic. The second largest group was Black, non-Hispanic. Nearly a fourth of the distance education students self-reported to be Black, non-Hispanic in contrast to 10.7% of the conventional campus-based students.

<table>
<thead>
<tr>
<th>Demographics- Race/ethnicity</th>
<th>Distance</th>
<th></th>
<th>Conventional Campus</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=160</td>
<td>%</td>
<td>N=103</td>
<td>%</td>
</tr>
<tr>
<td>American Indian/Alaskan</td>
<td>1</td>
<td>.6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asian/ Pacific Islander</td>
<td>3</td>
<td>1.9</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Black non-Hispanic</td>
<td>37</td>
<td>23.8</td>
<td>11</td>
<td>10.7</td>
</tr>
<tr>
<td>Latino/ Hispanic</td>
<td>8</td>
<td>5.0</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>White non-Hispanic</td>
<td>106</td>
<td>65.6</td>
<td>89</td>
<td>86.4</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1.9</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>1.3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Age data presented in Table 5 indicates that the majority (91.2%) of distance education students were over 25 years old. The majority of conventional campus-based students (59.2%) were 25 years old or younger in age.
Table 5. Age: Demographics
Distance Education and Campus-Based Criminal Justice Graduate Students
Distance Education Academic years 05-06 and
Conventional Campus-Based Academic Years 00-01, 01-02, 03-04 and 05-06

<table>
<thead>
<tr>
<th>Demographics- Age</th>
<th>Distance</th>
<th>Conventional Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=160</td>
<td>%</td>
</tr>
<tr>
<td>≤ 25 years</td>
<td>14</td>
<td>8.8</td>
</tr>
<tr>
<td>&gt; 25</td>
<td>146</td>
<td>91.2</td>
</tr>
<tr>
<td></td>
<td>N=103</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>61</td>
<td>59.2</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>40.8</td>
</tr>
</tbody>
</table>

In comparing full or part time status, slightly more than half the students in distance learning courses entirely from a distance were enrolled full time. The majority of conventional campus-based students (75.7%) were full-time students with part-time students (24.3%). These data are presented in Table 6.

Table 6. Enrollment Status: Demographics
Distance Education and Campus-Based Criminal Justice Graduate Students
Distance Education Academic years 05-06 and
Conventional Campus-Based Academic Years 00-01, 01-02, 03-04 and 05-06

<table>
<thead>
<tr>
<th>Enrollment Status</th>
<th>Distance</th>
<th>Conventional Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=160</td>
<td>%</td>
</tr>
<tr>
<td>Full-time</td>
<td>85</td>
<td>53.1</td>
</tr>
<tr>
<td></td>
<td>N=103</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>75.7</td>
</tr>
<tr>
<td>Part-time</td>
<td>75</td>
<td>46.9</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>24.3</td>
</tr>
</tbody>
</table>

Respondents also indicated the number of quarters they had completed in their program. The largest number of students in both groups was new to the program with one to three quarters completed. Adjusting the category to include respondents that indicated they completed either 1-3 or 4-6 quarters at the University of Cincinnati, demonstrated a closer
correlation of the two groups, distance education (40.0% + 32.5% = 72.5%) and conventional campus-based (55.3% + 9.7% = 65.0%). Data are presented in Table 7.

Table 7. Quarters at UC: Demographics
Distance Education and Campus-Based Criminal Justice Graduate Students
Distance Education Academic years 05-06 and
Conventional Campus-Based Academic Years 00-01, 01-02, 03-04 and 05-06

<table>
<thead>
<tr>
<th>Quarters at UC</th>
<th>Distance</th>
<th></th>
<th>Conventional Campus</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=160</td>
<td>%</td>
<td>N=103</td>
<td>%</td>
</tr>
<tr>
<td>1-3</td>
<td>64</td>
<td>40.0</td>
<td>57</td>
<td>55.3</td>
</tr>
<tr>
<td>4-6</td>
<td>52</td>
<td>32.5</td>
<td>10</td>
<td>9.7</td>
</tr>
<tr>
<td>7-9</td>
<td>30</td>
<td>18.8</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>10 or more</td>
<td>13</td>
<td>8.1</td>
<td>33</td>
<td>32.0</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>.6</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Reliability

Tests of reliability were completed to examine test construction. An item-total analysis was conducted to assess the internal consistency of the data set. A Pearson Correlation was calculated to determine if items on the scale were desirable based on the strength of the relationships between variables. A Cronbach alpha was calculated to determine overall internal consistency.

A Pearson Correlation was conducted by variable areas of faculty, classes, general items and climate. A positive correlation indicates as one variable increases the other also increases. Greater than 0.3 to .49 in correlation is a medium strength relationship, 0.5 to 1.0 is a high correlation of strength. Greater than .3 strength of correlation for a variable area
indicates advanced analysis of variance may be conducted rather than independent tests (Cohen, 1988). Each correlation exceeded .30 for internal consistency. See Table 8.

Table 8. Pearson Correlation of Internal Consistency by Variable Means

<table>
<thead>
<tr>
<th>Variables</th>
<th>Faculty Mean</th>
<th>Class Mean</th>
<th>General Mean</th>
<th>Climate Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Mean</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.637**</td>
<td>.660**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>260</td>
<td>244</td>
<td>260</td>
</tr>
<tr>
<td>Class Mean</td>
<td>Pearson Correlation</td>
<td>.637**</td>
<td>1</td>
<td>.647**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>244</td>
<td>244</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>244</td>
<td>254</td>
<td>244</td>
</tr>
<tr>
<td>General Mean</td>
<td>Pearson Correlation</td>
<td>.660**</td>
<td>.647**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>260</td>
<td>244</td>
<td>260</td>
</tr>
<tr>
<td>Climate Mean</td>
<td>Pearson Correlation</td>
<td>.415**</td>
<td>.356**</td>
<td>.461**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>260</td>
<td>243</td>
<td>259</td>
</tr>
</tbody>
</table>

**.Correlation is significant at the 0.01 level (2-tailed)

Table 9 represents the results of the Cronbach alpha as a measure of internal consistency. This statistical measure comprised the number of items on the survey to determine a single construct as well as the degree these items measured the same single construct. There is very high (96%) internal consistency, 1.00 represents the highest consistency.

