

Professional Practice Models of Criminal Justice Education in Traditional versus Online Environments

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Abstract

This paper compares teaching in both the classroom and online environment. Data from two identical criminal justice courses offered in both the traditional and online format are examined. The researcher has substantial experience with both traditional and online educational formats at two universities; one university is a traditionally based regional university, the other institution is a large university system that offers all of its curriculum and instruction completely online. This paper examines the use of practitioner-oriented approaches to teaching criminal justice coursework in both the on-line and the traditional educational setting. Specifically, the researcher tested four main themes identified as being part and parcel to any educational curriculum designed around a professional practice model of education within the field of criminal justice. Strengths and limitations associated with this approach are discussed.

There has been a virtual revolution in higher education as a result of the increasing use of online technologies that now assist, and even take the place of traditional classroom settings. In 1997, Peterson's Guide reported there were nearly 400 accredited colleges and universities in North America that employed some form of online instruction (Schulman & Sims, 1999), with more than 150 accredited institutions offering an entire bachelor's degree programs to students who rarely, if ever, come to campus (Schulman & Sims, 1999). Online classes provide flexibility for the working adults to obtain a higher education while simultaneously meeting their other demands and obligations that are encountered in their life.

Several studies have emerged that compare the effectiveness of online classes with those offered in the traditional classroom setting. Various aspects of online learning have been examined, from student satisfaction to the comparability of the content, as well as the teaching effectiveness of instructors in both environments. Much of this research seems to indicate that online education has the same potential for student success as do classroom-based forms of educational instruction. Further, it has become clear that many universities can substantially reduce costs within their budgets due to the decrease in overhead (Schulman & Sims, 1999).

Shen, Hiltz, Cheng, Cho, and Bieber (2001) examined the collaborative model of learning (used by many online programs) with the traditional instructor-controlled objectivist learning model typically used in many classroom settings. Shen et al. (2001) noted that collaborative learning is regarded as the uncritical absorption of objective knowledge transferred from instructor to student (Shen et al., 2001). Collaborative learning is a learner-centered and team-based approach that assumes that learning emerges as learners interact with each other (Shen et al, 2001). The emphasis on the collaborative learning process is important for two key reasons. First among these is the concern that many traditional educators have about student cheating and the integrity of the course. The second issue has to do with the nature of the population that now seeks higher education.

This first point revolves around the fact that many educators may be skeptical of the online learning process due to the sharing of knowledge (and even answers) that tends to occur within the collaborative teaching forum that is common to online programs. This is an understandable concern and it is important to determine if, in fact, students in online programs do have grades that are substantially inflated beyond those that are obtained in traditional classroom-based course offerings. The very academic integrity of the online learning process is then a subject that is open to question and this is an issue that simply must be resolved among any program that considers such a forum for educational service delivery.

The second point, however, expands on this first point since the population of online learners tend to be persons that are older and more settled into their careers or family lifestyles. Because of the resultant maturity of this population, it is likely that the typical "passive" learning environment will not hold the same appeal and this approach actually overlooks the valuable insights that students can bring to a course. Thus, the "active" learning approach is considered much more appropriate with this population as it allows the student to take ownership for their education. With ownership comes accountability and (at least ostensibly) there occurs more incentive to hold one's education as a priority.

In addressing this first point of interest regarding the collaborative and open nature of the online learning environment, several studies have compared the student outcomes in educational service delivery for both online and traditional classroom-based settings. In a study conducted by Schulman and Sims (1999) students that enrolled in two separate sections of the same business administration course were examined. One section was a traditional

classroom-based course consisting of 94 students. The other section was taught online and consisted of thirty-seven students. Both sections were asked to evaluate their respective courses based on content, availability of the instructor, comprehension of the course, organization of the course, and grading processes. In addition, those students participating in the online version of the course were asked to assess and compare the quality of learning that they received in relation to the traditional classroom-based method of educational service delivery.

From these evaluations, Schulman and Sims (1999) found that both traditional and online section students indicated that their overall course expectations had been met. However, it was found that a greater percentage of students in the traditional classroom section provided affirmative statements regarding teacher organization, the pace of instruction, and course comprehension than did their online counterparts. One of the problems that were noted in this research was the fact that students in the online section were required to utilize e-mail as their primary form of communication with their instructor.

Schulman and Sims (1999) likewise reported the grade distributions within both sections of this course. This is important because this research clearly addresses the concern that many traditional faculty may have regarding issues of grade inflation in the online educational environment. In regard to grade distribution, Schulman and Sims (1999) did find that more online students made A's than did those in the traditional classroom environment, but this was followed with the fact that more traditional students made B's than were found in the online section of the course. Thus, it is clear that both sections tended to coalesce within the same basic range between letter grades, with a higher modal score being associated with online students. In addition, these researchers found a lower number of withdrawals in the online class than in the classroom-based section. This observation was surprising for these researchers because retention issues are often a more pronounced source of concern among online educators than with classroom-based educators since there is a lack of face-to-face contact in online teaching environments (Schulman & Sims, 1999).

