Learning Empathy Online versus Face to Face

By: Danna Livingston-Matherly

A Thesis Submitted to the Graduate Faculty

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science in Education

University of Wisconsin-Superior

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Major Professor

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Abstract

Online learning is used in multiple fields of study. Having the ability to take classes online and having the flexibility to learn at a student's own convenience is one of the rewards of learning online. Some subjects may be more difficult to take online then others. Criminal justice teaches subject material, such as empathy, that up until recently has been primarily taught in a face-to-face traditional classroom. This study analyzed if learning about empathy online can be as effective as learning about empathy face-to-face by analyzing the test results of both groups of students online and face-to-face. The mixed-methods study first measured the level of knowledge of empathy based on a pre-test and then, after teaching the material on empathy, a post-test. Next, a survey was conducted to assess students view on how empathy was and could be taught by both delivery methods of either online or face-to-face. The results from the pre and post-test indicated that the online students were more knowledgeable with the subject material, empathy, than the face-to-face students however, the face-to-face students increased their knowledge of the subject material, empathy, at a higher percentage than the online students. The survey showed very similar views between both sets of students in that the majority of the students felt that learning empathy face-to-face would be more conducive. Both online and face-to-face students increased in their learning in this study.

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CHAPTER 1: INTRODUCTION

The term online learning is a way of studying and learning with the assistance of a computer and the internet, without having to attend classes on a campus or inside of a classroom. Another term for it can be called "on the go" learning, which means the student is using the internet from a remote location and studying at his or her convenience. The other form of learning discussed here is traditional classroom. This is where the student sits in a classroom and the teacher teaches the class in front of students. Both styles of teaching are currently used in the educational system. What is important in this study, however, is focusing on whether online learning is as effective as learning in a traditional classroom setting when teaching certain social skills.

Technology is constantly evolving and improving; with it comes the new style of learning. Sitting in a classroom amongst other students and a teacher is slowly becoming a thing of the past. Although face to face may continue to be around, other ways of bringing knowledge to the student are surpassing the classroom style of teaching (Means, Toyoma, Murphy, & Baki, 2013). The popularity of the internet and online learning forces us to look at the big picture of how the educational system can improve on this style of learning to satisfy this popular trend.

According to Means, Toyama, Murphy and Baki (2013) online learning is everywhere world-wide, making learning from a screen possible at any time. Their recent survey involved over 2,800 universities and colleges and found that over 6.7 million students total are taking at least one online course. Online enrollment is increasing at a rate of over nine percent every

year. According Cavanaugh and Jacquemin (2015) nearly seventy percent of higher education academic leaders believe that online education is crucial for their long term strategy.

The question the educational environment must then ask is whether or not online learning is as beneficial as learning in a classroom. It is important that those in the business of education understand the pros and cons of both styles of teaching and how these styles effect learning and recall or application. If online teaching is rapidly increasing (Cares, Hirschel, & Williams, 2014), this study would argue, it is important to make sure it is at least as beneficial as the face-to-face form of education and not used just because of its convenience.

The criminal justice field, for example, is one field where social skills including empathy are a vital part of the criteria (Gilbert, Schiff, & Cunliffe, 2013). Because of its importance to the field, one must ask: Can students learn and understand empathy from an online class? Gilbert, Schiff, and Cunliffe (2013) conducted a study that looked specifically at teaching restorative justice across three platforms: face-to-face, online, and hybrid course modalities. That study reported that students can learn restorative justice with all three platforms. The authors looked at the effectiveness of teaching restorative justice, with empathy deeply embedded in the material, and focused on the online delivery method as well as the face-to-face delivery method. Their study stressed that learning refers to the individual processes that result in modifications of earlier understanding or the acquisition of new knowledge, as well as skills or perceptions. Gilbert et al. (2013) defined learning as the integration of previous knowledge with new concepts and ideas. This can not only be done in the classroom but rather learning can take place almost anywhere. Keeping that in mind, they proposed learning empathy online, if presented the right way, might be just as effective as teaching in a traditional classroom.

Statement of the Problem

Teaching online has become a popular way to teach content to students. Learning social skills for students in the criminal justice field is vital. These social skills include empathy. With the increase and popularity of online delivery of coursework there needs to be evidence that it is possible to teach empathy online as effectively as in the traditional classroom. The proposed study intends to examine the problem and to collect data in order to potentially provide more understanding of whether learning empathy is comparable with criminal justice students learning in either online or face-to-face in a course that involves social skills development.

The learning objectives in this course that relate to empathy are to understand what it is, why it is important, and how it relates to this field. This research attempts to analyze whether students enrolled in online learning are able to understand empathy when courses encompass such subject material. One of the concerns behind the study is if empathy can be taught through the online class. If it has been taught online then an area to explore is how it can be done effectively.

According to Gilbert et al. (2013) learning online can be very convenient and practical but the main concern for educators is how to meet this current trend/need, while maintaining an ethical responsibility to provide the best learning format available. This study hypothesizes that through a pre-test, post-test, and survey on what the students know before teaching empathy and then finding out what they learned after the instruction may help with understanding the effectiveness of both styles of teaching. The students in this study will be in two groups. One that is online and one that is face-to-face.

Background and Need

Understanding the web-based form of learning has become a vital part of the educational system's goals related to learning styles. Online learning has become a significant part of our lives and lifestyle (Shu-Fang & Aust, 2008). Because of this, it only magnifies the quest to compare and contrast this style of learning with that of a face-to-face classroom setting. Means et al. (2013) states that online learning is one of the most popular ways of learning for students, the educational environment must adapt to this and find a way to make this style of learning the best it possibly can be. Means et al. states that although online learning is convenient and efficient it is unknown if it is as effective as face-to-face. Technology, they note, is moving at such a rapid pace that the research is having a difficult time keeping up with analyzing the effectiveness of online teaching.

Certain subjects taught online include learning objectives that address learning emotional responses, such as empathy. The review of the literature provides the background on issues such as how an instructor will teach such a topic as empathy using an online platform, when there is no face-to-face contact. The literature elaborates the learning objectives that deal with empathy being measured. Gilbert et al. (2013) studied various methods of teaching the material on restorative justice. They discovered that because students are already using mobile devices with internet, as well as numerous social networks in this electronic culture, it is possible to achieve the important concepts without being in the classroom. The authors found that although the classroom tends to have a more conducive environment for teaching certain subjects, such as restorative justice, it is possible to teach these subjects online. According to the authors, because students online know that they are only known through their electronic communication, they are

more likely to be more open and responsive. Since these students participate in a virtual community, they appeared to make interactions as comprehensive as possible (Gilbert et al., 2013). Gilbert et al. stress that, although some academic content can seem to find a way around certain activities that have required 'present time face-to-face interaction' in the past, the concern today is what is effective to do when it is not possible.

Purpose of the Study

The purpose for the study is to provide further insight on the teaching of emotional skills as part of course content when the online platform is being used. The intent is that focusing on the effectiveness of online teaching of empathy, when compared to face-to-face teaching, will help educational systems improve upon the approach needed to ensure that empathy is learned as effectively.

Research Questions

Can empathy be taught as effectively online as it can be in the classroom? Specifically, in this study, do students studying criminal justice gain an understanding of empathy in both online and face-to-face instruction when measured by pre/post-tests? The search to date has found limited research on empathy in criminal justice although there have been studies conducted on empathy in other fields, such as ministry and nursing. It may be presumed there has been little done to understand the impact of studying empathy in an online class versus face-to-face class, within the criminal justice field.

Significance to the Field

The benefits for instructors in criminal justice and other professions will be to potentially have a better understanding of what works and what does not work when teaching empathy online. Best practice can be analyzed to show a more clear and concise way to improve approaches to teaching social skills to gear towards today's current trends and needs. This study may help the instructors teach their online students to meet the course learning objectives as effectively online as the students in the classroom especially when providing content and skills related to empathy.

Definitions

- Distance learner- learners are physically separated from the institution that sponsors the instruction (Rumble, 1986, p. 1).
- Distance learning- A method of education in which the learners are physically separated from the teacher. It may be used on its own or in conjunction of other forms of education, including face to face (Rumble, 1986, p. 1).
- Online teaching- A form of learning that provides access to content and instruction at any time from any place. Overlaps with the broader category of distance learning, which encompasses earlier technologies such as correspondence courses, videoconferencing, and educational television (Means et al., 2013, p. 3).
- Research question- A research question is related to the problem in a study and is the question that the researcher attempts to answer. The research question guides the type of data that will be collected of how the data should be collected (Bui, 2014, p. 291).