Table 9. Cronbach Alpha Test of Reliability

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>%</th>
<th>N of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
<td>.964</td>
<td>24</td>
</tr>
<tr>
<td>Cronbach’s Alpha Based on Standardized Items</td>
<td>.965</td>
<td>24</td>
</tr>
</tbody>
</table>
Descriptive Statistics

Descriptive statistics were calculated to determine total responses of participants’. Mean scores by survey question and for each category of questions (faculty, classes, general experiences, and climate) were generated for each of the two groups.

Items Within Survey Categories

Distance education students reported higher satisfaction on each question representing the categories of faculty, classes, and general experiences. However, conventional campus-based students were more satisfied overall for the category of climate, rating five of six items higher. The remaining item, (positive learning environment), was rated slightly higher by distance education students.

Faculty. For the category of faculty, distance education students were more satisfied overall (M=4.32) then conventional campus-based students (M=3.83). Across indicators for the category of faculty, distance students reported higher responses. Distance learning students rated instructional quality, instructor availability, and instructor commitment higher than convention campus-based students. Distance learning students also rated instructors as more respectful (M=4.51) than conventional campus-based students (M=3.97). Lastly distance education students rated instructors as mentors (M=4.58) higher then conventional campus-based students (M=3.55). See Table 10.
Table 10. Means and Standard Deviation by Survey Questions: Faculty Distance Education and Conventional Campus-Based Criminal Justice Students Distance Education Academic years 05-06 and Conventional Campus-Based Academic Years 00-01, 01-02, 03-04 and 05-06

<table>
<thead>
<tr>
<th>Category</th>
<th>Distance Education</th>
<th>Conventional Education</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=160</td>
<td>N=103</td>
<td>N=263</td>
</tr>
<tr>
<td></td>
<td>Mean   SD</td>
<td>Mean   SD</td>
<td>Mean   SD</td>
</tr>
<tr>
<td>Faculty Overall</td>
<td>4.32   .882</td>
<td>3.83   .919</td>
<td>4.128  .9268</td>
</tr>
<tr>
<td>Faculty Instructional quality</td>
<td>4.52   .931</td>
<td>4.01   .955</td>
<td>4.32   .972</td>
</tr>
<tr>
<td>Faculty Availability</td>
<td>4.13   1.089</td>
<td>3.75   1.126</td>
<td>3.98   1.117</td>
</tr>
<tr>
<td>Faculty Commitment</td>
<td>4.50   .889</td>
<td>3.83   1.106</td>
<td>4.23   1.033</td>
</tr>
<tr>
<td>Faculty Respect</td>
<td>4.51   .897</td>
<td>3.97   1.033</td>
<td>4.29   .988</td>
</tr>
<tr>
<td>Faculty Mentoring</td>
<td>4.58   1.838</td>
<td>3.55   1.155</td>
<td>3.64   1.254</td>
</tr>
</tbody>
</table>

Classes. In the category of classes, distance education students were more satisfied overall (M=4.48) then conventional campus-based students (M=3.78). Distance education students rated their perception of class size (M=3.98 as opposed to 3.55) and class relevance (M=4.46 as opposed to M=3.901) higher then conventional campus-based students. Distance learning students also rated class availability in the major information requirements, and technology use higher then conventional campus-based students. Means are provided in Table 11.
Table 11. Means and Standard Deviation by Survey Questions: Classes
Distance Education and Conventional Campus-Based Criminal Justice Students
Distance Education Academic years 05-06 and
Conventional Campus-Based Academic Years 00-01, 01-02, 03-04 and 05-06

<table>
<thead>
<tr>
<th>Category</th>
<th>Distance Education N=160</th>
<th>Conventional Education N=103</th>
<th>All N=263</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes Overall</td>
<td>4.48 (.797)</td>
<td>3.77 (.985)</td>
<td>4.22 (.933)</td>
</tr>
<tr>
<td>Class size</td>
<td>3.98 (1.155)</td>
<td>3.55 (1.278)</td>
<td>3.80 (1.223)</td>
</tr>
<tr>
<td>Class relevance to career goals</td>
<td>4.46 (1.006)</td>
<td>3.91 (1.059)</td>
<td>4.26 (1.057)</td>
</tr>
<tr>
<td>Class availability in major</td>
<td>4.46 (1.043)</td>
<td>3.74 (1.283)</td>
<td>4.20 (1.186)</td>
</tr>
<tr>
<td>Information requirements</td>
<td>4.64 (.867)</td>
<td>4.09 (.996)</td>
<td>4.44 (.952)</td>
</tr>
<tr>
<td>Effective use of technology</td>
<td>4.63 (.853)</td>
<td>3.65 (1.237)</td>
<td>4.28 (1.108)</td>
</tr>
</tbody>
</table>

*General Experiences.* In the category of general questions, distance learning students were more satisfied overall (M=4.27) then conventional campus-based students (M=3.55). Across all indicators for questions on general experiences, distance students again responded higher then conventional campus-based students. Mean responses to specific questions of general experiences are presented in Table 12.
Table 12. Means and Standard Deviation by Survey Questions: General Areas
Distance Education and Conventional Campus-Based Criminal Justice Students
Distance Education Academic years 05-06 and
Conventional Campus-Based Academic Years 00-01, 01-02, 03-04 and 05-06