In another study, Johnson, Burnett, and Rolling (2002) used students that were enrolled in a family and consumer sciences curriculum in a public university setting in south Louisiana. These researchers examined students that were enrolled in a consumer economics course. As with the Schulman & Sims (1999) study, this course had two sections that were simultaneously taught during the same semester, with one section being online and the other being taught through traditional classroom-based educational delivery. In this study, twenty-five students were enrolled in the traditional classroom section of the course while thirteen students were enrolled in the online course section, with two of the thirteen declining to provide survey responses.

Johnson, Burnett, and Rolling (2002) provided students with both a midterm and final exam as indicators of student performance. On the midterm measure, online students scored significantly higher than did those students in the traditional classroom-based section. It was likewise found that students in the online class section scored significantly higher on their end-of-course final exam than did those students in the traditional classroom environment (Johnson et al., 2002). It is interesting to point out that student self-report surveys found that students in the online section of the course spent an average of six to ten hours a week reading and studying their course material, whereas students in the classroom-based course section spent less than five hours a week on course material (Johnson et al., 2002).

From this and other research, it is clear that comparisons between online and traditional educational delivery have been conducted throughout the field of higher education and within a number of disciplines (though only a couple of studies were presented in this brief literature, other such examples abound). Because this research

has been successfully conducted in other disciplines, it is important that the field of criminal justice likewise have a body of research to determine if such venues of education are effective. Further still, as has been seen in the previous two studies, the results pertaining to the legitimacy of online education have provided mixed outcomes. In both cases, it is clear that online students are indeed receiving higher grade scores than are their classroom counterparts. Given the proliferation of online educational programs within the discipline of criminal justice, it is therefore important to determine if such outcomes are similar for criminal justice students in online educational environments and it is also important to determine if this is due to grade inflation (thereby creating practitioners who are not actually competent in their field) or due to some other variable, such as is implied in the study by Johnson et al. (2002) where it was found that students in the online course section studied much more frequently than did their classroom-based counterparts.

Online Training of Criminal Justice Professionals

The notion of online professional training among criminal justice practitioners has been well utilized. Indeed, most police officers, community supervision officers, and correctional staff around the nation are required to engage in some form of in-service education throughout the duration of their career. This is particularly true among those agencies that hold or seek to hold certifications that establish overall agency competence and quality of service.

One such example might be the Miami-Dade Police Department (MDPD). This police department conducted a three-month trial study and assessed several web-based training systems (Macromedia, 2005). The MDPD specifically noted that their decision to use online training with their officers was influenced by the fact that such training provided a blended form of learning that enabled more dynamic and effective training, provided on-demand access to self-paced training sessions, reduced overtime dollars spent as a result of training, and met state and nationally mandated reporting requirements (Macromedia, 2005). Added to these benefits was the fact that travel time and overhead from physical classroom facilities were substantially reduced (Macromedia, 2005). Thus, it is clear that such training has many benefits for administrators wishing to offer professional development and in-service training to members of their agency.

According to Reiswerg (2005), the advent of distance learning approaches to departmental training needs has become quite widespread. The main issues for training personnel to determine are the training needs of the department, the tools and capabilities that can be made available, and to identify the personnel that are in need of training. Reiswerg (2005) provides an overview of the various approaches that are used to implement online training to police officers and likewise cites numerous advantages to implementing online training into the overall curriculum for agency training. Some of the advantages noted by Reiswerg (2005) are improved tracking of training attendance, consistency in content learning, individual officer control over when and how the learning will take place, as well as substantial cost savings. While there are naturally drawbacks, Reiswerg (2005) makes it clear that online training is a viable option in many cases where departments have training needs.

Online Education for Criminal Justice Professionals

At this point, it is clear that online education has been a source of curiosity to researchers and it is also clear that educators have examined the effectiveness of both online and traditional forms of educational delivery. In addition, it is likewise clear that online forms of in-service training have become widely accepted within the criminal justice discipline. Thus, there exists the integration of online education within most all academic disciplines, including

criminal justice. All the while, the use of online forms of service delivery have been likewise accepted within the professional criminal justice community. But professional training is not the same as higher education. Indeed, it is the role of higher education (i.e. college and university level) to provide criminal justice practitioners with the opportunity to develop and perfect their writing ability, critical thinking skills, and understanding of ethical principles that are fundamental to any democratic society. Further, much of the Constitutional framework of knowledge that serves as the underlying rationale of our criminal justice system's basis of operation is provided at this level of learning.