- Traditional face-to-face classroom- Students and the professor interact with each other in the classroom including lecture, presentation, and answering questions (Rumble, 1986, p. 1).
- Empathy- The person's ability to understand the emotions of others and share in their feelings (Posick, 2013, p. 1).

Limitations

There are limitations to be aware of with this study. First, the study uses a sample of convenience, rather than randomly assigned students, and it is limited in its geographic enrollment and diversity. Second, the student base was drawn solely from the Wisconsin Indianhead Technical College and no other schools. This can be a limitation because often times each school has its own format for online teaching, therefore a student may report a deficiency with an online class at this school that may not be a deficiency at another school. Another limitation is that the students who will be completing the study have taken their online classes predominately with the researcher. Because each instructor also has his or her own style, it is possible the researcher may utilize online learning material or activities in a less or more effective way then another instructor.

Ethical Considerations

Students attending classes both online and face-to-face will be asked to participate in this study. Students will not be forced to participate, nor will they face consequences if they refuse to participate. All students who willingly participate in this study will not be placed in any harm and there will be no potential risk to the student, other than filling out a ten minute survey. All students will sign a consent form agreeing to their participation in the study.

CHAPTER 2: LITERATURE REVIEW

Introduction

This review of the research laid out studies that appeared to show the effectiveness of online teaching and that it was possible to teach social skills through technology versus face-to-face. Some subjects, such as criminal justice, incorporated teaching social skills within their coursework. This research analysis also looked at social skills such as empathy and if they were taught as effectively online as they were in the traditional classroom. The literature review found for this study falls into three categories: understanding the concept of empathy and its teachability; teaching empathy online versus a traditional classroom; online learning versus face-to-face learning.

Understanding the Concept of Empathy and its Teachability

According to Toranzo (1996) learning the concept of empathy and its importance in many fields is crucial for working with people whether they are patients, victims, or criminals. According to the researcher, learning the appropriate and inappropriate social values of a culture, which are developed through linguistic interchanges between people, is required in order to negotiate proper social interaction. Toranzo set out to understand and improve classroom behaviors and do so through teaching empathy. Toranzo conducted a study describing how students' empathy skills were developed in a classroom. The study was conducted with deaf students through a classroom based project. Toranzo examined students' perception and

interpretations of information in certain contexts that primarily focused on communication issues.

Toranzo (1996) identified and compiled components of empathy based on his research on empathy and collected the data through ongoing observations and documentation of his students' statements, responses, interactions, and various situations. Toranzo explained that empathy influences prosocial behaviors. "Empathy is a multifaceted skill integral to humans. It involves the dynamic interplay of perception, social cognition, and affect" (p. 15). His data was gathered in the form of written and verbal dialogue. Toranzo recorded field notes based on comments of others the students came in contact with. The empathy project had three core domains: communication, literacy development, and social competence.

Toranzo (1996) found that through the empathy geared classroom activities and projects, students developed perspective taking by recognizing emotions in others which led to a more advanced and appropriate response of an identical emotion. Through some guided activities, students were able to use others viewpoints to expand their social understanding. Social competence improved through their understanding of roles and responsibilities in communication exchanges and their communication skills in general. What was found in his study was the importance of understanding how to be empathetic of others not only because it is needed in certain occupations but also because it was a necessary skill to be understanding of others and to have prosocial, societal, behaviors that everyone will benefit from. According to Toranzo, this was important simply to adapt and improve social skills with others.

Researchers have conducted some studies on empathy and how it relates to certain fields such as criminal justice, pastoral care, field of pharmacy, and nursing. This research helped to explain how empathy tied in with certain fields and was important for students' understanding of

the basic concept of empathy. But some research also provided a general understanding of what empathy is and its importance to the teaching and working world.

In a later study, Yilmaz (2007) conducted research regarding historical empathy and its implications for schools. Yilmaz defined historical empathy as "the ability to see and judge the past in its own terms by trying to understand the mentality, frames of reference, beliefs, values, intentions, and actions of historical agents using a variety of historical evidence" (p. 331). Yilmaz looked at what historical empathy was in the classroom and why it was important to show students how to understand empathy as well as the need to be empathetic when looking at what others have gone through. He especially looked at how what our ancestors went through should have meaning to the people today.

According to Yilmaz (2007), understanding how to place oneself in another's situation other than one's own, to look through the other's eyes, to see something from another's perspective, and to build a connection with someone, are all vital empathetic skills needed to do an effective job in criminal justice. Yilmaz looked at numerous studies and reviewed the literature to come to an understanding of the definition of empathy. He found it difficult to find a common term and understanding for empathy. "Clearer delineation of the components of historical empathy is needed. If a cumulative knowledge base about historical empathy is to be built, an agreed upon definition of the term must emerge from diverse studies" (p. 336).

Yilmaz (2007) stated that understanding empathy means developing a positive attitude or feeling toward an individual, event, or situation. For example, in psychology empathy is defined in seventeen separate ways. While historians are concerned with understanding the past, psychologists are concerned with the present world. The literature reviewed by Yilmaz showed that scholars have not yet come to agreement about the definition of empathy. In other words, it

can be used in different ways, in various fields. The researcher focused mainly on the area of social studies when dealing with historic empathy but the realization was that understanding how and to what extent students can engage in historical thinking and reasoning is a relevant question that needs further research. The educational community, according to Yilmaz, has a long way to go to truly understand the relation of empathy and its impact on various fields of study.

More recently, Posick (2013) reviewed research regarding the perceptions of empathy as it relates to crime and justice. His focus pinned down what was currently known about empathy in context of justice and crime by reviewing recent research and additional analyses with his associates. He noted that factors like age, sex, education, race, and income, when taken into consideration, formed a variation in how empathy mattered. He went on to further note that taking empathy in to account in police training is one of the most promising areas for improvement. Training those working in the criminal justice field can show them how to display their understanding of community values and needs when they are interacting with the public. Such training, Posick noted, can be taught by displaying steps to help officers learn about what empathy is and how to show concern.

According to Posick (2013), researchers have a great deal more to learn about how empathy helps to shape crime and interactions between the public and those working in the criminal justice field. He went on to state that we have enough knowledge to at least continue to make improvements. Such improvements can benefit understanding the emotions of criminals and victims as well as prevention and dealing with juvenile delinquency.

In summary, this section highlighted the different studies conducted to teach students about empathy, its importance, and how it relates to various fields of study. Developing empathy skills in a classroom can only benefit students who then can use those skills in their occupational

fields. According to Toranzo (1996) there is still little known regarding the study of empathy and its overall impact on society. Posick (2013) also emphasized the need for more research in the area of empathy, although he added that, in his opinion, we have enough knowledge base to start working on building empathy into our trainings of criminal justice employees.

Teaching empathy online versus a traditional classroom

According to Cares et al. (2014) teaching a social skill such as empathy can be difficult enough when done in a classroom let alone teaching this subject online. Cares et al. spent time exploring teaching victimization in an online environment. The researchers studied translating in person empathy and support through the internet. Their research focused on the teaching of sensitive topics, teaching online, and trauma-informed care in regards to teaching about victims of crime. Cares et al. discussed how dealing with sensitive issues, such as victimology, is a crucial part of criminal justice training. Since the content of a victimology course has the potential to elicit strong, emotional reactions the researchers not only looked at how empathy can be taught to online students but also how to deal with students who were themselves victimized and may be further traumatized by the class material.

One of the things Cares et al. (2014) emphasized was how to guide students who are discussing sensitive issues in a discussion board to be aware of what they post and how it may be taken. One of the advantages of online teaching that they noted is that often times with discussion boards, because it is not in real time, participants can think about what they want to say, making sure they are not sounding offensive. One common way Cares et al. said that could be particularly offensive is when students on a discussion board are ‘blaming the victim’. Further, it can be more difficult for the instructors to control this especially if they are not on the discussion board at the same time.

Cares et al. (2014) stressed that instructors must have a plan upfront for dealing with students who may be posting insensitive remarks regarding victims that can have an adverse effect. The authors cautioned instructors that students must really be sure to read the syllabus and other material provided up front before starting their online class because that is the best way they will have guidelines and structure for how to behave and respond. The researchers went on to further stress the importance of making sure to utilize all resources available to the students. In a traditional classroom setting instructors have the opportunity to deal with students' concerns immediately after class but this is not the case online. Therefore, they cautioned, teachers need to have clear instructions on communication from the start.