<table>
<thead>
<tr>
<th>Category</th>
<th>Distance Education N=160</th>
<th>Campus-Based N=103</th>
<th>All N=263</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>General Overall</td>
<td>4.27</td>
<td>.875</td>
<td>3.55</td>
</tr>
<tr>
<td>Availability of computers and technology resources</td>
<td>4.48</td>
<td>.951</td>
<td>3.18</td>
</tr>
<tr>
<td>Quality of resources</td>
<td>4.03</td>
<td>1.071</td>
<td>3.61</td>
</tr>
<tr>
<td>Flexibility of program</td>
<td>4.32</td>
<td>1.122</td>
<td>3.62</td>
</tr>
<tr>
<td>Opportunity to provide feedback</td>
<td>4.04</td>
<td>1.218</td>
<td>3.61</td>
</tr>
<tr>
<td>Consistency of information from administration/program</td>
<td>4.35</td>
<td>1.059</td>
<td>3.60</td>
</tr>
<tr>
<td>Student handbook</td>
<td>4.20</td>
<td>1.058</td>
<td>3.74</td>
</tr>
<tr>
<td>Accessibility of information</td>
<td>4.37</td>
<td>1.019</td>
<td>3.82</td>
</tr>
</tbody>
</table>

Program Climate. Program climate was the one category in which conventional campus-based students overall were slightly more satisfied (M=4.31) then distance education students (M=4.20). Although, both groups were satisfied with program climate, on five of the six indicators, conventional campus-based students reported slightly higher satisfaction. The means for specific aspects of program climate are presented in Table 13.
Table 13. Means and Standard Deviation by Survey Questions: Program Climate Distance Education and Conventional Campus-Based Criminal Justice Students Distance Education Academic years 05-06 and Conventional Campus-Based Academic Years 00-01, 01-02, 03-04 and 05-06

<table>
<thead>
<tr>
<th>Category</th>
<th>Distance Education N=160</th>
<th>Campus-Based N=103</th>
<th>All N=263</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Program Climate Overall</td>
<td>4.20</td>
<td>.816</td>
<td>4.31</td>
</tr>
<tr>
<td>Diverse perspectives welcome</td>
<td>4.04</td>
<td>.934</td>
<td>4.21</td>
</tr>
<tr>
<td>Equitable treatment—gender</td>
<td>4.26</td>
<td>.835</td>
<td>4.31</td>
</tr>
<tr>
<td>Equitable treatment—race</td>
<td>4.25</td>
<td>.840</td>
<td>4.39</td>
</tr>
<tr>
<td>Equitable treatment—religion</td>
<td>4.23</td>
<td>.851</td>
<td>4.39</td>
</tr>
<tr>
<td>Equitable treatment—age</td>
<td>4.16</td>
<td>.965</td>
<td>4.31</td>
</tr>
<tr>
<td>Positive learning environment</td>
<td>4.25</td>
<td>.921</td>
<td>4.23</td>
</tr>
</tbody>
</table>

Overall Differences in Satisfaction

Descriptive statistics are calculated for the population of graduate students together and for each group. The distance students reported overall higher (M=4.22) then conventional campus-based students (M=3.88). See Table 14.
Table 14. Means and Standard Deviation Overall Survey Question
Distance Education and Conventional Campus-Based Criminal Justice Students
Distance Education Academic years 05-06 and
Conventional Campus-Based Academic Years 00-01, 01-02, 03-04 and 05-06

<table>
<thead>
<tr>
<th>Category</th>
<th>Distance Education N=160</th>
<th>Campus-Based N=103</th>
<th>All N=263</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean  SD</td>
<td>Mean  SD</td>
<td>Mean  SD</td>
</tr>
<tr>
<td>Overall satisfaction single question</td>
<td>4.22 1.33</td>
<td>3.88 1.08</td>
<td>4.09 1.25</td>
</tr>
</tbody>
</table>

The Research Questions

The main effect between groups and the within group interactions was calculated to respond to the research questions. A split-plot analysis of variance (ANOVA) was conducted. The ANOVA summary table is depicted in Table 15. Main effects for groups and categories were statistically significant. In addition, the interaction for groups by categories was also statistically significant.
Table 15. Split-Plot Analysis of Variance

<table>
<thead>
<tr>
<th>Factor</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>1529.232</td>
<td>1</td>
<td>152.93232</td>
<td>12048.674</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>331.284</td>
<td>261</td>
<td>1.269</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Category</td>
<td>27.321</td>
<td>3</td>
<td>9.107</td>
<td>36.271</td>
<td>.000</td>
</tr>
<tr>
<td>Group by Category</td>
<td>21.533</td>
<td>3</td>
<td>7.178</td>
<td>28.587</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>196.587</td>
<td>783</td>
<td>.251</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Question 1

Research question #1 is based on an overall difference of participant responses in relationship to program categories. This question investigates: Is there a difference in overall student satisfaction for conventional campus based vs. distance education students?

Research question 1 is answered by main effect for groups. The F ratio is statistically significant, $F(1,261)=12048.674$, $p<.000$. See Table 15. Figure 2 supports the contention that distance education students are notably more satisfied then conventional campus-based students.
Effect sizes were assessed by examining the Eta Squared given in the split-plot ANOVA. According to Cohen (1988), small .01, medium .06, and large .14 may distinguish effect size. The effect size for groups is .979, which represents a very large main effect.

Research Question 2

Research question #2 is based on an overall difference of participant responses in relationship to the access method of education. This question investigates: Is there a difference between student satisfaction ratings of the following program categories: teacher assistant performance, faculty performance, class characteristics, general experiences and program climate? Research question 2 is answered by the split-plot ANOVA program category main effect. The F ratio is statistically significant, $F(3,783)=36.271$, $p<.000$. See Table 15.
In addition, means for each category are depicted in figure 3. Satisfaction levels are > 4.0 on a Likert scale of 0 to 5 for each category. There is a slight difference between groups of faculty, classes, and general experiences. The area of climate was rated highest overall.