However, it is still not clear if online education (as opposed to training) is effective in obtaining valid (as opposed to inflated) student outcomes. And, it is likewise not clear if online educational programs are truly capable of molding students into effective practitioners. This leads to the final issue regarding online education within the field of criminal justice, and this issue simply cannot be overlooked when a discipline exists to provide a service to the broader society. This issue has to do with the aspect of *competency*, as opposed to the mere ability to remember information for examination purposes. Thus it is that applied disciplines essentially perform two functions. First, these disciplines endeavor to impart knowledge to the avid student of that discipline. Second, it is the task of applied disciplines to educate and train the student to integrate knowledge that is obtained within the routine practice of a given profession. This is quite naturally, the very goal of criminal justice education and it is for this reason that the professional practice model of education (Kaplan University, 2005) is part and parcel to any program that seeks to prepare the criminal justice professional for service within society.

Hypotheses

From the previous discussion, it is clear that research on online education has proliferated. However, comparisons between the effectiveness of criminal justice education in the online setting to the standard classroom setting have not been widely conducted. Indeed, there is a need for some form of specific and controlled comparison to ensure that both forms of education are equivalent. Further, it is beneficial to determine if criminal justice students in online courses obtain outcomes that are similar to their classroom-based counterparts when observing student performance against identified variables associated with the professional practice model of criminal justice education. And lastly, it is of interest to this study to determine how practitioners perceive criminal justice students in both online and classroom-based forums. With these points in mind, the following three hypotheses were presented:

HO1 – Test scores for students in online programs will not be significantly higher than those obtained by students in classroom-based courses.

HO2 – Students in online programs will have similar rankings on indicators associated with the professional practice model traditional classroom-based students.

HO3 – Practitioner perceptions of students will be similar for students in online programs when compared to those participating in a traditional classroom setting.

Methods

Subject/Participants

Participants for this study included criminal justice students (all were degree seeking majors in criminal justice) enrolled in CJUS 250 Courts and Criminal Justice at the University of Louisiana at Monroe during the spring semester of 2004 and the spring semester of 2005. During the spring 2004 semester 62 students were enrolled for this course and during the following spring 2005 semester 64 students were enrolled in this course. During both semesters, participants from both the in-class and online sections of the course were included. All combined, during both semesters there were 42 students that took the online version (22 students in 2004 and 20 students in 2005) compared to 84 students (40 during 2004 and 44 during 2005) that took the traditional classroom-based course.

Overall, among these students roughly 75 percent were Caucasian American (95 students) and 25 percent were African American (31 students). The overall gender composition included 61 percent female students (77 students) and 39 percent male students (49 male students). More specifically, there were 21 female African American students and 56 female Caucasian students compared to 10 male African American students and 39 male Caucasian American students. When further divided between online and classroom participation, there were 4 African American female students and 21 female Caucasian American students took the online version of the course compared to 7 male African American and 10 Caucasian American students who also took the online version of the course. Those taking the course via traditional classroom instruction included 17 female African American female students and 35 Caucasian American female students compared with 3 male African American Students and 29 male Caucasian American students. There were no Latino American or Asian American students in any of the online or classroom-based sections.

As might be expected, the average age for students in the online environment (*Mean* = 24.47) tended to be a bit older than those who took the course in the traditional classroom setting (*Mean* = 22.36). Overall, when considering both the online and classroom sections, female students (*Mean* = 23.18) tended to be slightly older than their male counterparts (*Mean* = 22.89), but when comparing online and classroom sections female students tended to be younger (*Mean* = 23.96) than male students that took online courses (*Mean* = 25.23). Conversely, in class room sections, female students tended to be older (*Mean* = 22.80) than male students (*Mean* = 21.65). The age difference between African American students (*Mean* = 25.00) and Caucasian American students (*Mean* = 24.89) in online sections was barely noticeable and a similar comparison among students in the classroom found that both racial groups were of very similar age (*Mean* average age of 22 for both groups).

The main reward and/or motivation provided to the participants of this study was the ultimate grading that they would receive in the course. It should also be noted that this course is a required course for students majoring in criminal justice and therefore added incentive is presumed to have existed for the overwhelming majority of the participants in this study since all student participants were criminal justice degree-seeking majors.

Apparatus

During this study, the researcher utilized the Blackboard system software to provide course instruction to those students taking the online version of the course. Several PowerPoint instructional aids were also utilized when

teaching this course and these PowerPoint learning aids were made equally available to both the online students and those taking the course through the standard classroom instructional format.

The instructor likewise utilized a common textbook to all sections during both years. The same edition of the textbook was utilized during this period and the instructor ensured that all extended readings were made equally available to participants of each section of the course during both the spring 2004 and spring 2005 semesters. Aside from the questionnaires utilized for the practitioner interview surveys, no other equipment or tools were utilized during this study.

Design

This study utilized a pre-test post-test classic experimental design that examined student performance during multiple points of their participation. Specifically, the experimental group consisted of those students that received instruction through an online educational format and the control group consisted of those students that received instruction through the standard classroom-based instructional format.