Another difference with teaching empathy online that Cares et al. (2014) went over was that while students are in a classroom setting, they are able to read the non-verbal cues which can help when learning about empathy. They also have tone of voice as well as facial expressions which the researchers stated are important when learning to work with victims. Although teaching online can prove to have its hurdles, Cares et al. explained creative ways to accomplish the goals in an online setting and provided ways they felt to be most successful.

Gilbert et al. (2013) also looked at methodologies for empathy online and face-to-face as well as hybrid course modalities when teaching restorative justice. The researchers looked at how empathy can be taught when it is necessary to use various instructional modalities. The authors started out by explaining that restorative justice is a non-traditional philosophy of justice that views crimes more as harm done to people rather than a violation of the law. Restorative justice, furthermore, was presented as victim centered and focused on healing harms and improving social conditions by making amends to the community and repairing relationships.

Gilbert et al. elaborated that restorative justice is about 'being with' rather than 'talking to' people so that understanding empathy is a major component to restorative justice.

Gilbert et al. (2013) discussed four principles of restorative justice that combined principles and values of adult learning and applied it to three instructional modalities: face-to-face only, online only, and hybrid courses. The researchers found strengths and weaknesses in each of the styles of teaching. They found that having the face-to-face modality was more appealing to community development. With online communication, they found that participants shared personal information or revealed deeply hidden feelings because they were only known through electronic communication and therefor were apparently more willing to open up. "Since online students participate in a virtual community through the written work, they appear to make interactions as comprehensive as possible, perhaps to avoid being misunderstood" (p. 65). The researchers discovered after taking a close look at presenting restorative justice material to both styles of learning, both were able to grasp the important concepts.

There are not many studies apparently conducted specific to criminal justice and teaching empathy, however there have been some studies done in other fields. One of studies was conducted by researchers Goodman-Snitkoff and Snitkoff (2006). The researchers focused on enhancing empathy with pharmacy students. The study focused on whether or not the student would have increased empathy if during the class time, they were given more details about their patients as a way to make the patient more human and relatable. "The goal of pharmacy education is to develop competent and empathetic clinicians. Recommendations have been made about how to maintain or increase empathy throughout the educational experience, but little attention has been paid to the tools we use to teach students about patients" (p. 5).

Goodman-Snitkoff and Snitkoff (2006) studied two ways to present case studies to pharmacy students. In the first they compared what happened with a traditional case study that the students would normally get in their lesson to when students received a nontraditional case study. In the nontraditional case study students were given a more detailed case study to see if there would be greater development of empathy. Goodman-Snitkoff and Snitkoff enriched a traditional case study by making the information more patient focused rather than disease focused. For example, students given the enriched case study (ECS) were given the clinical facts of the illness in the context of the patient's emotional and social circumstances rather than just the clinical facts. The researchers discovered that the students who were given the more detailed case study and had a narrative that had a beginning, middle, and end, which gave the student more information had a better understanding of the patient. This in turn, according to the authors, enabled the students to have more awareness and more of a connection to the patient they were reading about. They concluded that there was more empathy shown by the students who had more information in their case studies based on the personal information provided.

Research was also found on teaching empathy to pastoral care students. The researchers in this study, Sharp and Morris (2014), looked at the anxieties of how to transition teaching pastoral care where empathy is an important piece, from the classroom to online. Sharp and Morris explained that pastoral care in the past has involved a great deal of peer to peer or small group discussions throughout the semester. This created some anxiety for the students and professors who were seeking to transition the pastoral care curriculum from the classroom to online.

The researchers stressed how the downside to this were that emotions can be difficult online but the upside is that everyone online had to engage. They identified that some of the fears

with teaching empathy online were lack of access to body language and confidentiality. Could role plays on case studies and personal experience conducted online simulate the personal nature of pastoral care experience, they wondered? Theological education, (courses like pastoral care), according to the researchers, are apparently some of the last courses to join the virtual world of online learning.

Sharp and Morris (2014) were also concerned with the transition of this class to online; they wondered if a virtual space could hold the same opportunities of education as the classroom. The researchers looked at this from a pastoral perspective, defining empathy as interpersonal connections often manifested in expressions of understanding and insight. The researchers took a close look at 'virtual empathy'. Can the virtual classroom be just as effective when learning empathy for pastoral care? There was concern about online learning through analysis of how conflict and anxiety were manifested in the virtual classroom which become opportunities of embodying empathy, an important learning goal and outcome for the class.

Sharp and Morris found that from their standpoint virtual empathy was witnessed in all the courses they taught online. They described, "A series of pedagogical choices made with the intent of facilitating dynamic movement between peer-to-peer small group and whole class discussions throughout the semester" (p. 247). In an online course, they concluded, no voice was muted due to the dominance of another student's voice, so no one is interrupted mid-sentence. They found that this encouraged students to become involved in the communication piece of the discussion and helped the instructor to gage when empathy was being used. The researchers went on to say, "Online courses can teach how to respond to anxiety and conflict in the pastoral care setting since the online experience of anxiety and conflict is slowed down and less intimidating because of their asynchronicity across separate physical spaces" (p. 255). The study showed by

examining results of a whole class discussion with weekly group listening exercises, practice labs, and small group role playing, that through a willingness to be creative and think outside the box, theology could be taught online as effectively as in the classroom.

In summary, this section highlighted a few studies on how empathy can be taught online. Although the process is different for learning empathy online, it has shown it can be as effective (Sharp & Morris, 2014). Although Goodman-Snitkoff and Snitkoff's (2006) research was only geared towards one style of teaching, it explained how students were able to build empathy in some of their fields simply by how the learning material was presented to them. Cares et al. (2014) stated that when in a face-to-face classroom, the instructors can give immediate feedback but that is not usually the case with online. The researchers looked closely at the results of online students who were getting that open communication and feedback in a timely manner from the instructors online and found that they were able to show empathy as well as those students working in a classroom. Gilbert et al. (2012) stated that because restorative justice is a component of empathy, it gives an interesting insight on how it can work even though learning empathy online is usually different than in a classroom. .

Online learning versus face-to-face learning

According to Means et al. (2013) online learning was one of the fastest growing trends; in the fall of 2008 over 4.6 million students were taking at least one online class. The authors stated that with this popular style of delivery students must still learn how to grasp all the subject's concepts through technology and not face-to-face. Our society has adapted to various styles of teaching to students. "Now that web based learning has emerged as a major trend in both K-12 and higher education, the relative efficacy of online and face-to-face instruction needs to be revisited." (Means et al., 2013, p. 1). Means et al. looked at the effectiveness of online learning.

Means et al. stated that although there had been research conducted on the effectiveness of online learning versus the traditional classroom, more current research needed to be considered. With the increased capabilities of web-based applications the researchers proposed that the expectations for the online learning had been raised.

Means et al. (2013) conducted a meta-analysis using studies that included random assignment and quasi experimental designs with control for pre-existing differences (p. 2). They also only focused on studies of web-based learning and did not include audio based tele-courses or studies of video instruction. The researchers not only examined the learning effects but also looked at the conditions and practices that might have played a key role in the effectiveness of learning online. The researchers took into consideration that there are different types of factors that can play a crucial role in learning outcomes when comparing face-to-face with online conditions. Some of these factors are the subject material, the type of learning (meaning procedure or strategy), and what technology is involved. All of these things, the authors postulate, can play a role in the validity of the learning outcomes when looking at the two styles of teaching.

Means et al. (2013) took into consideration that online instruction can serve as a replacement for face-to-face instruction in order to save on cost and school staffing. They infer that this alone can make online learning attractive but it becomes more attractive if the student outcomes are the same, or better, and it saves money. Means et al. looked at not only the effectiveness of online learning compared to face-to-face, but also the practices that are more effective with online learning and what conditions influence this. Means et al. conducted a screening process when gathering their data to compare the effectiveness of both styles of teaching. The researchers used a two-step approach for gathering appropriate studies which

consisted of abstract screening of the initial electronic database searches and then full text screening of the studies. This was done to gain credibility and accuracy without excluding relevant, high quality studies of online learning.

The findings for Means et al.'s analysis (2013) was that online learning was comparable and similar to face-to-face learning. What they also found is that blending the two, having face-to-face while enhancing it with online, brought greater results then just using one or the other.

In an earlier study Donovan, Mader, and Shinsky (2006) compared online with face-to-face learning as well, but only focused on student evaluations. The researchers looked at comparing a traditional paper and pencil method for course evaluations with an electronic method. The authors conjecture that this is yet another way to analyze the effectiveness of the two different styles of teaching. They looked at the quantitative ranking, the difference in the proportion of positive to negative comments and the quality of open ended comments.

Donovan et al. (2006) did not find a significant difference. They found that students in an online setting wrote more comments in their evaluations than the students taking their evaluation in the classroom. They hypothesized whether the effectiveness of online evaluations was important to look at and analyze because with the increase of this style of teaching it will be even more important to critique its effectiveness and value. Their study was important to look at because it compared the way students complete a task given to them online versus those who were given the traditional paper and pencil method in the classroom. They concluded that instructors using the online format for their evaluations may find that open-ended comments will not only have more qualitative detail but also be quantitatively greater in length and number.

Another study was conducted by Shu-Fang and Aust (2008) where the researchers focused more on the impact of verbal immediacy and sense of classroom community that tends to be more prominent in the traditional classroom. Their prefaces was that the role of teacher verbal immediacy is important in online discussion but the task at hand is to develop communication behaviors that reduce social distance that is common in the online learning environment.

The participants in Shu-Fang and Aust's (2008) study consisted of 214 undergraduate and graduate students enrolled in college courses delivered online. There were five scales to measure participants' perception on sense of classroom, teacher verbal immediacy, course satisfaction, perceived learning, and online posting frequency. One of the things they found was that student satisfaction with the teacher verbal immediacy was significantly tied to their overall course satisfaction. If the students were not happy with the course in general, they tended to view the online classroom community with less satisfaction. "Teachers should develop communication behaviors that reduce social and psychological distance in the online learning environment" (p. 477). Overall the authors concluded that the quality of learner-learner interactions (classroom community) and verbal immediacy appeared to have the largest influence on students' online learning experience. The researchers stressed the importance for there to be more research done in the future concerning learner-instructor and learner-learner interactions.

"By almost every measure, online education continues to play an increasing role in higher education (Cavanaugh & Jacquemin, 2015, p. 25). In this recent study Cavanaugh and Jacquemin (2015) compared grade based learning outcomes between face-to-face and online course formats. The researchers found that past studies conducted on this have been hampered by small samples and have had mixed results, and at times been inconclusive. According to the

researchers what appeared to be an ongoing trend with most research done in this field of online learning is that more research needs to be done. It is especially important for research to continue in this area because as technology advances, more information is needed on the delivery methods and the learning objectives. Cavanaugh and Jacquemin examined the grade differences between students online vs. face-to-face to see if delivering their material online would be as effective as delivering their material face-to-face. They only looked at courses that were taught in both formats by the same instructor to keep their findings the most consistent and accurate. The study included 6,012 courses over a three year time span and 140,444 students. The overall result of this study found no significant difference between the grades and course offerings formats.

Although this study found the grades to be similar with either format taught, Cavanaugh and Jacquemin (2015) did note that the sample was taken from just one institution and only included courses that could be taught in both formats, which excluded courses that had a lab component. They noted that additional universities from the global academic community should be included in future studies. "Course completion and program matriculation become essential pieces of assessment and represent two aspects of scale to provide a clearer short and long term measure of the impact of online vs. face-to-face instruction" (p. 30).

In summary, this section highlighted how online learning has deeply impacted our educational system. According to Shu-Fang and Aust (2008) if students taking courses online are able to get immediate verbal communication from the instructor and they feel like there is classroom community, they see the online delivery as beneficial as face-to-face. Donavan et al. (2006) also reported very little difference in online and face-to-face outcomes regarding completion of evaluations. In fact, online students appeared to take more time to write out lengthier comments then the face-to-face students. Overall however, there was very little

difference. This would seem to indicate that a subject, like empathy, can be taught as well online and potentially to find lengthier responses and comments from online students. According to Cavanaugh and Jacquemin (2015), there was no significant difference found when they compared students taking the same course with the same instructor in either an online or face-to-face format. The grade results and student performance was similar.

Means et al. (2013) also found no significant difference between online learning and face-to-face. What they did discover is that learning can be most beneficial if face-to-face and online learning can be blended together, to give optimal learning. They discovered that a face-to-face class that incorporates some online enhanced learning with it had higher rankings then just purely online or face-to-face instructional learning. The question still remains though, can students learn online when sensitive subject material must be learned and the student is unable to verbally interact with others? Can what occurred with ministry students, as found with Sharp and Morris (2014), be duplicated with criminal justice students?

Conclusion

As the world becomes more virtual the educational environment must do its best to keep up. Classes taught online are becoming more prominent. But are all fields of study able to adapt to the notion of presenting their material online, and can it be learned as well in a virtual classroom? Research is lacking in this particular criminal justice area, which is why this research sought to find more information concerning the effectiveness of learning online versus in a classroom. This seems especially important for certain fields of study where social and interpersonal skills, such as empathy, are such a huge component.

There are fields of study like ministry, medical, and criminal justice, where empathy may be needed because these occupations deal with people in need. The researchers mentioned above have not only examined the differences between teaching online versus in a traditional classroom but some of the research went into more detail and looked at how certain fields encompass empathy. There has also been some research that analyzed the importance of understanding empathy. This is crucial for certain fields of study to first understand that empathy is a vital piece to working with certain groups of people like patients or victims. According to Yilmaz (2007), understanding how to place oneself in another's situation other than one's own, to look through the other's eyes, to see something from another's perspective, and to build a connection with someone, are all vital empathetic skills needed to do an effective job. Given the importance of empathy in criminal justice in roles working with victims, it is important to understand how to teach about it as effectively online as in the classroom There is a need for more research, but up to this point what research has been done appears to show that online teaching can be as useful and successful as traditional style face-to-face.

CHAPTER 3: METHODOLOGY

This study examined whether learning the skill of empathy can be accomplished as effectively online as it can be face-to-face in a traditional classroom setting. As the literature review indicated, the teaching of various different subjects online involving empathy has been shown to be as effective as when such material is presented face-to-face. However, what was also found is that there is limited research that has been done concerning empathy taught within the criminal justice field. Although some studies have been conducted on empathy being taught online there have been very few studies specific to the criminal justice field. Therefore, this study proposed to look at empathy being taught to a group of criminal justice students online and to another group of criminal justice students face-to-face and to compare the outcomes.

Participants

Participants in this study were from the Wisconsin Indianhead Technical College's Criminal Justice Studies Program. The participants were current students in the researcher's course titled Criminal Law. Students attending this two year program are primarily seeking to go into policing or corrections where they will be working inside prisons and jails or on the street. WITC serves the northwest section of WI and has several campus locations across the area. The classroom used for face-to-face instruction is located in Superior, Wisconsin. Approximately forty-five students are enrolled in the Criminal Justice Program, Criminal Law Course; approximately thirty are learning on campus and fifteen are learning online. The forty-five students in this course vary in age, gender, and race; however, the majority are Caucasian, with an age range of eighteen to twenty-four. All of these students are currently enrolled as criminal justice students and are seeking future careers in criminal justice. Each group of students was given the same learning material; the only difference was the delivery method.

Instrumentation

This study used a mixed measure approach in which the researcher studied the difference of teaching empathy online versus a traditional classroom. The instructor gave a pre-test (Appendix D) to all students at the beginning of the semester to establish where they currently were with their understanding of empathy. It established what their understanding base was for how empathy tied in with their chosen field, criminal justice. The pre-test focused on a qualitative approach, using short answer questions. Next, the material on empathy was taught to all students online as well as in the traditional classroom. The material was the same but was presented in a different format in order to accommodate the two different class styles. After all students were taught the subject material on empathy, the students were then given a post-test (Appendix E). The post-test consisted of the same short answer questions. The students then took a survey which sought to find not only their thoughts on what they learned but on the format in which it was presented to them.

The survey questions (Appendix A and Appendix B) presented to the students were short answer in nature and were reviewed by other instructors for face validity and for improved reliability. The survey consisted of eight questions, one given to online learning students and one given to face-to-face learning students. Both groups were given the same learning material, were all in the same course, and had the same instructor. The main difference was how the curriculum was presented. Reviewers were provided with the context of the study and asked to consider the meaning and clarity of the questions for student's responses. The study then looked at the learning of the online students compared to the face-to-face students to see if there was a difference.

Procedure

Before any data was collected, approval of the study was sought from the UW-Superior Institutional Review Board (IRB) as well as the Wisconsin Indianhead Technical College (WITC). Once approved, a letter about the study was provided to the students enrolled in the Criminal Justice Studies online and face-to-face classes as well as a signature for their approval to participate (Appendix C). This letter provided information about the study and informed them that all the classroom and online instruction would not change, the material would be presented the same way, whether they are in the study or not. All classroom and online instruction and routines remained unchanged.

A pre-test was given at the beginning of the semester (January 19, 2016) and then the curriculum and materials were presented. The subject material involving empathy was taught and presented from January 20th to March 29th. Midterm in the semester, students were given a post-test as well as a survey. It was estimated that the entire study would take approximately three months to complete. Efforts were made to reduce the instructional variables.

Data Analysis

The data collection consisted of three parts. The pre-test, the post-test, and the survey. The data from the pre-test was compared to data collected from the post-test to gain perspective on student growth regarding the topic of empathy, from the beginning of the semester to the midterm of the semester. It was assumed that their responses would fall into certain categories and could be compared that way. It was also expected that their test scores would change from

pre-test to post-test and might show variation between groups as well as well as across groups. Because of the small sample size no analysis of variance seemed feasible.

Finally, a short answer survey was given to all the students who participated in the study and was analyzed for their thoughts on the delivery method of the curriculum that involved empathy. Again, it was assumed that responses could be compared within and across groups.

CHAPTER 4: RESULTS

In this present day with technology thoroughly integrated into the culture, it is important to analyze the impact it has when it comes to education. Schools are ever increasingly offering classes to students online along with face-to-face. As a result, some subjects such as empathy in criminal justice can be seen as a challenge when looking at the various delivery methods. This raises questions about whether students can learn a social skill such as empathy online as effectively as face-to-face. This study seeks insight into the effect of online teaching versus face-to-face teaching with the subject of empathy. The information gathered by this study may be helpful for understanding what students are learning online versus face-to-face when the material within the Criminal Justice Program is subjective and affective.

The school sample for the study included all students who were enrolled both online and face-to-face in the Criminal Law Class through the Criminal Justice Studies Program at Wisconsin Indianhead Technical College in Superior, Wisconsin. The study began with 33 students face-to-face and 15 online. The school sample that volunteered for the study included 27 face-to-face students and nine online. Not all who volunteered completed all parts.

Both the online and face-to-face students were given a pre-test at the beginning of the semester. After the same material was taught to both groups, about midway through the semester, a post-test was given. The post-test consisted of the same questions as the pre-test. The only studied difference between the two groups was the instructional delivery method. One group was present in the classroom and the other did all their work online using the blackboard

platform. A survey was then given to both groups to access their thoughts on what they learned based on the delivery method they chose.

Pre and Post-Test Results

Can empathy be taught as effectively online as it can in the classroom? Specifically, in this study, do students studying criminal justice gain an "understanding" of empathy in both online and face-to-face instruction? This is what this study intended to shed light on.

The pre-test was completed by nine students online and 27 students face-to-face. The post-test was completed by nine students online and 27 students face-to-face. The pre-test and post-test questions were the same and were scored according to a four point scale. If the question was not answered or was not comprehended by the student, that response scored a one. If the question was answered showing some understanding and had the right idea, but did not use any key words found within the definition of empathy, it scored a two. If the question was answered using two words or phrases that were used in the definition of empathy, it scored a three. Last, if the question was answered showing understanding and using more than two key words or phrases found in the definition of empathy, it scored a four. The pre-tests and post-tests were then tallied for total points and separated by the two groups: online and face-to-face.

Table 1

Example of response scoring as given by students:

Needed to include: key words or phrases in the definition of empathy to score three or four. The feeling that you understand and share another person's experiences and emotions; to show someone else's feelings. The ability to identify another's situation. To see things from another perspective.

Question: What is empathy?	
1 pt.	when a person does something for another person
2 pts	having feelings for someone in a certain situation
3 pts	to understand another's feelings and listen to them
4 pts	the ability to understand how others feel and to put yourself in their shoes; the ability to listen and understand

The questions in the pre and post-test centered on the students understanding of what empathy is and how it applies to different aspects of the criminal justice field. (See Appendix D & E) The face-to-face students who took the pre-test scored 50% compared to the online students who scored 72%. The face-to-face students who took the post-test scored 82% compared to the online students who scored 87%. This was achieved by totaling the total points from each group's pre and post and then dividing by the total number possible of points based on the number of students. (See Table #2 below.)

Table #2

Student Number Face-to-Face	Pre-Test Score	Post-Test Score	Percentage of Change	Student Number Online	Pre-Test Score	Post-Test Score	Percentage of Change
1	06	14	+50%	1	12	16	+25%
2	11	14	+19%	2	11	12	+06%
3	06	13	+43%	3	12	12	0
4	07	13	+37%	4	10	13	+18%
5	10	13	+18%	5	09	14	+32%
6	10	14	+25%	6	12	13	+06%
7	10	14	+25%	7	12	14	+13%
8	07	12	+31%	8	16	16	0
9	07	14	+44%	9	10	15	+31%
10	10	12	+12%				
11	08	15	+44%				
12	06	12	+37%				
13	08	11	+19%				
14	04	10	+38%				
15	06	13	+43%				
16	07	14	+44%				
17	09	10	+07%				
18	07	13	+37%				
19	07	13	+37%				
20	07	13	+37%				
21	06	12	+37%				
22	08	14	+38%				
23	10	10	0				
24	11	12	+06%				
25	11	13	+12%				
26	08	13	+31%				
27	11	13	+12%				

Survey Results

In addition to the pre and post- test, students were given a survey to assess their attitudes toward a subjective topic, empathy, and the delivery method/format in which it was presented. The survey was completed by seven online students and 27 face-to-face students. Table 3 shows questions one, two, five, six, and eight, based on the percentage of their yes and no answers. Question numbers three, four, and seven shows a more detailed answer also based on percentile but ranked according to their responses.

Table #3: Survey Questions as presented to online or traditional classroom students

	Survey Questions	On campus	On Line
1.	Do you think the concepts of empathy and how it relates to criminal justice, can be learned and absorbed just as well via on-line courses versus the traditional classroom? Explain your response.	57% Yes	56% Yes
2	Did you think you were able to grasp the concepts about empathy the way it was presented to you? Explain your response.	96% Yes	100% Yes
3	What concepts of empathy were difficult to learn online/classroom and why?	85% no response	57% reading non-verbals
4	What concepts of empathy were easier to learn in the online/classroom and why?	41% no response	86% no response
5	When you were taught the concepts of empathy, did you observe anything that you believe would have been easier to grasp, if it had been taught in a different format?	89% No	86% No
6	During your assignments and course work on empathy, can you think of anything that would have been helpful or would have provided a better learning experience?	78% Yes	57% Yes
7	What could have been done to improve your learning on empathy?	78% no response	57% no response
8	Are there certain subjects within the criminal justice field you believe would be impossible to learn online/in the classroom? If so, which ones, and why?	63% No	57% Yes

Each question is presented individually, showing how the students responded. In order to categorize responses in a manner that could be analyzed the researcher created various response categories prior to reviewing student responses. These categories are reflected in the tables below.

Survey Questions

1. Do you think the concepts of empathy and how it relates to criminal justice, can be learned and absorbed just as well via online courses versus the traditional classroom?

Online Students		Face-to-face Students	
Yes	No	Yes	No
43%	57%	44%	56%

2. Did you think you were able to grasp the concepts about empathy the way that it was presented to you?

Online Students		Face-to-face Students	
Yes	No	Yes	No
100%	0%	96%	4%

3. What concepts of empathy were difficult to learn in the traditional classroom/online and why?

Online Students	
43%	No Response
57%	Reading Non-verbal's; people's emotions
0%	Other

Face-to-Face Students	
85%	No Response
15%	Other
0%	Reading Non-verbal's; people's emotions

4. What concepts of empathy were easier to learn in the traditional classroom/online and why?

Online Students	
86%	No Response
14%	Cultural lens
0%	Reading Nov-verbal's; people's emotions
0%	Perspective taking

Face-to-Face Students	
41%	No Response
11%	Reading Non-verbal's; people's emotions
15%	Perspective taking
0%	Cultural lens

5. When you were taught the concepts of empathy, did you observe anything that you believe would be easier to grasp, if it had been taught in a different format?

Online Students		Face-to-face Students	
Yes	No	Yes	No
14%	86%	11%	89%

6. During your assignments and course work on empathy, did you think of anything that would have been helpful or would have provided a better learning experience?

Online Students		Face-to-face Students	
Yes	No	Yes	No
57%	43%	78%	22%

7. What could have been done to improve your learning on empathy?

Online Students	
57%	No response
43%	More videos/articles
0%	Roleplaying

Face-to-Face Students	
78%	No response
22%	More roleplaying and/or videos
0%	Articles

8. Are there certain subjects within the criminal justice field you believe would be impossible to learn online/in the classroom?

Online Students		Face-to-face Students	
Yes	No	Yes	No
57%	43%	30%	63%

Analysis of Data

The data gathered from the survey showed that all the online students were able to grasp the concept of empathy with the delivery method they were provided with. 96% of the face-to-face students indicated they grasped the concept of empathy with the delivery method they had. When asked in the survey if they observed anything that would have been easier to grasp if it had been taught in a different format, 86% of the online students said no and 89% of the face-to-face students said no. When the survey asked if the students believed there were certain subjects within the criminal justice field that would be impossible to learn either online or in the classroom 57% of the online students answered yes, it would be impossible to learn some subjects online, but they did not specify which subjects. When the face-to-face students were asked if they believed there were certain subjects within the criminal justice field that would be impossible to learn either online or in the classroom, 30% stated yes, there would be certain subjects that would be hard to learn online, but they did not specify which subjects.

The face-to-face students who took the pre-test and post-test had an average score of nine for the pre-test and 13 for the post-test. The total points they could have earned on each test was 16 since one of the five was a Yes/No question (#4) and not scored. The grand total was tallied based on the number of students and the maximum amount of points that could be earned on each test. There were 27 face-to-face students and 16 points total possible per test which put the total points possible to be earned for pre-test at 423 and post-test at 423. The face-to-face students received a total of 211 points for the pre-test placing them at a 50% and a total of 347 points for the post-test, putting them at 82%. This gave the face-to-face students a learning span/point increase of 32% from pre to post-test.

The online students who took the pre-test and post-test had an average score of 11 for the pre-test and average score of 14 for the post-test. The total points they could have earned on each test was 16. The grand total was tallied based on the number of students and the maximum amount of points that could be earned on each test.

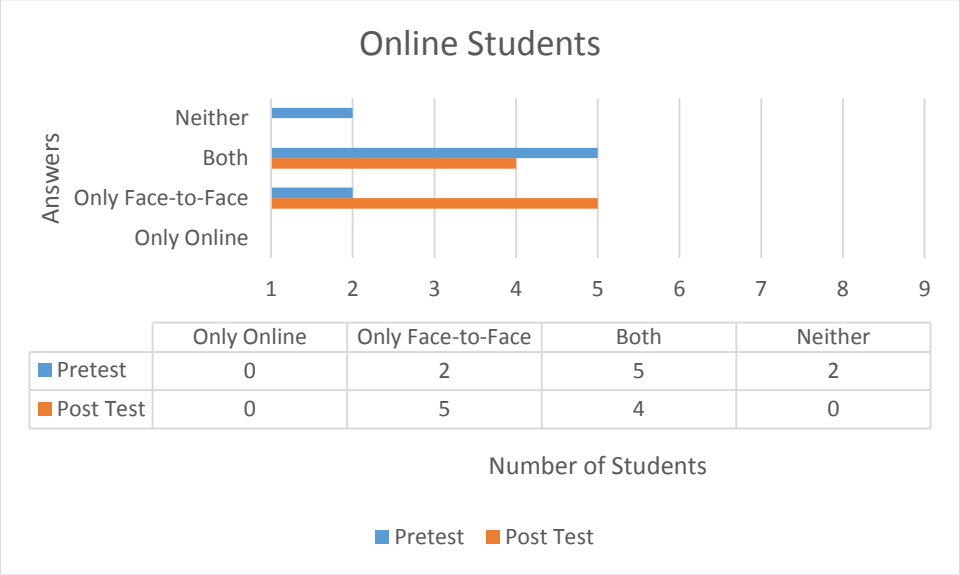
There were nine online students and 16 points total possible per test which put the total points possible to be earned for the pre-test at 144 and the post-test at 144. The online students received a total of 104 points for the pre-test placing them at a 72% and a total of 125 points for the post-test placing them at a 87%. This gave the online students a learning span/point increase of 15% from pre to post-test.

In the pre and post-test Question 4, the students were asked if they thought it was possible to learn about empathy both online and face-to-face. Nine of the online students answered Question 4 in the pre-test with no one answering only online, two answering only face-to-face, five answering both and two answering neither. (See Table #4.) On the post-test for the online students no one answered for only online, five answered as only face-to-face, four students answered for both and no students answered for neither.

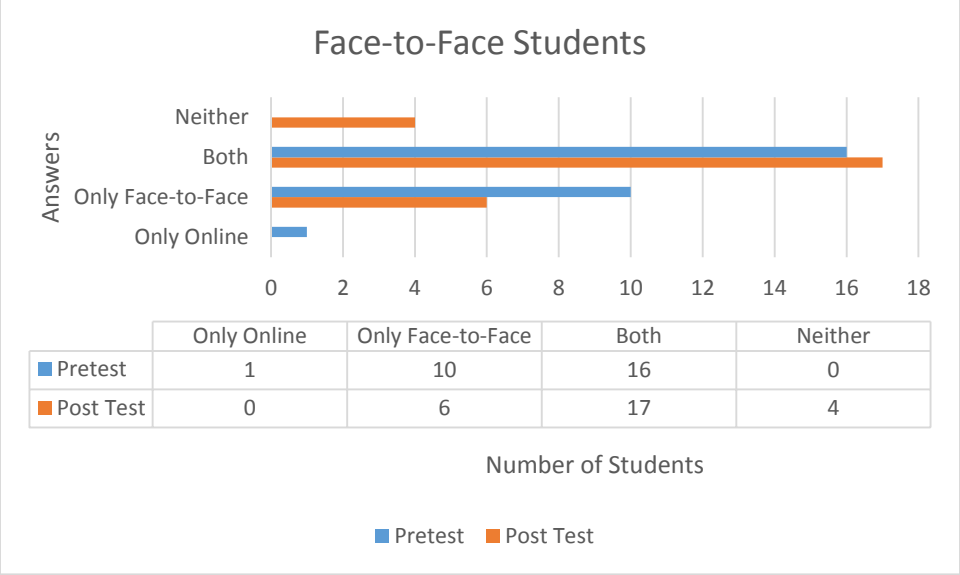
A total number of 27 face-to-face students answered number four. On the pre-test given to the face-to-face students, for Question 4, one student answered as only online, 10 students answered as only face-to-face, 16 students answered both and no students answered neither. On the post-test given to the face-to-face students, for Question 4, no students answered only online, six students answered only face-to-face, 17 students answered both and four students answered neither.

#4 Question on pre and post-test- Do you think it is possible to learn about empathy both online and face-to-face?

Table #4



	Only Online	Only Face-to-Face	Both	Neither
Pretest	0	2	5	2
Post Test	0	5	4	0



	Only Online	Only Face-to-Face	Both	Neither
Pretest	1	10	16	0
Post Test	0	6	17	4

Limitation

While attempts were made to provide the same material in the same manner to both groups, after presenting the data there are other variables that should be noted that could not be controlled. The online students were not monitored while taking their pre and post-test. The online students also were taking their test from home without the pressures of the classroom or of other students to finish a test in a timely manner. The face-to-face students were taking the pre and post-tests and survey together in a classroom and were supervised with the instructor present.

Summary

Can empathy be taught as effectively online as it can be in the classroom? Specifically, in this study, do students studying criminal justice gain an understanding of empathy in both online and face-to-face instruction as measured by both a pre-test and post-test? The online students scored 72% on their pre-test and 87% on their post-test, and their overall change in their scores was 15% .The face-to-face students scored 50% on their pre-test and 82% on their post-test and their overall change in their score was 32%. Because the number of online students was small and only one-third the size of the face-to-face students no statistical analysis comparing the two groups or their change in scores was attempted. Chapter Five will discuss what can be learned when comparing the results to the reviewed literature and, given the limitations, what other instructors might learn from this study.

CHAPTER 5: DISCUSSION

Introduction

This study examined the differences between learning about empathy when the delivery method is different. Delivery methods for educational courses, such as online, are becoming more common in colleges and universities therefor the need to evaluate their effectiveness compared to the traditional mode of teaching in the classroom is critical to our education. Understanding the effectiveness of a particular delivery method, like online, can be crucial for programs to determine whether or not they will pursue the online format. This study looked at the students' understanding of a particular social skill used in the criminal justice field, empathy. The research first looked at a baseline for the understanding of empathy and how it connects in with the criminal justice field. Next, the study measured the overall learning from the beginning of the presentation of the empathy material (pre-test) to the end of the presentation of the empathy material (post-test). The question at hand was can empathy be learned as effectively with the online delivery method when compared to the common style of learning face-to-face?

Discussion

The data from this study appear to show that in both approaches students gained an understanding when provided the same material with the same instructor. The results do seem to indicate, however, that the face-to-face students had a higher percentage growth of learning from pre to post, possibly indicating an overall greater understanding of empathy from the beginning of the curriculum to the end of the curriculum on the role of empathy. The actual scores imply that the online students knew more from the start and grew in understanding, although not at the

same rate as the face-to-face students. Overall, the online students had a higher score average with both tests.

The survey results may have indicated that despite the two different group of students experiencing a different delivery method, their thoughts on grasping empathy online vs face-to-face were similar. Although the percentages were not exactly the same with their answers, with each yes or no question, both groups fell on the same side of yes or no as a majority. For example, the first question they were asked in the survey was if they thought the concepts of empathy and how it related to criminal justice, could be learned and absorbed just as well online as in the traditional classroom. 57% of the online students said No while 56% of the face-to-face students also said No. What this could mean is that the majority of both groups who experienced a different delivery method think that online *cannot* be absorbed just as well as in the traditional classroom. Where the most disparity is found between the two groups is with the short answer questions. Survey question number three asked what concepts of empathy were difficult to learn in the traditional classroom/online and why. The majority of the online students listed reading non-verbal's and people's emotions as the most difficult to learn online and the majority of the face-to-face students did not respond to the question.

When asked what could have been done to improve their leaning on empathy, 43% of the online students stated they would have liked to have more videos and articles while 22% of the face-to-face students stated they would have liked to have had more roleplaying and/or videos.

Finally, when students were asked if they felt there were certain subjects within the criminal justice field they believed would be impossible to learn online/in the classroom, 57% of the online students felt there were subjects that may be difficult to learn online and 30% of the face-to-face students felt there were subjects that may be difficult to learn online. What is

interesting is that students as a majority appear to think that learning can be more efficient and effective face-to-face compared to online but their data does not necessarily show this to be the case. Although there are distinct differences with some of the answers between the online and face-to-face students, the differences appear to not be significant.

According to Means et al. (2013) online learning was comparable and very similar to face-to-face learning. This researcher found that although the face-to-face students had a larger growth in learning between the pre and post-test, the online students also showed improvement from pre to post. Donovan et al. (2006) did not find a significant difference between online and face-to-face in their study either. They did note that students in the online setting wrote more comments in their evaluations than the students taking their evaluation in the classroom but essentially the difference was small. Their study was important to look at because it compared the way students complete a task given to them online versus those given a task in the classroom. This researcher noticed the students online scored higher initially on their pre and post-tests than the face-to-face students but unlike Donovan et al.'s students they did not take time to write more.

The study conducted by Cavanaugh and Jacquemin (2015) looked at the grade differences between students online versus face-to-face. Their study was similar to this research in that they used the same courses and instructor with the only difference being the teaching format. Like this research, they felt this would give the most consistent and accurate findings. They did, however, similar to this researcher, note that one of the downsides to gathering the data was that the sample was taken from just one institution and included only courses that would be taught in both formats which excluded courses that had a lab component. Although

they found no significant difference between the students' grades, they did note the fact that using one institution needed to be taken into consideration, the same as this study.

Cares et al. (2014) found that students who were in a classroom setting were able to read the non-verbal cues which seemed to help when learning about empathy. The student also had the tone of voice which can be important with empathy and can be done more readily face-to-face. Teaching empathy online can prove to have its challenges. As noted in this research survey, question number three, 57% of the online students stated that reading non-verbal and people's emotions was difficult to learn in the online setting compared to 0% of the face-to-face students listing that as their difficulty.

This study seems to show that it is possible to learn about empathy and its role in criminal justice in both learning environments but that students still felt that it would be better in a face to face setting than the present online mode. Several of the studies did have ideas on how to improve the learning environment for online students which could be considered.

Limitations

After reviewing the data, the following variables may have affected the validity of the responses: The online students were not monitored while taking their pre and post-tests. Because they are online students, they would have had access to the internet where they could have looked up the definition on empathy or read additional information based on empathy before answering the questions on the test. They could have obtained other resources or talked with others to give them guidance on how to answer. The on campus students could not do this. The online students also were taking their exams from home without the pressures of the classroom

to finish a test in a timely manner. Frequently, students taking an exam together in a classroom will feel the need to complete quickly when they know others are done and waiting on them.

The study was only based on test results as opposed to content which limited the scope of measuring the learning of empathy in the two different delivery methods. A review of instructional techniques would enhance the understanding of learning empathy online versus face-to-face.

It should also be noted that there is no information on how the online and face-to-face groups self-selected their delivery method for their criminal justice course where empathy was taught. It is possible the groups scored differently from each other because of how the course was taught but it is also possible the differences were because of some differences between the students in each group. One speculation is that the online group may consist of students taking the course that have more knowledge because they are already working in the criminal justice field. If so, they might already have an understanding of the subject material which might lead to them to score higher on their tests.

Recommendations for Future Research

This researcher conducted a study based on a pre and post-test as well as a survey. The post-test and survey were given at the midterm of the semester, which may have limited additional information had an additional test been given at the end of the semester. A recommendation would be to not only test after the specific material has been taught but also at the end of the semester when the class in which the specific subject was taught, ends.

The pre, post-test, and survey were all based on short answer questions. This created a difficulty when reading the data. Another recommendation would be for future data gathering, to

use a measurement scale (quantitative measurement) and assign a number to given answers. This way tallying points for the sake of scoring would be more clear and concise. In addition, this study was only based on test results as opposed to content. Future studies may want to look at instructional methodologies.

Although this research had an advantage when conducting the study with the same person instructing the same subject material to the same group of students, only in a different delivery method, an additional recommendation would be to seek out a more diverse group of students. The students this researcher had access to, based on the courses taught in the two different formats, were predominately Caucasian males and females in their twenties. Perhaps this same study conducted in other geographical areas, at larger schools, or with a more diverse group of students, would find additional information or a different outcome.

Conclusion

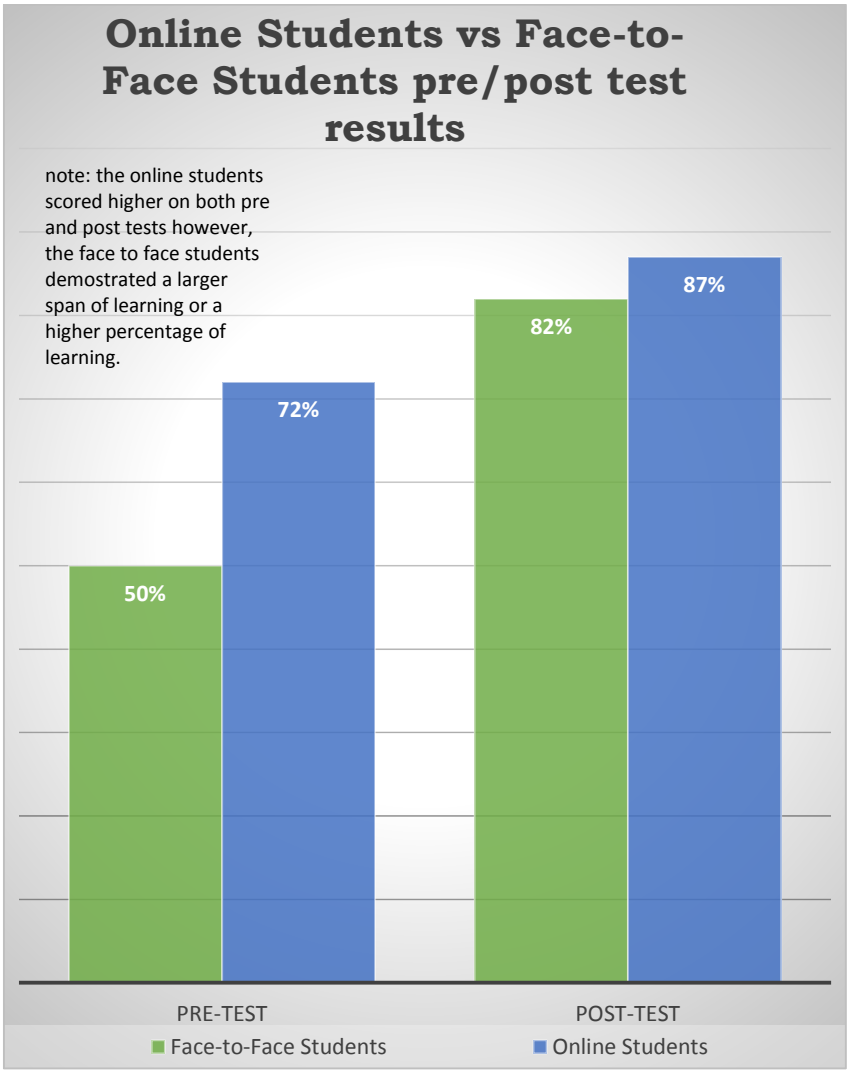
The present study illuminated some findings within the area of online versus traditional face-to-face style learning. Three conclusions can be tentatively made from this study. The first conclusion is that learning online can be as effective as learning face-to-face. Even though minor differences have been found between the two delivery methods this researcher as well as researchers (i.e.: Donovan et al., 2006; Means et al., 2013) found little differences with the overall outcomes. The findings for Means et al. (2013) was that online learning was comparable and very similar to face-to-face learning. What they also found is that blending the two, having face-to-face while enhancing it with online, brought greater results then just using one or the other.

Donovan et al. (2006) compared online with face-to-face learning as well, but only focused on student evaluations. They looked at the quantitative ranking, the difference in the proportion of positive to negative comments, and the quality of open ended comments. They did find that students in an online setting wrote more comments in their evaluations than the students taking their evaluation in the classroom however, they reported they did not find a significant difference.

The second conclusion is that the online students may have an advantage when taking exams for the purpose of gathering research, because they are not monitored or in a controlled setting. With a pre-test for example, it is impossible to know if they are looking up the definitions to the questions, giving them higher scores than those students who are in a controlled setting being monitored by an instructor. With this particular research, as can be seen in chart A below, online students scored higher in both their pre and post-tests. Is this because they were more knowledgeable with the subject empathy or is it because they had access to materials to look up and retrieve a more precise answer?

The research indicated that the online students scored higher overall with their understanding of empathy in the criminal justice system, but the face-to-face students showed greater improvement with their learning from pre to post- test.

Chart A


Online Students vs Face-to-Face Students pre/post test results
note: the online students scored higher on both pre and post tests however, the face to face students demostrated a larger span of learning or a higher percentage of learning.
50%
72%
82%
87%
PRE-TEST
POST-TEST
Face-to-Face Students
Online Students

Last, the third conclusion is that the belief remains fairly strong with both online as well as face-to-face students that learning a social skill such as empathy in the criminal justice field is more conducive face-to-face. The results appeared to show some minor differences but, overall, both delivery methods proved to be effective. Although this study apparently has shown that there are little differences, the perception among these students remained strong with face-to-face learning being more effective for learning empathy.

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APPENDIX A- SURVEY QUESTIONS

1) Do you think the concepts of empathy and how it relates to criminal justice, can be learned and absorbed just as well via on-line courses versus the traditional classroom? Explain your response.

2) Did you think you were able to grasp the concepts about empathy the way it was presented to you? Explain your response.

3) What concepts of empathy were difficult to learn in the traditional classroom and why?

4) What concepts of empathy were easier to learn in the traditional classroom and why?

5) When you were taught the concepts of empathy, did you observe anything that you believe would have been easier to grasp, if it had been taught in a different format?

6) During your assignments and course work on empathy, can you think of anything that would have been helpful or would have provided a better learning experience?

7) What could have been done to improve your learning on empathy?

8) Are there certain subjects within the criminal justice field you believe would be impossible to learn online/in the classroom? If so, which ones, and why?

APPENDIX B- SURVEY QUESTIONS

1) Do you think the concepts of empathy and how it relates to criminal justice, can be learned and absorbed just as well via on-line courses versus the traditional classroom? Explain your response.

2) Did you think you were able to grasp the concepts about empathy the way it was presented to you? Explain your response.

3) What concepts of empathy were difficult to learn online and why?

4) What concepts of empathy were easier to learn in the online and why?

5) When you were taught the concepts of empathy, did you observe anything that you believe would have been easier to grasp, if it had been taught in a different format?

6) During your assignments and course work on empathy, can you think of anything that would have been helpful or would have provided a better learning experience?

7) What could have been done to improve your learning on empathy?

8) Are there certain subjects within the criminal justice field you believe would be impossible to learn online/in the classroom? If so, which ones, and why?

APPENDIX C

When one engages in a formal study it is important to be transparent with those participating in the study so they know what is happening. I am engaging in a project that is examining learning about topics such as empathy and how it is presented for learning. I am inviting you to assist me with this project since you have been part of this course. Your Participation would be very helpful. Please read below.

INFORMED CONSENT

1) Purpose: The purpose of this survey is to study one's ability to learn empathy in various learning formats. The results are intended to help assess the impact of one learning format over another when teaching emotional topics like empathy.

2) Procedure: If you agree to take part, you will be given a survey and asked to answer the questions. Please do not write your names or any other identifying information on the survey as it should be anonymous. Please complete the survey in its entirety. Surveys that are not answered completely will not be included in the study. After completing the survey, please hit submit or place in the designated envelope in your room.

3) Time required: Your participation will involve one session lasting approximately 10-15 minutes.

4) Risks: It is not anticipated that this study will present any risk to you other than the inconvenience of the time taken to participate in it. It will benefit future CJ students and improve instruction.

5) Your rights as a subject: The information gathered will be recorded in anonymous form. Data or summarized results will not be released in any way that could identify you. Your participation is totally voluntary; if you want to withdraw from the study (completing the survey) at any time, you may do so without penalty.

If you have any have any concerns about your treatment as a subject in this study please call or write:

Dr Eric Edwards, UW Superior Institutional Research Board at eedward2@uwsuper.edu

Dr. Suzanne Griffith Department of Educational Leadership, UW-SUPERIOR, (715) 394-8316 sgriffit@uwsuper.edu

This research project has been approved by the UW-Superior Institutional Review Board for the Protection of Human Subjects. (#1220)

Informed Consent Signature Page

Your consent to participate in the survey is required. Please sign and return the following consent form (this page) if you are willing to participate in the study. Hold on to the top of the page so that you retain notification of the study, the safe guards, and student's rights.

Student Name Student Signature Date

APPENDIX D- PRE-TEST

Name _____

1) What is empathy?

2) Do you think empathy is necessary in the Criminal Justice Field? Why?

3) Do you think empathy is important when working with victims? Why?

4) Do you think it is possible to learn about empathy both online and face to face? Why?

5) In your own words, what does it mean to you to be empathetic?

APPENDIX E - POST-TEST

Name _____

1) What is empathy?

2) Do you think empathy is necessary in the Criminal Justice Field? Why?

3) Do you think empathy is important when working with victims? Why?

4) Do you think it is possible to learn about empathy both online and face to face? Why?

5) In your own words, what does it mean to you to be empathetic?

APPENDIX F

January 15, 2016

TO: Danna Livingston-Matherly
Student Researcher

FROM: Eric Edwards, Chair
Institutional Review Board for Human Subjects

Institutional Review Board (IRB) Expedited Status Determination for Research Involving Human Subjects: *Learning empathy on-line versus face to face.*

Your research proposal, IRB protocol #1220 has been determined to meet the guidelines for expedited status. The reader was Vanessa Hettinger. Data collection is approved for one year from yesterday. Should collection need to extend beyond that date, you will need to resubmit your protocol to the IRB for an extension.

The purpose of the Institutional Review Board is to review research projects conducted by UW-Superior students, faculty, and staff to ensure that ethical practices and protocols with regards to use of human subjects are followed. Retain this memorandum with your research protocols. Please note that you must follow the proposal submitted to and agreed upon by this committee. If you change protocols or practices, or if data collection is expected to extend beyond the approved date, you must return to the committee for review of the modifications or extension.

Good luck in your research endeavor.

Cc: Dean of Faculties
Suzanne Griffith
IRB Committee members
Eric Edwards
Lynn Goerdt
Yvonne Rutford
Andrew Breckenridge
Vanessa Hettinger