Figure 3. Distance and Conventional Campus-based Total Means by Program Category

![Bar chart showing total means by program category for distance and conventional campus-based education satisfaction.]

Effect size is assessed for program categories through multivariate tests. A partial Eta of .105 was determined. This represents a medium effect size.

Research Question 3

Research question #3 is based on overall ratings of satisfaction on program categories by groups of students of distance or conventional campus-based education satisfaction. Research question #3 investigates: Is there a differential pattern of student satisfaction ratings between distance education and conventional campus-based students’ ratings across the following program categories: faculty performance, classes, general experiences and climate?
Research question 3 is answered by a split-plot ANOVA to determine statistical significance of interaction effects within these groups by category. These tests indicate that research question #3 of within groups by category effect F ratio is statistically significant, \( F(3,783)=28.573, p<.000 \). See Table 15. Figure 4 illustrates this interaction in a line graph.

**Figure 4. Interaction Effects**
In addition, across each category area, a mean is computed. Distance education students reported higher satisfaction in areas of faculty (M=4.24) than conventional campus-based (M=3.80), regarding classes (M=4.36) than conventional campus-based (M= 3.81), and general items (M=4.20) then conventional campus-based students (M=3.52). However, in the area of climate, conventional campus-based students (M=3.70) and distance education students (M=3.61) were similarly satisfied with their experiences. In support of response to research question #2, the overall means demonstrate that distance education students (M=4.10) are more satisfied then conventional campus-based students (M=3.71). See Table 16.

Table 16. Distance Education and Conventional Campus-Based Means and Standard Deviation by Survey Category of Questions Distance Education (05-06) versus Campus-Based (00-01, 01-02, 03-04 and 05-06)

<table>
<thead>
<tr>
<th>Category</th>
<th>Distance N=160</th>
<th>Conventional Campus N=103</th>
<th>All N=263</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Faculty</td>
<td>4.24</td>
<td>.755</td>
<td>3.80</td>
</tr>
<tr>
<td>Classes</td>
<td>4.36</td>
<td>.715</td>
<td>3.81</td>
</tr>
<tr>
<td>General Experiences</td>
<td>4.20</td>
<td>.745</td>
<td>3.52</td>
</tr>
<tr>
<td>Program Climate</td>
<td>4.20</td>
<td>.816</td>
<td>3.70</td>
</tr>
<tr>
<td>Overall Total</td>
<td>4.25</td>
<td>.758</td>
<td>3.86</td>
</tr>
</tbody>
</table>

The interaction effect is also examined. Within the groups, faculty, classes, general experiences, and climate the Eta Squared for this test was .259. This is a large effect size.
Summary of Results

Graduate Criminal Justice students were all highly satisfied with program categories: faculty, classes, general experiences and climate. The main effect for groups, distance education and conventional campus-based education was statistically significant with a large effect size. The main effect for the categories was statistically significant with a medium effect size. The interaction effect of group by categories was statistically significant with a large effect size. The F ratio of each research question was statistically significance at p<.000.

Distance education students were more satisfied overall than conventional campus-based students. Distance education students were more satisfied with the faculty, classes and general experiences than conventional campus-based students were. Conventional campus-based students were slightly more satisfied in the category of climate. Both groups were satisfied overall in the category of climate.

In conclusion, this study demonstrates that distance and conventional campus-based programs are both meeting the needs of students. Distance education students are more satisfied overall. Higher education institutions and other organizations considering distance education options to programs and courses may be encouraged by these results. This study provides positive feedback from students in consideration of systems of support and faculty across program models of distance education and conventional campus-based education.
Chapter 5
Discussion

This chapter contains a discussion of this study based on the findings as presented in the previous chapter. The implications of the significant findings are discussed. The limitations of the study are presented next. Finally, suggestions for future research are made with respect to institutions of higher education embarking on distance education.

Implications

Results from this study indicate distance education students and conventional-campus-based students from the same graduate education program were highly satisfied with their experiences. Mean scores on the survey from both groups revealed satisfaction across survey items. In addition, an analysis of categories for faculty, classes, general experiences and climate was completed. Mean scores for these categories were also positive for both programs.

Statistical analysis was conducted to determine the main effects of groups, distance and conventional campus-based education. It was also conducted for program categories, faculty, classes, general experiences, and climate. Additionally, an analysis of interaction of group by category was also completed. Through a split-plot ANOVA the main effects and interaction effect F ratios were determined for the groups, distance education and conventional campus-based; for categories, faculty, classes, general experiences, and program climate; and for groups by categories. The main effect F ratio for groups was statistically significant, (p<.000). The main effect F ratio for the program categories was also statistically significant, (p<.000). In addition, the interaction effect F ratio of groups by program categories was statistically significant, (p<.000). Though both groups reported positive satisfaction rates, distance education students reported statistically significantly
higher satisfaction than their counterparts accessing courses conventionally on campus. These results were statistically significant at an alpha of .05.

Two distinctions between the participants that made up the groups were evident by the demographics reports of age and race/ethnicity. The majority of distance education students were over the age of twenty-five (91.2%), while, the majority of conventional campus-based students were ages twenty-five or younger (59.2%). In addition, there were a larger number of minority participants in the distance education group. Of the participants in the distance education group, (23.8%) students indicated they were Black non-Hispanic; while in the conventional campus-based group, (10.7%) students indicated they were Black non-Hispanic. Additionally, if all students that indicated a minority status were combined, the students in the distance education program that indicated they represented a minority group represented 33.2%; whereas the conventional-campus-based population that indicated a minority status was 12.7%. Thus, there is a noted difference between these two groups based on the two factors of age and minority status. These data suggest that the distance education program is more accessible to students of minority groups, particularly Black non-Hispanic individuals than the conventional campus-based program. Considering, the university is located in a large urban city, it is interesting that less minorities are accessing on campus where they may reside closer than those students accessing from a distance.