The primary independent variable examined was the type of instruction (labeled INSTRUCT online and INSTRUCT classroom in data output tables) with the main focus of this research examining differences in the dependent variables when comparing online and classroom instruction that was provided for an otherwise identical course. The dependent variables included student test scores on three separate tests given to each group of students (labeled TESTONE, TESTTWO, and TESTTHREE in the data output tables) and four other key variables commonly associated with the professional practice of criminal justice (Kaplan University, 2005). These dependent variables were applied scholarship (APPSCH1), advanced study of the discipline (STUDDIS1), developing and contributing scholars (CONTRIB1), and service and commitment to the profession (SVC1). These variables are further explained in Appendix A if a more detailed understanding of each specific variable is desired.

Seven other dependent variables were also used to determine the practitioner perceptions of the online or classroom students that interviewed them. These variables were selected because they were considered good indicators of probable impressions that students might provide when entering the profession (particularly with job interviews and other such activities). The variables were labeled as DRESSP1, INTSKIL1, QUEST1, PROFES1, APPRO1, UNDER1, and MAINISS1 and each variable is fully described in Appendix B.

Subjects randomly chose their own individual course sections based on their own personal registration desires. Thus, the sample of students that were included in the research was essentially randomized (aside from personal preferences of the student regarding online and classroom instruction). It should be mentioned that all sections had an essential "cap" on the maximum number of participants in both the online and classroom-based courses. No more than 25 students were allowed to enroll in the online version of the course and no more than 50 students were allowed to enroll in the classroom version of the course during both the 2004 and 2005 spring semesters.

Lastly, it should be noted that this research was subjected to a variety of controls that helped improve the validity and reliability of the research process and results. First, the same instructor (the primary researcher) was the same person throughout both years and taught both the online and the classroom sections of the course. Thus, all four sections that were examined received instruction from the same person. Second, all tests that were administered were identical between both the online and the classroom-based sections. While the questions were the same in

each section and for each test, their order of appearance was randomized for each student that took the test. Likewise, potential responses for each question were also randomized each time the test was given. Third, all students received the same amount of time to take each test (one hour and 15 minutes per test) regardless of whether they were in the online or classroom section of the course.

Questions that were used came from a test bank from within the department of criminal justice and have been shown to possess adequately sufficient face, content, and construct validity. In fact, many of the questions are similar in construction to those that appear on the criminal justice version of the ACAT. The ACAT is a nationally recognized assessment test (with discipline specific versions) that is used by many universities across the nation. The University of Louisiana at Monroe's Department of Criminal Justice utilizes this test to assess the department's level of student learning. Over time, the questions used in this current study were gleaned from relevant study questions from this database (tested for face, content, and construct validity as well as split-half and inter-rater reliability) that covered material in the CJUS 250 Courts and Criminal Justice class.

The researcher likewise utilized the input and assistance of other instructors within the department when assessing a student's four key variables pertaining to the professional practice of criminal justice. Two other professors rated the students on each of these four variables based on the criteria listed in Appendix A and provided their assessment to the researcher. The researcher calculated the mean average for each variable (rounding to the nearest whole number) when determining the value given to each student. This likewise established a degree of inter-rater reliability for each of these variables.

Procedures

During the spring semester of 2004 the researcher taught two sections of CJUS 250 Courts and Criminal Justice at the University of Louisiana at Monroe. One section was online and the other section was taught in the classroom. The researcher did not inform either section that they were part of an examination of online versus classroom-based educational formats. The researcher replicated this same study by again teaching two sections of CJUS 250 Courts and Criminal Justice during the spring 2005 semester. The teaching style, teaching curriculum, and even the test bank questions were all identical in every respect.

While teaching this course during the spring semesters of both years, the instructor did assign discussion activities where the student had to demonstrate their ability to write about various aspects of the courtroom process. The course specifically contrasted and compared aspects of the courts system that reflected the "law on the books" as opposed to "the law in action." This particular emphasis was included in the chosen textbook that was utilized in the course and the instructor made it his personal domain to demonstrate to the class the real-world dimensions of courthouse operations.

Both courses emphasized the world of the practitioner at different levels and in different arenas. Throughout both semesters, students were provided with opportunities to engage in various forms of scholarly contribution. The instructor ensured that both online and classroom-based students were given opportunities to join student organizations, write papers for various potential publications, and participate in research forums and activities. Students were asked to provide the instructor with any criminal justice related activities (academic and vocational) that they were involved in. The instructor maintained a list of activities and rated these activities according to the criteria in Appendix A. The instructor likewise had two other professors rate these criteria and rated them accordingly

(the mean average of the ratings, rounded to the nearest whole number was the value placed in the dataset). It should also be added that each instructor typically knew each of these students from other course offerings.

Likewise, students in each section were given an assignment call the "Practitioner Interview." This assignment required that students go into the field and interview an identified practitioner that was associated with the court system. Students could interview judges, prosecutors or defense attorneys, bail-bonds personnel, and courtroom staff. Students were required to complete these assignments and were also given instructions to have the person that they interview submit a brief questionnaire on the student's performance. A self-addressed, stamped, envelope was provided to encourage interviewees to return the questionnaire and students were given bonus points if their interviewee made a point to return the questionnaire. Students were required to provide the instructor with the phone number, e-mail address (if available), and business card (if possible) of the person that they interviewed. The instructor did follow-up in most all of the cases to ensure that the response rate was high. In fact, the response rate was nearly 98 percent.

Lastly, students were required to fill out a similar questionnaire on their own perceived performance during the interview experience. Students were given this questionnaire prior to conducting the interview to help guide them in conducting a successful interview (they did essentially know what the researcher would examine) but the inflated performance was equivalent for both groups making the comparison still valid.

The instructor maintained test scores, grades on the practitioner interviews, professional practice model ratings, and survey results (from both the interviewee and the student) within an SPSS database throughout the two-year period. While the students did know that the instructor was utilizing the data that they provided, they were not aware that the instructor would be specifically comparing online versus classroom educational outcomes related to the professional practice of criminal justice. It should be noted that those subjects who failed to complete all three of the tests given throughout the semester were discarded from this study.

Results

When comparing test scores between those students in the online section and those in the classroom section of the course, it becomes clear that there were no true trends between the two groups. The data in Table 1 show mixed results in the comparison. Indeed, with TEST ONE it can be seen that those students in the classroom-based section of the course scored slightly higher (*Mean* = 73.94) than did those in the online section of the course (*Mean* = 71.80). Even though the classroom-based section did have a higher Mean average, this difference was only by 2.14 points. In the case of TEST TWO, both groups have nearly identical *mean* averages with the online section (*Mean* = 67.30) scoring only a fraction of a point lower than the classroom-based section (*Mean* = 67.11). Lastly, TEST THREE resulted in a higher *mean* score among the online section of students (*Mean* = 68.78) than occurred among the classroom based students (*Mean* = 66.80). The overall difference between the two groups (1.98 point difference) was even less than the difference that occurred during TEST ONE. To address the study's first research question

Table 1
A Comparison of Online and Classroom Test Performance Outcomes

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INSTRUCT	TEST ONE	TEST TWO	TEST THREE
Online Mean Score (N = 42)	71.80	67.30	68.78
Std. Dev.	12.56250	19.25248	17.29026
Classroom Mean Score (N = 84)	73.94	67.11	66.80
Std. Dev.	10.53548	16.80892	19.33377
Total Mean Score (N = 126)	73.23	67.18	67.46
Std. Dev.	11.24645	17.58381	18.63145

ANOVA found no significant differences between online and classroom test scores.

associated with the data in Table 1, an Analysis of Variance (ANOVA) was conducted in order to determine whether there were statistically significant *Mean* differences in the multiple test scores between online and classroom-based students. The results of the ANOVA found no significant differences in *Mean* averages between both groups on each of the three test scores ($p > .05$).

Table 2 examines data pertaining to the professional practice model of education in criminal justice. Each of the dependent variables listed in Table 2 (APPSCH1, STUDDIS1, CONTRIB1, SVC1) are explained in detail in Appendix A. Coding for responses to each variable was as follows: 1= Nearly Perfect Performance, 2 = Above Average Performance, 3 = Average Performance, 4 = Below Average Performance, and 5 = Very Poor Performance. From the data, it can be seen that students in the online section (*Mean* = 3.19; Average Performance)

Table 2

A Comparison of Online and Classroom Performance on Outcomes Related to the Professional Practice Model of Education

INSTRUCT	APPSCH1	STUDDIS1	CONTRIB1	SVC1
Online Mean Score (N = 42)	3.19	3.23	2.78	3.38
Std. Dev.	1.21451	1.03145	.84206	1.10326
Classroom Mean Score (N = 84)	3.20	3.14	2.92	3.14

Std. Dev.	1.02710	.85225	.77282	.82349
Total Mean Score (N = 126)	3.19	3.17	2.88	3.22
Std. Dev.	1.08826	.91284	.79606	.92856

ANOVA found no significant differences between online and classroom-based student outcome measures related to the professional practice model of criminal justice.

scored very close in relation to those in the classroom section (*Mean* = 3.20; also Average Performance) in the category of Applied Scholarship (APPSCH1). In fact, the scores were nearly identical. With respect to the variables related to the Advanced study of the discipline (STUDDIS1), Developing and contributing scholars (CONTRIB1), and Service and Commitment to the Profession (SVC1), it is clear that both groups are very similar in their *mean* average responses. To address the second research question, an Analysis of Variance (ANOVA) was conducted in order to determine whether there were statistically significant *Mean* differences on the outcome indicators of the professional practice model of education when comparing between online and classroom-based students. The results of the ANOVA found no significant differences in *Mean* averages between both groups on each of the outcome measures related to the professional practice model of education in criminal justice ($p > .05$). Further examination of the data provided in Table 2 demonstrates that both groups tended to be rated in the average range, being near or about an average *Mean* response of 3.00 (Average Performance) on each indicator. This demonstrates that both groups have an average range of indicators that are associated with the professional practice model of criminal justice education.