In addition, the distance education program has a majority of non-traditional students based on the indicator of age (≥ 25 years) than the conventional campus-based program.

Phipps & Merisotis (1999) reviewed the contemporary research on distance learning high student satisfaction. Experiences with distance education were favorable compared to conventional campus-based experiences. In addition, student outcomes were similar to their
counterparts in conventional campus-based courses. More recently, Oakley (2004) from the University of Illinois conducted a study of the value of online learning in relationship to Maydas Five Pillars of quality. Results indicated students were pleased with their experiences and the quality of online learning. Students were also pleased with the support services. The study implies that these results are supportive of the institutions distance delivery model representing a very high enrollment exceeding 50,000 students in over 3,700 online courses a semester.

Levy (2002) places an emphasis on successful preparation by institutions for distance education. He provides six factors to consider when planning distance education programs in higher education. These include:

- the vision and plan phase to assist in the design and implementation of distance courses and programs. Institutions without a vision will find themselves in a reactive mode in lieu of a more effective proactive mode.
- technology, beyond simply providing a system.
- training and support, replacement for the typical one time delivery to a group face-to-face.
- student supports that are implemented and evaluated for effectiveness.
- student training and support to increase the likelihood of student success.
- an awareness of copyright law allowances and fair use, defined by The Technology, Education, and Copyright Harmonization (TEACH) Act (2002).

This study examined one complete program in higher education offered through conventional campus-based access and through distance education. Prior studies have
typically focused on individual courses, students, or components of distance education. This study represents positive results of satisfaction to the field of the successes of a full program.

Limitations

Although positive aspects of the results of the analysis of this data outweigh the negative, there are some limitations of this study. There are limitations of the study being based on a convenience sample. Also, there are problems with the nature of self report by participants. Finally, there could be an influential factor due to the differences in time when sample was reported by the two separate program modals of conventional campus-based students and distance education students.

First, the sample population for this study represented second source data. The actual data collection was completed by an external evaluation group to the program. This group provided the SPSS data file with identifiers removed. Only general demographics could be examined. Thus, the population of distance education students is unknown beyond that they were coded distance education and participated only in the distance education method of program delivery. The conventional campus-based students were participants that came to class at the university. An assumption is they lived locally within a reasonable driving distance to access their courses. Due to the location of the main campus being in the tri-state area, these students may have come from Ohio, Kentucky or possibly Indiana to attend courses on a daily basis. Thus, it impossible to report more specifically on the participants’ locations.

Second, the study was based on data obtained through self-report. While the advantage of self-report is that participants give their views directly, the disadvantage is that there are potential validity problems. The greatest risk is that participants may not be
truthful. They may deceive themselves or others. Furthermore, there may be a risk of inflation of data by participants wishing to convey a positive perception. Also, this could have been exacerbated by the external evaluation process. The decision by the external evaluators was made to have coded identifiers to track incoming data and allow for subsequent mass mailings soliciting responses from individuals. This may have potential for creating an error of mistrust in the anonymity stated on the survey. Thus, if a participant believed their answers may be attributed to them they may skew these more positively.

Third, the sample size required considerations for what data to include in the study. The research on satisfaction of conventional campus-based students has been conducted annually for five years. Each program throughout the college was included. In the academic year 2005-2006 an effort to capture the response of students accessing programs through distance education was included. There were far fewer entire programs being offered fully through distance education. However, the ones that were surveyed yielded high response rates. In the one year for the graduate program this study is based on there were 160 participants. With less than half this number of participants the same year of conventional campus-based students in the program, there was not a comparable group. The decision was made to include the prior academic years academic years 2000- 2001, 2003- 2004, 2004-2005 along with 2005-2006. Data were not available from 2002. This allowed for a sample of conventional-campus-based students of 103 participants.

The limitations of this study data may not have affected the results. Considerations are certainly warranted for how to improve the design a comparison study of programs with two delivery methods, conventional campus-based and distance education. Future research studies may need to address these limitations.
Conclusion and Future Research

The growth of distance education in the last few years has been great. In 2003, more than 57% of institutions with distance education courses reported learner outcomes were as good as face-to-face or superior. Most recent data by Allen & Seaman (2006) provides this number grew each to slightly more than 60% the following year in 2004 with a large percent (40%) indicating that distance education was viewed superior. Interestingly, 80% of the largest institutions (enrollment > 15,000) viewed distance education as equal to with just fewer than 30% of these stating it is actually superior to conventional campus-based education.

The growth of distance education will continue and more institutions of higher education will attempt to place entire programs online. Based on the predictions of Sloan-C studies distance education growth will continue at a fast pace. In 2006 growth was reported from 2.3 million students having accessed distance education (minimally one course) in the fall term 2004 to 3.2 million in the first term for fall 2005 Allen & Seaman (2006). In the year 2005, predictions for 2006 were of growth of approximately 25% (Abel, 2005). Data for growth in 2006 are not yet available.

The goal of this study was to determine if differences existed between the perceptions of students enrolled in a conventional campus-based program and their counter-parts enrolled in distance education. Overall, both groups were satisfied with their programs and categories of faculty, classes, general experiences, and program climate. Notably, distance education students were more satisfied then conventional campus-based students. Furthermore, the interaction of program access, distance or conventional campus-based education, by these categories yielded higher satisfaction of distance education students. There was statistical
significance for groups, for categories, and for group by the category. Additionally, there was a noted difference in group demographics based on age and race/ethnicity. The majority of distance education students were older than twenty-five years of age as compared to their counter-parts in the conventional campus-based group where the majority of students were twenty-five years or younger in age. Also, there was a higher representation of minorities in the distance education program than the conventional campus-based program.