Table 3 examines the perceptions that practitioners reported when interacting with students in online or classroom-based instruction. The data in Table 3 does reflect the existence of missing cases. Specifically, there were two students in the online sections and three students in the classroom-based sections that were not successful in soliciting feedback from the practitioner that they interviewed. Each of these cases were simply discarded (since the number was slight, being right under 5 percent of the total cases) from the analysis and the data output that appears in Table 3. Each of the dependent variables listed in Table 3 (DRESSP1, INTSKIL1, QUEST1, PROFES1, APPRO1, UNDER1, MAINISS1) are fully described in **Appendix B**. Coding for responses to each of these variables was as follows: 1= Nearly Perfect Performance, 2 = Above Average Performance, 3 = Average Performance, 4 = Below Average Performance, and 5 = Very Poor Performance. To address the third and final research question,

Table 3
Practitioner Interviewee Perceptions of Student Interviewers from Online and Classroom Courses.

INSTRUCT	DRESSP 1	INTSKIL1	QUEST1	PROFES1	APPRO1	UNDER 1	MAINIS S 1
Online Mean Score	1.7500	1.9500	1.9750	1.8500	1.8500	2.0250	1.9500

(N = 40)							
Std. Dev.	.74248	.71432	.69752	.62224	.66216	.80024	.84580
Classroom Mean Score (N = 81)	1.7160	1.9630	2.0123	1.9630	1.9877	1.9877	1.9630
Std. Dev.	.57521	.45947	.33518	.29345	.24969	.48718	.51099
Total Mean Score (N = 121)	1.7273	1.9587	2.0000	1.9256	1.9421	2.0000	1.9587
Std. Dev.	.63246	.55373	.48305	.43138	.43393	.60553	.63766

ANOVA found no significant differences between practitioner perceptions of students in online courses when compared to practitioner perceptions of students in classroom-based courses.

an Analysis of Variance (ANOVA) was again conducted in order to determine whether there were statistically significant *Mean* differences in practitioner interviewee perceptions of online students as compared to practitioner interviewee perceptions of classroom-based students. Despite the fact that standard deviations were often very different between both groups along many of the listed variables, results of the ANOVA found no significant differences in *Mean* average ratings of practitioner perceptions related to online students when compared to practitioner perceptions of traditional classroom-based students ($p > .05$).

Discussion

From the data provided, it can be seen that differences in test scores between students in the online sections and those in the classroom-based sections are not significant. In fact, it is interesting that one section (online) outscored the other on TEST ONE only to have the other section (classroom-based) gain a higher score on TEST THREE; in both cases each section outscored the other by nearly the same identical amount. Further still, both sections had *mean* average scores on TEST TWO that were almost identical. In the world of statistics, with all of the possibilities that can occur, this is truly a rarity. Further, it is clear from this data that we must accept our first research hypothesis (**HO1**) that test scores for students in online programs will not be significantly different than those obtained by students in classroom-based courses. This was indeed the case in this study. Therefore we can conclude that the weight of evidence is in favor of **HO1**.

Likewise, it is clear that criminal justice students in the online section are not at a disadvantage from benefiting from a professional practice model of education. In every one of the professional practice model indicators, neither section significantly differed from the other. Thus, we likewise accept our second hypothesis (**HO2**) that

students in online programs will not rank significantly worse than traditional classroom-based students on indicators associated with the professional practice model. This then addresses one of the key areas of concern regarding the issue of competency in the field in addition to those issues that are typically considered academic. It would appear that all students in both online and classroom-based sections rank as "average" on indicators associated with the professional practice model of criminal justice. While this may not be an outstanding testament to criminal justice education as a whole, it does demonstrate that students do engage in a professional practice model of criminal justice education at the University of Louisiana at Monroe. Further, these outcomes demonstrate that online students are just as competent in the professional practice of their discipline as are their classroom-based counterparts.

Lastly, the data from Table 3 demonstrates that online and classroom-based students left practitioners with very similar perceptions of the student. With respect to both sections of students, practitioners did tend to rate the student as being "Above Average" in most all of these variables. This is, of course, a good indicator for any criminal justice program and it demonstrates that students in both sections are at least somewhat in line with the expectations of other professionals in their field. Naturally, this variable might be most useful in determining if students are well prepared for an interview process, such as would be conducted during the hiring and/or selection process for employment at a criminal justice agency. This is actually one key objective of the criminal justice program at the University of Louisiana at Monroe and so the results were considered to be positive. More specifically to this study, it was also found that practitioners had very similar perceptions of online students and traditional classroom-based students that conducted these interviews. Thus, we once again accept our third research hypothesis (**HO3**) stating that practitioner perceptions of students will not significantly vary between students in online programs when compared to those participating in a traditional classroom setting.

This study addresses two primary concerns that were identified earlier in the current research literature. First, this study shows that grade inflation is not automatically associated with online education. Indeed, when the study is given appropriate controls (not just taught during the same semester, but taught by the same instructor, using the same syllabus, the same textbook, the same curriculum, and the same test items) a clearer picture seems to emerge. Likewise, the reported test scores may seem to have a high *Mean* average but this is largely explained by the fact that all students were majoring in criminal justice and all students had to successfully complete this course to go on to their subsequent 300 and 400 level coursework. Thus, it is presumed that students were at least moderately interested in the subject area (afterall, they did choose to major in the criminal justice discipline) and that they had at least marginal incentive to pass the course. Being that degree seeking students must make a minimum letter grade of "C" or higher in this required course to take further coursework, one would presume that student scores might collect around this general range or higher.

Limitations

There are several limits to this study. The first limit is the fact that this study was conducted at a small sized regional university. The area of the nation that this university services tends to be more rural than many other areas of the nation. Even the online students at this university tend to come from within the same portion of the state and they are therefore largely similar to those in the classroom environment. Further, this sample consisted of only two racial groups – African American students and Caucasian American students – and therefore did not include members of other racial groups that are found throughout other sections of the United States. As such, it is questionable if these results are generalizable to the broader population.

In addition, the sample size was very small with this study. While this is of course problematic, it should be pointed out that this is a common limitation within the body of research comparing traditional and online education. The studies noted in the literature review had small sample sizes, and this was particularly true with the study by Johnson, Burnett, and Rolling (2002). The studies noted in the literature review are by no means unique when considering their sample sizes, reflecting the fact that it may be difficult for researchers to arrange such comparisons so that they are methodologically sound. Since this is likely to happen on fairly rare occasions, the number of students included will tend to be small in most cases.

Similarly, the small sample size does prevent us from making any valid comparisons between online students during the spring 2004 and spring 2005 semesters (and it is likewise difficult to make valid comparisons for traditional classroom-based students during both semesters for the same given reason). Thus, this study is not truly capable of making any convincing comparisons between academic calendar years. Despite this fact, some general data has been provided for the curious reader in Appendix D. The reader is free to examine the outcomes listed at their own peril. The information is offered purely on the basis of open exchange, ethical reporting, and academic stewardship.

Lastly, this study did not examine one important factor that is occasionally mentioned in similar research. This factor is the outcome of student evaluations of their course and of their professor. The use of student evaluations was specifically noted in the study by Schulman and Sims (1999) and reflects a common trend in much of the research that compares online and classroom-based educational outcomes. Though there may be some debate as to the validity of such measures when determining instructor performance, this is nevertheless useful data when triangulated with other data comparing online and classroom educational performance. In theory, one would expect students to provide higher evaluations for instructors that gave higher grades. Due to the low response rates among student evaluations, this study was not able to provide a valid comparison of this indicator. Such factors as instructor performance (particularly from the standpoint of the student) might prove valuable in rating both types of educational delivery. Appendix E is nevertheless provided to further address the reader's curiosity. From the data that is provided, it would appear that student's evaluation of the professor and of the effort required to succeed in their course was not related to overall grades received by students. If it were not for the very small sample size and the low response rate, this would be effective data for hypothesis testing. As with Appendix D, the data in Appendix E is simply provided to demonstrate a good faith effort on the part of the researcher to examine all aspects of this comparison; such an effort being made in the interest of academic integrity.

Conclusion

The common research within the field of higher education has compared online and traditional classroom-based forms of instruction through a number of methods with varying degrees of success. This study successfully addressed the same issue as specific to the field of criminal justice. With this in mind, it was found that academic rigor was similar in both online and classroom-based courses. This study likewise found that online courses are just as capable as classroom courses in providing a teaching model that emphasized the professional practice of criminal justice. Likewise, practitioner ratings were equally favorable of students in online courses and classroom-based courses. Given these findings, it would seem that the online format of education is a viable educational approach within the field of criminal justice and it would likewise seem that both academics and practitioners can benefit from this type of instruction, regardless of the career path that they ultimately choose.

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Appendix A: Professional Practice Variable Qualifiers

1. Applied scholarship

- Student understands research methods with courtroom data that are presented
- Student understands legal precedent and can apply precedent to assignments
- Student can speculate on outcomes based on prior precedent
- Student understands the complexities of the courtroom workgroup (beyond quantitative meaning) and without rote memorization.
- Student understands how the court system will relate to their own professional life (specifically, how courts affect policing and how courts affect corrections)

2. Advanced study of the discipline

- Analytical and problem solving skills
- Multidisciplinary in approach
- Uses outside referencing effectively
- Presents either contemporary issues or makes predictions into the future

3. Developing and contributing scholars

- Student discussion in classroom
- Student debate on discussion board
- Student completes any bonus activities in the course
- Student participates in research symposium
- Student participates in emerging scholars program
- Student participates in conference presentation or other such contribution
- Student writes an article for newspaper (school or local), encyclopedia, or magazine.
- Student engages in any form of competition related to criminal justice