Further investigation of distance education is recommended. Specifically, the body of research is limiting in general since distance education in higher education has grown exponentially in the last few years. Also, not many studies have examined entire programs and learner outcomes of students based on the difference in delivery method of courses. In addition to satisfaction studies, programs may want to investigate difference in learner outcomes. Another consideration is how to assess impact other than self-report or opinion. Finally, the noted difference in demographics would lend to studies that examined the differences in the individuals accessing distance education over conventional campus-based programs, specifically the differences in age and race/ethnicity.

Another area for study is the outcomes of learners from the two distinct groups of conventional campus-based and distance education. For example, an assessment of graduates’ employment could be interesting. Another consideration might be to design a content knowledge assessment. For example, observations could provide stronger data as to success in practical application of knowledge. However, the nature of distance programs might complicate this type of a study. Use of technology to overcome this by webstreaming to conduct observations from a distance might be a viable option. Finally, other considerations of a final assessment to graduate might be the subject of a future study.
To thoroughly investigate the efficacy of higher education with regard to distance education efforts set forth in this study, perhaps more compelling development of questions to provide qualitative data might be developed. Another consideration would be to follow-up with a specific group of students in the format of interviewing. Together these methods might provide insight and support of satisfaction results.

This study provides a positive outlook for higher education institutions concerned with maintaining quality, moving instruction along with technology advances into the 21st century, and in their care in supporting students to promote satisfaction in learning. Also, considerations for benefits of distance education that perhaps would have not been made without cause are worthy of mention. In times of tragedy such as Hurricane Katrina in New Orleans just over a year ago in the fall of 2005, in a region that is to this day still trying to rebuild to levels of normalcy, some institutions and individual faculty found that recovery was assisted by distance education. It is compelling that whether it is an act of God that motivates, an interest, a market that dictates, or an institution that desires to utilize technology to teach from a distance, distance education options will increase. This study supports the considerations for success in these future efforts. Clearly though, more research is needed with regard to the effectiveness of distance education in higher education.
References


Appendix A: Conventional Campus-Based Survey
College of Education, Criminal Justice, and Human Services
Student Satisfaction Survey

The College of Education, Criminal Justice, and Human Services (CECH) at the University of Cincinnati is committed to assuring the highest level of success for all of its students. This survey is designed to give students an opportunity to voice their opinions to an interested audience of administrators, faculty, and staff within the CECH and your program. Your responses will be used to improve your learning experience and those of future students. Your responses will remain strictly confidential. Results from this survey will be presented to the CECH administration without use of individuals’ names.

The questions in the survey are specifically designed for students in the CECH. Therefore, as you answer the questions, think only about your experiences as a student in CECH throughout the 2004-05 Academic Year. Do not respond based on courses or experiences outside the CECH.

Please answer the following questions by completely darkening the appropriate response.

1. Please enter the 6-digit number located on the envelope above your name. (This information will only be used to prevent your receiving additional requests to complete the survey once you have responded. It will be deleted from the final database and no identifying information will be linked to specific responses.)

2. SATISFACTION QUESTIONS: Please indicate your level of satisfaction using the following scale: Very Satisfied = VS; Satisfied = S; Neutral = N; Dissatisfied = D; Very Dissatisfied = VD; Not Applicable = NA

2. Teaching Assistants Performance: If you experienced courses taught by teaching assistants in your program this academic year, please tell us how satisfied you are with:

   a. The quality of instruction by teaching assistants ................. O O O O O O
   b. The availability of teaching assistants outside of class ........ O O O O O O
   c. Teaching assistants’ commitment to student learning .......... O O O O O O
   d. Respect for students shown by teaching assistants ............. O O O O O O

3. COMMENTS ON TEACHING ASSISTANTS:

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
4. **Faculty Performance**: As you think about your experiences with faculty in your program this academic year, please tell us how satisfied you are with:

Very Satisfied=VS; Satisfied=S; Neutral=N; Dissatisfied=D; Very Dissatisfied=VD; Not Applicable = NA

<table>
<thead>
<tr>
<th></th>
<th>VS</th>
<th>S</th>
<th>N</th>
<th>D</th>
<th>VD</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The quality of instruction by faculty</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b. The availability of faculty outside of class</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c. Faculty commitment to student learning</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>d. Respect for students shown by faculty members</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>e. Advising (information related to program requirements and/or course selection) you may have received from your program’s faculty</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>f. Mentoring (information relating to career and/or practices) you may have received from your program’s faculty</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

5. **COMMENTS ON FACULTY PERFORMANCE:**

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

6. **Classes**: As you think about your experiences with classes in your program this academic year, please tell us how satisfied you are with:

<table>
<thead>
<tr>
<th></th>
<th>VS</th>
<th>S</th>
<th>N</th>
<th>D</th>
<th>VD</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The size of classes</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b. The relevance of classes to career goals and objectives</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c. The availability of classes in your major field of study</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>d. The information instructors give about course requirements (grading, attendance policy, etc.)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>e. The effective use of technology in the classroom</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

7. **COMMENTS ON CLASSES:**

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
NOTE: Questions 8, 9, and 10 apply to UNDERGRADUATE STUDENTS ONLY. If you are a graduate student please skip to Question 11.

8. CECH Student Services Center: If you had experiences with the CECH Student Services Center this academic year, how satisfied are you with:

Very Satisfied=VS; Satisfied=S; Neutral=N; Dissatisfied=D; Very Dissatisfied=VD; Not Applicable = NA

<table>
<thead>
<tr>
<th></th>
<th>VS</th>
<th>S</th>
<th>N</th>
<th>D</th>
<th>VD</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The quality of advising</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>The availability of advisors</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>The respect shown to students by advisors</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Assistance with scheduling</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Availability of standardized test information (e.g., Praxis)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Availability of scholarship information</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Availability of licensure information</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Services from the front desk staff</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

9. How often have you visited the CECH Student Services Center this academic year? (UNDERGRADUATES ONLY)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never</th>
<th>3-4 Times</th>
<th>1-2 Times</th>
<th>5 or More Times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td></td>
</tr>
</tbody>
</table>

10. COMMENTS ON CECH STUDENT SERVICES (UNDERGRADUATES ONLY):

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

71
11. **Facilities:** As you think about your experiences in the College of Education, Criminal Justice, and Human Services (CECH) this academic year, how satisfied are you with:

<table>
<thead>
<tr>
<th></th>
<th>VS</th>
<th>S</th>
<th>N</th>
<th>D</th>
<th>VD</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Maintenance of physical facilities in CECH classrooms</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b. Maintenance of physical facilities in other public spaces in the CECH (hallw lounges, etc.)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c. Availability of study space</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>d. Accessibility for disabled students</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

12. **COMMENTS ON FACILITIES:**

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

13. **General:** As you think about your experiences in the College of Education, Criminal Justice, and Human Services (CECH) this academic year, how satisfied are you with:

*Very Satisfied=VS; Satisfied=S; Neutral=N; Dissatisfied=D; Very Dissatisfied=VD; Not Applicable = NA*

<table>
<thead>
<tr>
<th></th>
<th>VS</th>
<th>S</th>
<th>N</th>
<th>D</th>
<th>VD</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The availability of computers for student use</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b. Quality of resources and services offered by the Curriculum Resource Center (CRC) at Blegen Library</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c. The flexibility of your program of study</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>d. Opportunities to provide feedback to CECH administration</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>e. The consistency of information provided by CECH administration</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>f. Information in the graduate student or undergraduate student handbook provided for your program of study</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>g. Accessibility of information including relevant forms, etc....</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

14. **GENERAL COMMENTS:**

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
15. **Program Climate:** Please indicate how strongly you agree or disagree with each statement using the following scale: Strongly Agree=SA; Agree=A; Neutral=N; Disagree=D; Strongly Disagree=SD

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. In general, diverse perspectives are welcomed in classroom discussion.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>b. In general, students are treated equitably regardless of gender.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>c. In general, students are treated equitably regardless of race or ethnicity.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>d. In general, students are treated equitably regardless of religion or creed.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>e. In general, students are treated equitably regardless of age.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>f. In general, students are treated equitably regardless of their status (full-time and part-time).</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>g. In general, I feel that my program provides a positive learning environment.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

16. **COMMENTS ON PROGRAM CLIMATE:**

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

17. Overall, how satisfied are you with your decision to pursue an education in your program in the CECH?

O Very Satisfied
O Satisfied
O Neutral
O Dissatisfied
O Very Dissatisfied
DEMOGRAPHIC QUESTIONS: For each of the following questions please choose ONE answer that best describes you.

18. Status: O Full Time O Part Time

19. Class Status (CHOOSE ONLY ONE)
   O Freshman O Senior O Doctoral
   O Sophomore O Student Intern/Teacher O Post Baccalaureate
   O Junior O Masters O Non-Matriculated

20. Gender: O Male O Female

21. Age: O 25 years of age or under O Over 25 years of age

22. Academic Program (CHOOSE ONLY ONE)
   O Not currently enrolled in a CECH program O Health Promotion and Education
   O Addiction Studies O Para Legal
   O Counseling O Literacy
   O Criminal Justice O Middle Childhood
   O Criminal Justice (Evening College Transfer) O Secondary Education
   O Curriculum and Instruction O School Psychology
   O Early Childhood Education O Special Education/Intervention Specialist
   O Educational Administration O Teaching English as a Second Language
   O Educational Foundations O Urban Educational Leadership
   O Elementary Education

23. Number of quarters completed at UC:
   O 1 - 3 O 4 - 6 O 7 - 9 O 10 or more

24. Race/Ethnicity (CHOOSE ONLY ONE)
   O American Indian/Alaskan Native O Latino/Hispanic
   O Asian/Pacific Islander O White, non-Hispanic
   O Black, non-Hispanic O Other
25. If you transferred into the College of Education, Criminal Justice, and Human Services, did you:

- O Transfer from within the University of Cincinnati
- O Transfer from outside the University of Cincinnati
- O Not Applicable

26. Do you work in addition to taking classes?

- O Less than 10 hours per week
- O 11-20 hours per week
- O 21-39 hours per week
- O 40 or more hours per week
- O Not applicable

27. What does your program in the CECH do well in its service delivery to students?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

28. What does the College of Education, Criminal Justice, and Human Services do well in its service delivery to students?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

29. How could your program improve on its service delivery to students?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

30. How could the College of Education, Criminal Justice, and Human Services improve on its service delivery to students?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

Thank You!
Appendix B
Appendix B: Distance Education Survey
College of Education, Criminal Justice, and Human Services
Student Satisfaction Survey -- Distance Learning

The College of Education, Criminal Justice, and Human Services (CECH) at the University of Cincinnati is committed to assuring the highest level of success for all of its students. This survey is designed to give students an opportunity to voice their opinions to an interested audience of administrators, faculty, and staff within the CECH and your program. Your responses will be used to improve your learning experience and those of future students. Your responses will remain strictly confidential. Results from this survey will be presented to the CECH administration without use of individuals’ names.

The questions in the survey are specifically designed for students in the CECH. Therefore, as you answer the questions, think only about your experiences as a student in CECH throughout the 2004-05 Academic Year. Do not respond based on courses or experiences outside the CECH.

Please answer the following questions by completely darkening the appropriate response.

1. Please enter the 6-digit number located on the envelope above your name. (This information will only be used to prevent your receiving additional requests to complete the survey once you have responded. It will be deleted from the final database and no identifying information will be linked to specific responses.)

SATISFACTION QUESTIONS: Please indicate your level of satisfaction using the following scale: Very Satisfied = VS; Satisfied = S; Neutral = N; Dissatisfied = D; Very Dissatisfied = VD; Not Applicable = NA

2. Teaching Facilitators Performance: If you experienced courses taught by teaching facilitators in your program this academic year, please tell us how satisfied you are with the following experiences. If you have not had courses with a teaching facilitator, please select “NA” for “Not Applicable” and proceed to Question 4.

<table>
<thead>
<tr>
<th></th>
<th>VS</th>
<th>S</th>
<th>N</th>
<th>D</th>
<th>VD</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>e. The quality of instruction by teaching facilitators</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>f. The availability of teaching facilitators</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>g. Teaching facilitators’ commitment to student learning</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>h. Respect for students shown by teaching facilitators</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
3. COMMENTS ON TEACHING FACILITATORS:

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

4. Faculty Performance: As you think about your experiences with faculty in your program this academic year, please tell us how satisfied you are with:

Very Satisfied=VS; Satisfied=S; Neutral=N; Dissatisfied=D; Very Dissatisfied=VD; Not Applicable = NA

g. The quality of instruction by faculty ……………………..

h. The availability of faculty ……………………………

i. Faculty commitment to student learning ………………

j. Respect for students shown by faculty members ………

k. Mentoring (information relating to career and/or practices) you may have received from your program’s faculty………..

5. COMMENTS ON FACULTY PERFORMANCE:

___________________________________________________________________________
___________________________________________________________________________

6. Classes: As you think about your experiences with classes in your program this academic year, please tell us how satisfied you are with:

f. The size of classes ………………………………………

g. The relevance of classes to career goals and objectives ……

h. The availability of classes in your major field of study ……

i. The information instructors give about course requirements (grading, attendance policy, etc.) ………………………

j. The effective use of technology ……………………………
7. COMMENTS ON CLASSES:

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

NOTE: Questions 8 applies to UNDERGRADUATE STUDENTS ONLY. If you are a graduate student please skip to Question 11.

8. CECH Student Services Center: If you had experiences with the CECH Student Services Center this academic year, how satisfied are you with:

Very Satisfied=VS; Satisfied=S; Neutral=N; Dissatisfied=D; Very Dissatisfied=VD; Not Applicable = NA

i. The quality of advising .......................................................... O O O O O O
j. The availability of advisors .................................................. O O O O O O
k. The respect shown to students by advisors ......................... O O O O O O
l. Assistance with scheduling ................................................. O O O O O O
m. Availability of scholarship information ................................. O O O O O O
n. Availability of licensure information ................................. O O O O O O

9. General: As you think about your experiences in the College of Education, Criminal Justice, and Human Services (CECH) this academic year, how satisfied are you with:

h. The availability of technology support.......................... O O O O O O
i. Quality of resources and services offered online at Langsam Library and UC facilities .......................... O O O O O O
j. The flexibility of your program of study ....................... O O O O O O
k. Opportunities to provide feedback to your program.......... O O O O O O
l. The consistency of information provided by your program.... O O O O O O
m. Information in the graduate student or undergraduate student handbook provided for your program of study ............... O O O O O O
n. Accessibility of information including relevant forms, etc.... O O O O O O
10. GENERAL COMMENTS:
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

11. Program Climate: Please indicate how strongly you agree or disagree with each statement using the following scale: Strongly Agree=SA; Agree=A; Neutral=N; Disagree=D; Strongly Disagree=SD

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
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<tbody>
<tr>
<td>h. In general, diverse perspectives are welcomed in discussion ……</td>
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<tr>
<td>i. In general, students are treated equitably regardless of gender…..</td>
<td>O</td>
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<tr>
<td>j. In general, students are treated equitably regardless of race or ethnicity………………………………………</td>
<td>O</td>
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</tr>
</tbody>
</table>
k. In general, students are treated equitably regardless of religion or creed………………………………………… | O  | O  | O  | O  | O  |
l. In general, students are treated equitably regardless of age……… | O  | O  | O  | O  | O  |
m. In general, I feel that my program provides a positive learning environment……………………………………………………... | O  | O  | O  | O  | O  |

12. COMMENTS ON PROGRAM CLIMATE:
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

13. Overall, how satisfied are you with your decision to pursue an education in your program in the CECH?

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
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<tr>
<td>O</td>
<td>Very Satisfied</td>
<td>Satisfied</td>
<td>Neutral</td>
<td>Dissatisfied</td>
<td>Very Dissatisfied</td>
</tr>
</tbody>
</table>
DEMOGRAPHIC QUESTIONS: For each of the following questions please choose ONE answer that best describes you.


15. Class Status (CHOOSE ONLY ONE)
   O Freshman O Senior O Doctoral
   O Sophomore O Student Intern/Teacher O Post Baccalaureate
   O Junior O Masters O Non-Matriculated

16. Gender: O Male O Female

17. Age: O 25 years of age or under O 26-40 years O 41 Years or older

18. Academic Program (CHOOSE ONLY ONE)
   O Criminal Justice
   O Early Childhood Learning Community (ECLC)
   O Educational Administration

19. Number of quarters completed at UC:
   O 1 - 3 O 4 - 6 O 7 - 9 O 10 or more

20. Race/Ethnicity (CHOOSE ONLY ONE)
   O American Indian/Alaskan Native O Latino/Hispanic
   O Asian/Pacific Islander O White, non-Hispanic
   O Black, non-Hispanic O Other

21. Do you work in addition to taking classes?
   O Less than 10 hours per week
   O 11-20 hours per week
   O 21-39 hours per week
   O 40 or more hours per week
   O Not applicable
22. What does your program in the CECH do well in its service delivery to students?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

23. How could your program improve on its service delivery to students?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

Thank You!