4. Service and Commitment to the profession

- Currently work as a practitioner
- Participant in Emerging Scholars Program
- Participant in Research Symposium
- Volunteer at social service agency
- Member of LAE
- Member of Alpha Phi Sigma
- Other (as determined by instructor)

Appendix B: Practitioner Interview Survey Questionnaire

Interviewee evaluation of student:

1. Student dressed professionally for the interview.
2. Student demonstrated effective interviewing skills.
3. Student asked follow-up questions that were germane to my profession.
4. Student exhibited a strong sense of professionalism during the interview (i.e. appropriate use of language, punctuality to the interview site, appropriate business-like behavior).
5. Based on my experience with the student, I would consider him or her to be appropriate for my own line of work, presuming professional qualifications were met.
6. Student clearly demonstrated that they understood the information that I provided them during our interview.
7. Based on my own perception, I would say that the student understands the main issues germane to my profession.

Student evaluation of the interview experience:

1. I believe that I was dressed professionally for the interview.
2. I believe that I utilized effective interviewing skills.
3. I made a point to ask follow-up questions that were germane to the interviewee's profession.
4. I exhibited a strong sense of professionalism during the interview (i.e. appropriate use of language, punctuality to the interview site, appropriate business-like behavior).
5. I believe that I could be appropriate for my interviewee's line of work presuming that I had time to obtain the necessary professional qualifications.
6. I gave both verbal and nonverbal feedback that demonstrated that I understood the information that the interviewee provided to me during the interview.

7. Overall, I would say that I understand the main issues germane to the interviewee's profession.

Appendix C: A comparison of Student Self-Perceptions of Performance during Practitioner Interviews in Online and Classroom Courses.

INSTRUCT	DRESSP 2	INTSKIL2	QUEST2	PROFES2	APPRO2	UNDER 2	MAINIS S 2
Online Mean Score (N = 40)	1.7500	1.9000	1.9000	1.8250	1.8250	2.0000	1.9250
Std. Dev.	.63043	.70892	.63246	.67511	.67511	.87706	.94428
Classroom Mean Score (N = 81)	1.8889	1.9506	1.9877	1.9630	1.9877	2.0494	1.9383
Std. Dev.	.44721	.47173	.33518	.33333	.33518	.54546	.59887
Total Mean Score (N = 121)	1.8430	1.9339	1.9587	1.9174	1.9339	2.0331	1.9339
Std. Dev.	.51653	.55880	.45455	.47586	.47846	.67000	.72727

ANOVA found no significant differences between online and classroom test scores.

Appendix D: Comparisons between Online and Classroom-Based Students by Semester Year

INSTRUCT	SEMEST	TESTONE	TESTTWO	TESTTHRE
2004	Online Mean (N= 22)	76.0	71.2	67.1
	Online Std. Dev.	8.68496	20.55001	19.70892
2004	Classroom Mean (N = 40)	73.9	66.7	66.6

	Classroom Std. Dev.	10.57804	18.35092	21.27904
2005	Online Mean (N= 20)	67.2	62.9	70.5
	Online Std. Dev.	14.64528	17.17242	14.47493
2005	Classroom Mean (N = 44)	73.9	67.4	66.9
	Classroom Std. Dev.	10.61898	15.48210	17.62920

Appendix E: Instructor Evaluations among Online and Classroom-based Students by Academic Year.

E1: Spring 2004 Online

Mean	Mode	No Opinion	Number Submitted	Select the answer you feel is most appropriate for question 15:Far above average(5), Above average(4), Average(3), Below Average(2), Far Below Average(1), No Opinion(NA)
4.00	3.00	0	8	15. The effort required to succeed in this course was:
5.00	5.00	0	8	16. My overall opinion of the instructor as a teacher is:

E2: Spring 2004 Classroom

Mean	Mode	No Opinion	Number Submitted	Select the answer you feel is most appropriate for question 15:Far above average(5), Above average(4), Average(3), Below Average(2), Far Below Average(1), No Opinion(NA)
3.79	3.00	0	14	15. The effort required to succeed in this course was:
4.71	5.00	0	14	16. My overall opinion of the instructor as a teacher is:

E3: Spring 2005 Online

Mean	Mode	No Opinion	Number Submitted	Select the answer you feel is most appropriate for question 15:Far above average(5), Above average(4), Average(3), Below Average(2), Far Below Average(1), No Opinion(NA)
2.67	3.00	0	3	15. The effort required to succeed in this course was:
4.33	5.00	0	3	16. My overall opinion of the instructor as a teacher is:

E4: Spring 2005 Classroom

Mean	Mode	No Opinion	Number Submitted	Select the answer you feel is most appropriate for question 15: Far above average(5), Above average(4), Average(3), Below Average(2), Far Below Average(1), No Opinion(NA)
3.50	4.00	0	8	15. The effort required to succeed in this course was:
4.75	5.00	0	8	16. My overall opinion of the instructor as a teacher is: