

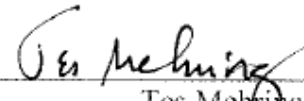
**Community College Criminal Justice Faculty Definition, Teaching, and Assessment of  
Students' Critical Thinking Skills**

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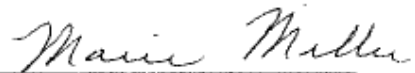
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Doctor of Education in Educational Leadership



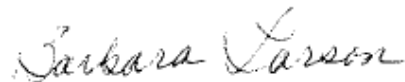
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## **Abstract**

The ability to think critically is important for all students in higher education. Students in criminal justice programs in community colleges need the ability to think critically to become effective as criminal justice professionals working in the community. The purpose of this qualitative study was designed to explore how faculty members teaching in a criminal justice program at a large Midwestern community college defined, taught, and assessed critical thinking. Six criminal justice faculty members were interviewed. The participants shared their methods of teaching and assessing their students' critical thinking ability. Through qualitative interviews and document analysis, data were gathered and analyzed to determine themes.

Three themes emerged from the data which revealed the participant's pedagogy as it related to teaching and assessing critical thinking. The following themes were identified: (a) The manner in which criminal justice faculty members taught or assessed critical thinking was varied by two types of criminal justice courses being taught, (b) The manner in which critical thinking is addressed varied by instructor, and (c) The use of the instructor's 'real-world' experience was an important component of addressing critical thinking in the classroom. The current study provides guidance for criminal justice programs in community colleges to create or enhance implementation of critical thinking into the curriculum.

## **Dedication**

**This is dedicated to my parents, Lee and Minerva Pryne who have always supported me  
and to whom I owe a debt that can never be repaid.....**

**Thank You and I love you, Mom and Dad**

**Never, never, never give up!**

## **Acknowledgements**

There are three important groups of people I would like to thank, without whom this dissertation would not have been possible: my committee, my colleagues, and my family.

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I would also like to thank the criminal justice faculty members who were collegial and assisted me with this project. This project would not have been possible without you and I appreciate your efforts with a challenging topic. You represent the spirit of our program!

Finally, but not least, I want to thank my long-suffering family for their support, patience, assistance, willingness to forgo vacations and have an absentee family member for too many years. To my family, I couldn't have done it without you.... My parents encouraged me to be an independent thinker and have confidence in my ability to go after new things that inspired me. Thanks for teaching me that it is important to leave the world just a little better than when you came into it, and how a career in higher education can be a worthy part of that pursuit.

Thank you all for your constant support throughout the doctoral dissertation process. Your confidence in me has enhanced my ability to achieve my academic goals.

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## **Chapter 1**

### **Introduction**

The ability to think critically is important for all students in higher education. Students in criminal justice programs in community colleges need the ability to think critically to become effective as criminal justice professionals working in the community. To learn to think critically, students in criminal justice programs need faculty members who are skilled in defining, teaching, and assessing critical thinking as the ability to think critically encompasses many cognitive skills which are necessary for criminal justice professionals, such as analysis, evaluation, and self-regulatory behavior (American Philosophical Association, 1990). “We understand critical thinking to be purposeful, self-regulatory judgement which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based” (p. 3).

To prevent current issues from evolving into future problems, individuals need to possess critical thinking skills (Sereni-Massinger, Bawden, & Rowe, 2016). Many students begin their career in higher education by enrolling in a community college. It is in this setting they begin to acquire critical thinking skills which include interpretation, analysis, evaluation, inference, explanation, and self-regulation (Facione & Facione, 1996). Students are exposed to this information in criminal justice courses in college. These skills are developed in the classroom by faculty members proficient in efficacious methods to transfer critical thinking skills and assess the students’ mastery of those skills (Sims, 2006).

Many students enrolled in criminal justice programs plan to be future criminal justice professionals who must have the ability to use critical thinking skills to conceptualize problems and deal with them proactively (Broadhurst, 2006; Phillips & Burrell, 2009). A student-centered learning environment which flows from a classroom discussion on current sensitive issues typically found in criminal justice courses, such as racial bias or capital punishment, naturally lends itself to a learning environment which promotes critical thinking (Sims, 2006).

Before educators can successfully guide students toward becoming critical thinkers, it is important to arrive at a definition of critical thinking through an understanding of its components (Facione, 1990; Flores, Matkin, Burbach, Quinn, & Harding, 2012). After defining critical thinking, it is essential to have an understanding of the preferred pedagogy for teaching (Behar-Horenstein & Niu, 2011; Holmes, Wieman, & Bonn, 2015; Howard, Tang, & Austin, 2015; Oyler & Romanilli, 2014) and to have the ability to competently assess it (Berrett, 2016; Brown, Afflerbach, & Croninger, 2014; Ennis, 1993; Halpern, 1993; Pickett, Riley, & Fraser, 2010). The present study examined how criminal justice faculty in a Midwestern community college define, teach, and assess critical thinking.

## **Background**

The large Midwestern community college in the present study opened its doors in 1969; the criminal justice program at the college began in 1971. In 1973, the large Midwestern community college was fully accredited by the State Department of Education and in 1975 it was accredited by the Higher Learning Commission and North Central Association of Colleges and Schools. The college became a board member of the

League for Innovation in Community Colleges in 1978. Another development which affected the criminal justice program in the present study occurred in 1986, 1996, and 2006 when the large Midwestern community college received the maximum ten-year accreditation from the North Central Association of Colleges and Schools.

In 2001, criminal justice program courses discussed in the present study were consolidated into one building and housed with the college's Police Academy. In 2003, the college described in the present study was awarded the highest level of recognition for quality by the State Award for Excellence Foundation and in 2005, the college qualified for the Academic Quality Improvement Project (AQIP) for maintaining accreditation through the North Central Association of Colleges and Schools. These developments offered students in the criminal justice program in the present study the ability to interact with criminal justice professionals on a daily basis and strengthened the bond between the criminal justice program and the local criminal justice community. Faculty members in the criminal justice program at the large Midwestern community college in this study were regularly drawn from the pool of local criminal justice professionals.

The county which houses the community college described in this study makes up approximately 20% of the state's population. Over the last five years, the county's population has increased 7% compared to 5% nationally. The average earnings for residents in the county in 2012 were 3% higher than the national average. Over the last fifteen years, the county has been the state's largest provider of employment. The county's residents are among the most highly educated in the nation, making the local labor pool one of the best in the country (Midwestern Community College, 2017). These

facts emphasize the prestige of the large Midwestern community college described in the present study and highlight the opportunities available to students in the criminal justice program. Students in the criminal justice program in this study have the responsibility to become outstanding representatives of the best of what criminal justice programs in community colleges offer. One of the skills necessary for highly-functioning criminal justice students is critical thinking.

While critical thinking is important for a variety of fields and discipline, perhaps none is more important than for first responders such as those in criminal justice: specifically, law enforcement and corrections. Research has highlighted the importance of critical thinking for first responders including law enforcement officers and emergency medical technicians (Feemster, 2010; Philips & Burrell, 2009). Geronazzo-Alman et al. discussed the importance of critical thinking for law enforcement professionals, whose job it is to protect the public from potential and imminent dangers (2017). The principles of critical thinking also have implications for the creation of policy concerning national or international cyber-crime (Broadhurst, 2006). As criminal justice professionals regularly experience novel situations, the ability to think critically and to react proactively is vital. Learning to act proactively requires a paradigm shift from a focus on training individuals to respond to singular crimes, to training the criminal justice professional to protect the country from potential threats (Broadhurst, 2006). This will require educating future criminal justice professionals to change the focus from preparing to react to individual circumstances to preparing students to think more globally. The ability to act proactively must be nurtured in the classroom through acquiring the ability to think critically (Broadhurst, 2006).

The ability to think critically demands effort, involves problem solving combined with an understanding of the importance of interrelationships, and requires analysis, making choices about expediency, the importance of minutia, and the amount of effort necessary to solve problems American Philosophical Association (APA,1990). Critical thinking demands choice (DeZafra, 1957). Choice is a product of an individual's cognitive ability and personal level of motivation. Flores, Matkin, Burbach, Quinn, & Harding (2012) posited that while there is no universal definition of critical thinking or consistency in various paradigms, there are some common elements or dimensions of critical thinking. Facione and Facione (1996, 2007) identified the following thinking skills as necessary for critical thinking to be present: interpretation, analysis, evaluation, inference, explanation, and self-regulation.

Another element of effective critical thinking requires a critical thinking disposition (Facione & Facione, 2007; Facione, Sanchez, Facione, & Gainen, 1995). With all these necessary components, it is not difficult to understand why, although critical thinking is valued, defining, teaching, and assessing critical thinking is a complex undertaking. Although the vast majority of research supports the importance of critical thinking, not everyone agrees that critical thinking is a skill that can be taught (Halliday, 2000; Rubin, 2017).

Critical thinking is considered to be a valuable skill in higher education for students in general (Bok, 2006; Halpern, 1993; Halpern, 1998). Individuals with a degree in higher education are expected to have the ability to analyze context (Battersby & Bailin, 2011) accurately assess problems, be proficient in problem-solving (Courtright, Mackey, & Packard, 2005), possess the ability to think critically (Alwehaibi, 2012; Holt,

Young, Keetch, Larsen, & Moller, 2015), and engage in critical analytic thinking (Alexander, 2014). Bok (2006) echoed the sentiment by observing, “another aim basic to every college is to enhance the ability of students to think clearly and critically” (p. 67). Tsui (2001) noted that teachers from two and four-year colleges identified one of their primary roles as educators was to “help students develop higher-order thinking skills” (p. 18).

Although higher education acknowledges a need to foster students with good critical thinking skills, there is also a realization this does not occur on a consistent basis (Ab Kadir, 2017; Flores et al., 2012). Student learning, a product of classroom instruction, is influenced by the educator’s intent, which is directly related to the instructor’s sense of self-efficacy (Ab Kadir, 2017). When educators are confident in their teaching abilities, they will take actions to achieve the targeted outcome (Ab Kadir, 2017). Instructors who are not confident of their ability to teach critical thinking are less likely to invest the time and effort required (Ab Kadir, 2017). Educators confident in their ability to teach critical thinking (another term for higher-order thinking skills) are more likely to invest their efforts to accomplish that goal. Tsui (2002) noted that to move the population from more highly educated to better educated, a paradigm shift would be necessary; from teaching content to teaching students how to think. This change requires students to learn critical thinking skill sets. Typically, curricula are designed to measure a student’s current ability to think critically as well as measure a student’s progress in mastering specific content (Lim, 2011; Nutefall & Ryder, 2010). Sims (2006) noted that a student-centered learning environment which utilized critical thinking is especially

relevant for criminal justice students who routinely focus on sensitive topics such as gun control and individuals' constitutional rights.

While defining and teaching critical thinking are important, educator's also have a role in assessing students' ability to think critically. Standardized assessment instruments augment educators' efforts to assess students' ability to think critically (Landis, Swain, Friche, and Coufal, 2007). Butler (2012) addressed the question of whether critical thinking assessment instruments such as The Halpern Critical Thinking Assessment (HTCA) have the ability to predict graduates' ability to successfully enter the workforce after graduation. He noted individuals who can think critically have the ability to make good decisions about a wide range of life events.

The large Midwestern community college in the present study offers an Associate of Arts degree which includes program-specific criminal justice courses in addition to general education courses chosen to support the content of the criminal justice courses. The required criminal justice courses offer students a broad framework to understand the complete criminal justice system, while providing elective courses, based on the student's interest. The degree is appropriate for students who plan to continue their education in a four-year institution or enter the workforce upon graduation. The criminal justice program in this study is involved in a program-wide outcome assessment of critical thinking which involves tailoring an assignment for each course, whether required or elective, to measure the students' ability to think critically. Currently, no studies exist to determine how faculty members in the criminal justice program at a large Midwestern community college define, teach, or assess critical thinking. The purpose of this study

was to determine how faculty in a criminal justice program at a large Midwestern community college define, teach, and assess critical thinking.

### **Statement of the Problem**

To adequately prepare educators for the 21<sup>st</sup> century classroom, Raible and Irizarry (2010) stated it is important to understand educators' pedagogy, whether critical thinking is incorporated into course content, and as a result, how the students understand those subjects. No studies investigating critical thinking in students pursuing study in criminal justice in a community college setting were identified in a review of the literature. Critical thinking has been the subject of countless studies, but one population is under-represented in the research: community college students seeking an associate's degree in criminal justice. The present study addressed that deficiency by adding to the body of knowledge concerning how faculty at a large Midwestern community college defined, taught, and assessed critical thinking in a criminal justice program of study.

### **Purpose of the Study**

This qualitative study was designed to explore how faculty members teaching in a criminal justice program at a large Midwestern community college defined critical thinking. A second purpose of this study was to determine how faculty members teaching in a criminal justice program at a large Midwestern community college taught critical thinking. A third purpose was to explore how faculty members teaching in a criminal justice program at a large Midwestern community college assessed critical thinking.



### **Significance of the Study**

This study identified how criminal justice faculty members in a large suburban Midwestern community college defined critical thinking, taught critical thinking, and assessed students' critical thinking skills. Without a practical understanding of how criminal justice faculty members define, teach, and assess their students' abilities to think critically, it is difficult to gauge students' progress in acquiring or refining that skill. The present study contributed to the body of knowledge on this topic. Results of this study may be of interest to faculty members at the Midwestern community college where the study was conducted as well as at other community colleges. Faculty members in community colleges, whether in criminal justice programs or other disciplines such as criminology or psychology, could benefit from this exploration of critical thinking. Higher education faculty in university settings may also be interested in the results of this study since most colleges and universities stress critical thinking as a core student learning outcome (Bridges-Rhoads & Van Cleave, 2016; Halpern, 1993; Mulnix, 2012);

### **Delimitations**

The current study was conducted by interviewing faculty teaching in a criminal justice program at a large suburban Midwestern community college. The researcher imposed the following delimitations:

1. All the participants interviewed were from one institution. Criminal justice faculty from other institutions may define, teach, and assess critical thinking differently due to variations in college cultures.
2. The participants were from the same program and had been participating in departmental activities related to the focus of this research study.

## **Assumptions**

The identification of assumptions is important as they “influence the entire research endeavor” (Lunenburg & Irby, 2008, p. 135). This study included the following assumptions about the participants:

1. Participants fully cooperated with the researcher during an individual interview.
2. Participants accurately reported how they defined, taught, and assessed critical thinking.

## **Research Questions**

Lunenburg and Irby (2008) called the research questions the “directional beam for the study” (p. 126). Qualitative studies typically employ a central research question that explores a broad question about the phenomenon being studied. In addition to a central research question, associated sub questions are identified (Creswell, 2014; Gall, Gall, & Borg, 2005).

This study was designed to collect qualitative data to answer the following questions:

**RQ1.** How do criminal justice faculty members in a community college define critical thinking?

**RQ2.** How do criminal justice faculty members in a community college teach critical thinking?

**RQ3.** How do criminal justice faculty members in a community college assess critical thinking?

## **Definition of Terms**

The following terminology is specific to this study as there are no universal definitions of these terms. Job titles of the study participants were used to create terms two through seven.

**Critical thinking.** United States of America v City of Ferguson (2016) included: “leadership, ethics, social intelligence, and interpersonal skills” (p. 71) as the definition of critical thinking.

**Law enforcement.** Individuals who are currently employed or have been employed as a patrol officer, detective, or police administrator.

**Corrections.** Individuals who are currently employed or have been employed as a prison guard or community corrections officer.

**Juvenile Justice.** Individuals who are currently employed or have been employed as a juvenile correctional officer or juvenile specialist.

**Private security.** Individuals who are currently employed or have been employed as a corporate loss prevention officer or investigator of corporate crime.

**Criminal law.** Individuals who are currently employed or have been employed as a private criminal attorney or district attorney.

**Crime analyst.** Individuals who are currently employed or have been employed in crime mapping or a crime analyst.

## **Organization of the Study**

This study includes five chapters. Chapter 1 summarized background research pertinent to the current study as well as the statement, purpose and significance of the study, delimitations, assumptions, research questions, and defined terms used in the

study. Chapter 2 offers a review of the literature on critical thinking. Chapter 3 provides an explanation of the research methodology for the present study. This chapter includes information on the research design, selection of participants, measurement, data collection procedures, analysis and synthesis of data, researcher's role, and limitations of the study. Chapter 4 identifies common themes that emerged from an analysis and interpretation of the study data. Chapter 5 summarizes the study, literature supportive of the study findings, recommendations for future research, and concluding remarks.

## **Chapter 2**

### **Review of the Literature**

The purpose of Chapter 2 is to provide a thorough review of the historic and current literature relevant to this study. During the process of reviewing the literature, it became obvious that the construct of critical thinking is complex and diverse; there is minimal consensus about any aspect of the concept, except its importance. Many researchers have investigated the definition, teaching, and assessment of critical thinking, but few studies have focused on critical thinking within a community college criminal justice program. This chapter provides a review of the literature in five sections: 1) defining critical thinking; 2) teaching critical thinking; 3) assessing critical thinking; 4) community college and critical thinking; and 5) critical thinking in criminal justice programs of study.

#### **Defining Critical Thinking**

de Zafra (1957) explained the importance of critical thinking and captured the essence of the concept when he stated,

For the first time in his long history, mankind has in his power the ability to fill his cornucopia or to destroy himself. The future of the human race depends upon the quality of critical thinking that is done in the world today. Dependent upon the quality of critical thinking that is done in America is the future of the United States as a leader among nations. 'Muddling through' is no longer good enough for any country in our contemporary world.

(de Zafra, 1957, p. 453)

His statement however did not address the complexity of this skill. That task was left to educators. de Zafra alerted educators of the need to define critical thinking, but did not offer a solution.

The concept of critical thinking is difficult to grasp due to the complex nature of the construct. It encompasses multiple dimensions, components, and perspectives. Each of these elements has been used singularly to describe the entire concept. It is accepted that critical thinking is a set of skills necessary for individuals who plan to enter the field of criminal justice or pursue an education in the domain, but there is no consensus about how to define critical thinking, effective teaching strategies, or valid methods of assessment (Broadhurst, 2006).

Critical thinking is important in a variety of settings, but none more so than in higher education where it is a valued set of skills to prepare students for the future (Ab Kadir, 2017; Alexander, 2014; Behar-Horenstein & Niu, 2011; Ennis, 2016; Gellin, 2003; Hilton, 2015; Holt et al., 2015; Jafarigohar, Hemmati, Rouhi, & Divsar, 2016; Kurfess, 1988). Although critical thinking is a nebulous concept with an elusive definition, its value has long been acknowledged (Brookfield, 1987; Kalelioglu & Gulbahar, 2014; Shor, 1992). While there is no universal definition of critical thinking, the ability to think critically is valued world-wide (Alwehaibi, 2012; Cetin, 2013; Clark, 2006; Emir, 2013). Flores et al., (2012) declared “critical thinking as a concept has far reaching implications” (p. 226).

While there appears to be universal consensus about the importance of critical thinking, the literature does not consistently support information about any aspect of critical thinking, including the definition (Ab Kadir, 2017). Critical thinking is so

amorphous, attempts to define, teach or assess it are difficult (Johnson & Hamby, 2015; Oyler & Romanelli, 2014). Not all research supports the manner in which critical thinking is conceptualized. Some research has concluded no universal definition of critical thinking exists (Gul, Cassum, Ahmad, Khan, Saeed, & Parpio, 2010). Bailin, Case, Coombs, and Daniels (1999) declared, “it is important to note that much of the literature contains a pervasive miasma of overlapping uses of such terms as skill, process, procedure, behavior, mental operations, etc.” (p. 269). The observation was made that our imprecise definitions and terminology regarding critical thinking has contributed to the problem (Ab Kadir, 2017).

Jafarigohar et al. (2016) contended different elements of critical thinking have been offered as a comprehensive definition of the concept. For example, Lewis and Smith (1993) suggested the definition of critical thinking includes three different foci: problem solving, evaluation or judgment, and a combination of both. Landis et al. (2007) identified alternate definitions of critical thinking based on the Newman Method and the Facione Method. Johnson and Hamby (2015) made the argument that many definitions of critical thinking are inadequate as they do not contain an evaluative component. They concluded the existing paradigm used to define critical thinking should be replaced with one that defines critical thinking as a “meta-problem” (p. 418). To address this meta-problem, they suggested the new approach to defining critical thinking should begin by identifying the deficiencies in other definitions; select criteria for a successful definition; and indicate how the new definition meets that criteria.

A variation of the critical thinking concept was suggested by Kuhn and Dean (2004) who argued that, rather than teaching critical thinking, the larger goal for

education is to prepare students for the 21<sup>st</sup> century by providing “the knowledge, skills, and values necessary to be successful contributors to our democratic society. These educational goals can be traced back at least as far as Thomas Jefferson....” (p. 268). To fulfill the need to prepare students to become good citizens, Kuhn and Dean advocated for the creation of a new paradigm, metacognition, to replace the concept of critical thinking. Kuhn and Dean suggested academicians and practitioners should collaborate to elucidate the nature of intellectual skills necessary to develop good citizens. Kuhn and Dean’s alternate construct, metacognition, illustrated the complexity of conceptualizing that which is universally labeled ‘critical thinking’.

The following variables have been identified as important when creating an operational definition of critical thinking: identification of outcome variables; design and selection of assessment instruments; ecologically valid indicators; multiple comparison groups; timing of testing; identification of classroom strategies that engender critical thinking; and educational measurement (Halpern, 1993). It is necessary to understand the elements of critical thinking before it can be taught or assessed. In 1988, a working group was created by the American Philosophical Association (APA). The results of that project conceptualized critical thinking in two dimensions: skills and dispositions (Walsh & Hardy, 1999). Facione and Facione (1996) discussed critical skills proposed by the 1990 APA consensus definition. The consensus definition indicated critical thinking cognitive skills and sub-skills included: interpretation (categorization, decoding sentences, clarifying meaning); analysis (examining ideas, identifying arguments, analyzing arguments); evaluation (assessing claims, assessing arguments); inference (querying evidence, conjecturing alternatives, drawing conclusions); explanation (stating



results, justifying procedures, presenting arguments), and self-regulation (self-examination, self-correction).

Critical thinking dispositions, necessary to ensure critical thinking skills are used properly, were identified by Facione and Facione (1992) in the California Critical Thinking Disposition Inventory (CCTDI) as subdispositions which included truth seeking inquisitiveness, open-mindedness, analyticity, systematicity, confidence, and maturity. In a refinement of critical thinking dispositions identified in the CCTDI, Facione's (2007) described dispositions required for critical thinking to include courageous truth-seeking, open-mindedness, persistence, thoroughness, intellectual integrity, confidence in reasoned decision-making, and maturity of judgment. Walsh and Hardy (1999) concluded that identifying a student's academic major predicted differences in critical thinking dispositions but was not predictive of different strengths in specific dispositions toward critical thinking. While many researchers have attempted to define critical thinking, no common definition exists. This research study focused on ascertaining how faculty members teaching in a large Midwestern community college in a criminal justice program defined critical thinking.

### **Teaching Critical Thinking**

The origins of critical thinking began with the teaching of Socrates (Gellin, 2003) and the inclusion of critical thinking in educational pedagogy continues to the present day. The Socratic method is inextricably linked with critical thinking (Gellin, 2003; Oylar & Romanelli, 2014; Ryan, Shuai, Ye, Ran, & Haome, 2013). Johnson and Hamby (2015) referred to Socrates as the "paradigmatic critical thinker" (p. 418).

Dewey was instrumental in integrating critical thinking in the curriculum by claiming critical thinking should be a central aim of higher education (Gellin, 2003). Ennis (2016) credited Dewey as being one of the first academicians to examine critical thinking. Ennis stated that in his seminal text, *How We Think*, Dewey (1909) noted “reflective thinking, in short, means judgment suspended during further inquiry” (p. 10). Reflective thinking requires good mental habits, which require: acquiring the attitude of suspended conclusion; searching for new materials to corroborate or refute the first suggestions that occur; maintaining a state of doubt; and carrying on systematic and protracted inquiry. These components of thinking correlate with Facione and Facione’s (1996) identification of critical thinking cognitive skills: interpretation, analysis, evaluation; inference; explanation; and self-regulation. Giancarlo and Facione (2001) noted that current approaches to thinking can be traced to Dewey who discussed critical thinking in the educational process. “Though the terminology has changed slightly over the years, developing students’ critical thinking remains a central goal of the educational process” (p. 29).

In the 1960s research on critical thinking, Gellin (2003) suggested students became more skilled at critical thinking simply as a function of their education. During the period of the 1970s to the 1990s, research suggested that another variable, students’ interaction with faculty and peers improved their critical thinking skills (Gellin, 2003). Gellin’s meta-analysis of the role student involvement in the educational experience plays in the development of critical thinking, suggested improvement in critical thinking skills could be attributed to the environment higher education offers students. The opportunity to interact with other students, be exposed to diverse ideas, and interact with

peers and educators, allowed students' critical thinking skills to develop. However, several limitations of the studies selected for the meta-analysis, including the sample size of the meta-analysis (N= 8) and characteristics of the sample, prevented generalization of the study's conclusions. Halx and Reybold (2005) noted that a faculty member's choice of pedagogy is related to a personal perception of critical thinking.

If we are to provide our students the best pedagogy available for the task, it is incumbent upon educators to become more knowledgeable about the preferred strategies to teach and assess critical thinking (Lipman, 1988). Critical thinking skills are essential in higher education courses as they allow individuals to gain a deeper understanding of the content (Dwyer, Hogan, & Stewart, 2014). The creation of Socratic questions and use of Socratic dialogue permit educators to elicit a deeper understanding of the content of their courses (Paul & Elder, 2007).

Research supports the importance of teaching and assessing critical thinking (Ab Kadir, 2017; Halpern, 1993; Jafarigohar et al. 2016). Controversy exists as to whether critical thinking may be taught, however. Lipman (1988) suggested critical thinking is a form of intelligence that can be taught and is independent from domain-specific content. Behar-Horenstein and Niu (2011) observed that students must possess the ability to think abstractly, which is correlated with Piaget's formal operations stage of cognitive development, before they can be taught to think critically.

The first step in selecting effective critical thinking pedagogy is to identify an operational definition (Halpern, 1993). While the definition is a necessary first step, it is not sufficient in order to teach students critical thinking. It is important for educators to consciously model critical thinking in their instructional practices in the classroom and

mentor students to promote critical thinking (Facione & Facione, 1996; Gul et al. 2010). The educational system expects educators to develop their students' ability to think critically, but there is no system presently in place to verify educators have the necessary knowledge and ability to successfully teach applications of critical thinking (Ab Kadir, 2017; Gellin, 2003; Kincheloe, 2000). Schaber and Shanedling (2012) observed that critical thinking is an important concept in higher education, but teaching or evaluating students' ability to demonstrate critical thinking is infrequent.

Varied researchers have identified teaching strategies to improve critical thinking including: critical thinking cards (Holland & Ulrich, 2016); active student-centered learning techniques, which include collaborative learning (Birzer, 2004), problem-based learning (McCoy, 2006), ill-defined problems (Bers, 2005), and experiential learning (Pithers, 2000). While a plethora of modalities have been suggested to instill critical thinking in students, the results have proven to be inconsistent (Oyler & Romanelli, 2014).

In addition to face-to-face education, another teaching modality has been examined for critical thinking instruction, distance learning. Distance learning is common in higher education today (Landis, Swain, Friehe, & Coufal, 2007). The specific issue of evaluating critical thinking in distance learning has been addressed and specific strategies unique to distance learning have been identified (Lunney, Frederickson, Spark, & McDuffie 2008). The volatile nature of topics regularly discussed in classes, such as capital punishment, especially lend themselves to active learning techniques (Sims, 2006).

Resources such as those found at Louisville University have produced innovative strategies for teaching critical thinking (University of Louisville, 2017). These strategies included a comic book series on critical thinking, lectures designed within the Delphi Center for Teaching and Learning, and modules which highlight faculty teaching strategies for critical thinking. Schaber and Shanedling (2012) observed students in a professional occupational therapy program effectively increased critical thinking skills through a cyclical, intentional course design in an online theory course. The course design consisted of seven sequential learning activities which increased in complexity and the demand for critical thinking skills. In this model, specific elements of critical thinking, including a clear message about the design and expectations of learning; active learning activities; graduated complexity of activities; and consistent feedback on performance were identified.

Jafarigohar et al., (2016) referred to critical thinking as a “crucial concept” (p. 59), but acknowledged that it may be a goal that is unachievable in the educational setting.

Paradoxically, humans are not simply the only logical animals, they are also the only illogical ones. Humans are the only animals whose thinking can be characterized as clear, precise, accurate, relevant, consistent, profound and fair; they are also the only animals whose thinking is often imprecise, vague, inaccurate, irrelevant, superficial, trivial, and biased (Paul, 1992, p. 3)

Higher education understands the importance of teaching critical thinking, but has not consistently produced critical thinkers using existing pedagogies (Flores et al., 2012).

Daud and Husin (2004) lamented “Much effort is concentrated on what to think rather than how to think” (p. 478).

One variable in critical thinking pedagogy which may be overlooked by educators is characteristics of student generations. This has implications when matching generational dynamics to effective classroom instruction (Werth & Werth, 2011). Different generations of students may require pedagogy tailored to that generation’s characteristic style of learning to be effective. While this has implications for the educator’s selection of effective pedagogy for critical thinking, research in this area is relatively recent. The current study focused on how criminal justice faculty in a large Midwestern community college teach critical thinking in criminal justice courses.

### **Assessing Critical Thinking**

Standardized instruments are used to assess specific critical thinking skills in (a) inference: the extent to which an individual determines the degrees of truth or falsity; (b) recognition of assumptions: whether the individual recognizes unstated assumptions or presuppositions in statements and assertions; (c) deduction: whether an individual decides if certain conclusions follow the information provided; (d) interpretation: whether an individual considers evidence provided and determines whether generalizations on data are warranted; and (e) evaluation of arguments: whether an individual distinguishes between strong and relevant arguments from weak and irrelevant within particular issues (Burbach, Matkin, & Fritz, 2004).

In addition, a variety of outcome evaluation forms have been identified as useful to accurately assess the development of students’ critical thinking skills. These include: identified formal evaluation programs (Halpern, 1993); student self-reports (Halpern,

1993); gains in IQ scores (Halpern, 1993); cognitive growth and development (Hanrahan & Isaacs, 2001); and expert-like mental representations (Halpern, 1993). However, it has been noted that faculty members must be educated to develop their own critical thinking skills before they will have the ability to assess their students' mastery of critical thinking (Gul et al, 2010; Kincheloe, 2000; Pithers, 2000). "There is evidence that those teaching critical thinking may not fully understand this construct" (Gellin, 2003, p. 746).

Given our present (mis)understanding of critical thinking, its wholesale inclusion in educational policy has set an impossible standard; failure is inevitable (Facione et al., 1995). While higher education in this country lauds critical thinking, our students are not as proficient with this skill set as students in other parts of the world. Halpern (1993) reviewed critical thinking assessment from a global perspective. She noted that North American students ranked below students from other parts of the world and potentially posed a threat to "our ability to remain a world leader in science and technology" (p. 239). Arum and Roksa (2011) offered a rather strong indictment of the state of higher education in the U.S. and its ability to produce students capable of thinking critically as measured by the performance task designed to measure general skills-based competencies, the Collegiate Learning Assessment (CLA). Arum and Roksa acknowledged

The precision of the individual-level measurement of CLA performance thus is not ideal. While the CLA performance of students would thus not be appropriate as a basis for high-stakes individual consequences ... when analysis is done at the aggregate level, the lack of precision in measurement simply leads to larger standard errors, and makes it more

difficult to identify statistically significant finding that would otherwise be the case. (pp. 147-148)

However, Arum and Roksa did acknowledge “The CLA measure is desirable and appropriate as a research instrument ...” (p. 148).

Commercial instruments that purport to measure critical thinking have been developed which include: the California Critical Thinking Disposition Inventory (Facione et al., 1995); California Critical Thinking Skills Test (Facione, 1990); Cornell Critical Thinking Tests (Ennis, Millman, & Tomko, 2005); Critical Thinking Toolkit (Stupple, Marator, Elander, Hunt, Chenung, & Aubeeluck, 2017); Watson-Glaser Critical Thinking Appraisal-FS (Watson, 1980).

These assessments are widely used and their reliability and validity are well established (Behar-Horstein & Niu, 2011). Potential concerns when selecting an assessment include matching the population which will be studied with an assessment specifically designed to be used with that population. For example, Behar-Horstein and Niu, (2011) observed the Cornell Critical Thinking Test was designed for gifted students and Burbach, Matkin, and Fritz (2004) noted the California Critical Thinking Skills Tests are valuable to predict workplace success. Lai (2011) suggested open-ended problems may be more appropriate than multiple choice formats to assess critical thinking skills.

The question of whether assessments should be subject-specific or a general measure of critical thinking was addressed by Renaud and Murray (2008). They speculated gains in critical thinking skills may be better detected with assessments which focus on specific course content, not general information, as instructors tend to focus on a subject-specific context during instruction. Behar-Horstein and Niu (2011) noted that



different implementation while using the same instructional approach “could lead to different effects on students’ critical thinking and influence the possibility of detecting critical thinking changes” (p. 31). This has implications related to the difficulty with consistent assessment of critical thinking even under the best of circumstances. To mitigate these deficiencies, it is recommended a variety of methods be used to assess critical thinking (Halpern, 1993). This study evaluated how criminal justice faculty in a large Midwestern community college assessed critical thinking in their classes.

### **Community College and Critical Thinking**

Facione and Facione (1996) commented on the pervasive influence of this construct when they stated “critical thinking (CT) is increasingly being recognized as the cognitive engine driving the processes of knowledge development and professional judgment in a wide variety of professional practice fields” (p. 129). Critical thinking is applicable to problem-solving and decision-making in a variety of contexts, and may be used to analyze complex data, evaluate, and choose the most appropriate actions (Birzer, 2003; Gul et al., 2010). Divsar and Jafarigohar, (2016) noted that cognitive skills are ‘indispensable’ for the application of critical thinking skills outside the classroom.

Critical thinking is included in core curricula, university goal statements, accreditation standards and identified as a skill considered to be necessary to prepare students for the 21<sup>st</sup> century workforce through professional accrediting standards. The term even appears in government policy (Ab Kadir, 2017; Facione, 1990; Gellin, 2003; Halliday, 2000; Lai, 2011; Sen & Sen, 2015).

Ideally, critical-thinking skills should be used to recognize and resist unrealistic campaign promises, circular reasoning, faulty probability estimates, weak arguments by analogy, or language designed to mislead whenever and wherever they are encountered. The ability to transfer thinking skills is, in my opinion, the most important of the outcome measures. (Halpern,1993, p. 250)

Consequently, it benefits society when community college students graduate with the ability to think critically (Finckenauer, 2005). Fong, Kim, Davis, Hoang, and Kim (2017) examined the importance of critical thinking through a meta-analysis on community college students and achievement. They noted that nearly 40% of students enrolled in higher education attended community colleges, but only one third of these students earned a credential within six years. To address the situation, these researchers recommended that by identifying “variables which can be enhanced through educational interventions, such as students’ critical thinking skills, educators and practitioners can design and implement interventions to help students improve in these areas” (p. 72).

Bers (2005) made several observations about the relationship between community colleges and critical thinking. She noted the following: there is an expectation that students will possess the ability to think critically upon completion of their education; most critical thinking is assessed at a course level in community colleges; and community colleges have not fully embraced assessment of critical thinking at the program or institutional level.

This researcher identified institution-specific methodology for assessing critical thinking designed for community colleges. One program identified by the researcher is

Metropolitan Community College (MCC), located in a region near the large Midwestern community college, which is the subject of the present study. In response to a less-than-favorable outcome for a subtest of the standardized assessment instrument, Watson-Glaser, pertaining to inference (a subskill of critical thinking), the faculty developed course-embedded assignments focusing on inference and a scoring rubric for courses which included social sciences and criminal justice courses. The Watson-Glaser is a critical thinking standardized assessment instrument designed to measure the components of critical thinking.

Calderone (2005) noted that community colleges are in a unique position to “actuate innovative pedagogies that serve to enhance their students’ critical thinking skills” (p. 97) and offered proven strategies for this population. These strategies included a website with resources for incorporating critical thinking into pedagogy and a model for developing critical thinking that parallels Piaget’s concept of formal operations as well as resources for incorporating critical thinking into online classes. These resources are designed to aid community colleges to create a culture of effective critical thinking.

To explore the intersection of community colleges, critical thinking, and technology, Martin (2011) noted the ubiquity of video games which are a part of the traditional community college population. Community colleges are in a better position to integrate games into the courses as elementary and secondary schools are required to teach to nationalized tests while larger colleges and universities have extensive bureaucracies but community colleges are typically more streamlined. Martin noted the disconnect between the traditional passive instructor-led instruction that produces a low level of student engagement with the high level of engagement personified in video

games and explained it through the lens of adult learning strategies which engage adult learners. Martin discussed several successful strategies identified by faculty in community colleges to incorporate the engagement offered by video games into the classroom. These included tailoring course writing requirements from the perspective of involvement in immersive video games and making a transition from traditional course grades to the use of salient feature of gaming such as experience points and levels based on the student's participation. Finally, Martin cautioned that administrative support is essential to encourage instructors to integrate games into their courses.

### **Critical Thinking and Criminal Justice Programs of Study**

A discussion has long existed about the legitimacy of criminal justice programs in higher education. On one side are those who feel criminal justice is an appropriate area of study in higher education (Clear, 2001). On the other side of the discussion, there are those who do not consider it to be as legitimate as other areas of study in higher education such as sociology, philosophy, or psychology. Bufkin (2004) challenged the assertion that community college degree programs should exist. There was concern that community college criminal justice programs place too much emphasis on the vocational aspects of the program and not enough emphasis on a broad-based liberal arts perspective to students. A corresponding concern was that many community colleges primarily employ adjunct faculty without doctoral degrees, but issues of program content have largely been ignored.

Sims (2006) discussed active learning pedagogies “within the broader theoretical framework of higher order thinking” (p. 337) which are appropriate for criminal justice students. These included collaborative, problem-based, and experiential learning.

Schept, Wall, and Brisman (2015), made a compelling argument that the traditional curriculum in criminal justice programs may not embrace teaching criminal justice students to think critically, but may simply bolster the tendency of those faculty and students to support the practitioner-oriented status-quo, with its emphasis on support of the school-to-prison mentality without question. Further, there is little consensus about the content and quality of criminal justice curriculum (Kinkade, Fuentes, & Leone, 2004). To design effective curricula for community college criminal justice programs, it is important to identify the manner in which educators define, teach and assess critical thinking. Before achieving this goal, it becomes necessary for educators in criminal justice programs at community colleges to arrive at a common set of expectations regarding defining, teaching and assessing critical thinking (Southerland, Merlo, Robinson, Benekos & Albanese, 2007).

Many vocations have embraced the idea that an ability to think critically is important, even necessary. In the United States, critical thinking is important in a variety of fields for individuals in the workforce in areas such as: accounting (Chabrank & Craig, 2013; Handy & Polimeni, 2015); agriculture (Splan, Porr, & Broyles, 2011); business (DeSimone & Buzza, 2013); corrections (Boghossian, 2006); dental hygiene (Beistly & Palmer, 2014); electric power industry (Walters, 2016); investment (Black & Ellis, 2010); journalism (Wihbey, 2017); law (Feteris, 2008); occupational therapy (Lederer, 2007); and public administration (Saldivar, 2015). This skill is valued in a variety of disciplines within education including health services (Nair & Stamler, 2013; Staib, 2003); counseling (Gervey, Drout, & Wang, 2009); higher learning (Butler, 2012; Shapiro & Stefkovich, 2011); science (Snyder, 2012), and social science (Harris & Zha, 2013).

Facione and Facione (1996) declared “critical thinking is increasingly being recognized as the cognitive engine driving the process of knowledge development and professional judgment in a wide variety of professional practice fields” (p. 129).

Few disciplines are as important as criminal justice to prepare students to think critically and where an absence of that ability may be as serious (Behar-Horenstein & Niu, 2011; Birzer, 2003; Feemster, 2010; Sereni-Massinger et al., 2016). The question of whether a criminal justice curriculum is appropriate for higher education has been debated for some time (Roberg & Bonn, 2004; Schanz, 2013). The issue of introducing criminal justice studies into higher education originated from a desire of law enforcement administrators to introduce professionalism into the field (Carlan, 2006; Finckenaer, 2005;). The debate began with criminal justice professionals’ skepticism of the value of a college education for the individual working in the field. What sustained the conversation was the perception that a criminal justice degree was not academically rigorous, but simply a pipeline to inject revenue into higher education as criminal justice classes traditionally maintain large enrollment - to the delight of college administrators (Birzer & Palmiotto, 2002). Some academicians have argued that criminal justice programs are primarily an advanced version of the traditional police academy with its emphasis on vocational training (Carlan, 2006).

Introducing professionalism into criminal justice through higher education promotes shared values, standards, and competencies of the individual with the larger society (McClellan & Gustafson, 2012). It provides individuals the ability to make informed, independent, ethical decisions for the common good of society. Individuals who have completed college degrees at the associate or baccalaureate levels working in

the field of criminal justice benefit personally by increased opportunities for promotion, including leadership roles, but more importantly, these individuals are better able to serve their communities (Hall, Ventura, & Lambert, 2007; Polk & Armstrong, 2001). This idea reinforces Werth's (2011) assertion that the common goal for law enforcement agencies is to 'serve and protect' the community.

Carlan (2006) examined the perceived value of a criminal justice master's, bachelor, and associate's degree level by professionals working in the field. The consensus was that a degree in criminal justice benefitted all the graduates by developing a deeper understanding of the criminal justice system, but more importantly, by improving their ability to communicate, analyze, and engage in human relations. Polk and Armstrong (2001) made a compelling argument that a degree in criminal justice affords the practitioner a greater opportunity to transition into a leadership position.

Critical thinking skills prepare individuals to become responsible citizens by basing judgements and decisions on careful examination of a situation. Criminal justice practitioners are expected to competently make decisions, solve problems, and de-escalate situations (Sereni-Massinger et al., 2016). The use of critical thinking to question biases provides the professional the ability to question and analyze complex situations and choose appropriate actions. These are routine expectations for the criminal justice professional (Polk & Armstrong, 2001). Preparing students to become good citizens is arguably also a goal for individuals preparing to enter the field of criminal justice (Kuhn & Dean, 2004).

Noddings (2004) advocated the use of controversial topics in programs of higher education to develop students' ability to think critically. Criminal justice professionals,

without the ability to think critically, have the potential to exacerbate dangerous situations. Dwyer, Hogan, and Stewart, (2014) observed education permits criminal justice practitioners the ability to make better decision in contexts where good decision-making and problem-solving abilities are needed on a daily basis, thus resulting in better decision in complex situations with less cognitive biases. Innocent people may be put in harm's way if a criminal justice professional does not have the skill set to analyze and diffuse a volatile situation (Birzer, 1999; Birzer & Palmiotto, 2002; Phillips & Burrell, 2008).

Graduates of criminal justice programs may enter the workforce as first responders (law enforcement, fire fighters, emergency medical technicians) who experience multiple exposures to traumatic events. Critical thinking skills prepare first responders to make better decisions and make better choices about the use of discretion (Birzer, 2003). Without the ability to think critically, they may not be prepared to avoid potentially biased judgments influenced by cumulative exposure to traumatic events. Critical thinking helps inoculate the first responder from making biased judgments (Geronazzo-Alman et al., 2017).

Students in criminal justice programs in community colleges typically plan to become professionals who function as first responders for emergency situations in the community (Finckenauer, 2005). The ability to think critically is an important skill for all college students, but specifically for criminal justice students (Alwehaibi, 2012; Butler, 2012). Our first responders, such as law enforcement officers, must have the ability and mental agility to think critically (Werth, 2011). One way first responders learn to think critically is through courses in criminal justice programs in colleges and



universities. This includes the ability to identify, analyze, and synthesize information from a variety of sources (Baker, 2009; Peerbolte, 2013).

Acknowledgment of the importance of a balanced curriculum in higher education has significantly evolved and provides students the ability to acquire social skills necessary to thrive in modern criminal justice agencies (Birzer & Palmiotto, 2002). Criminal justice courses which focus heavily on specialized vocational skills such as firearms training, Special Weapons And Tactics (SWAT) training, and undercover operations are appealing to students and college administrators as they increase enrollment, but “do little to prepare the student with broad critical thinking skills needed to function in an extremely complex and diverse criminal justice enterprise” (p. 206).

Some criminal justice administrators in the field have recognized the importance of a college degree (Polk & Armstrong, 2001), while others see higher education as unnecessary for those entering this field (Carlan, 2006). “Shenkman (1974, p. 68) once cautioned educational institutions that ‘the onus of responsibility’ for persuading the law enforcement community to the value of education *is on the educational system* [emphasis added]” (Carlan, 2006, p. 608). The primary concerns about the necessity of higher education for criminal justice professionals have been the quality of the criminal justice education and the value to criminal justice professionals (Carlan, 2006; Hall, Ventura, & Lambert, 2007).

Current and aspiring criminal justice practitioners benefit from a criminal justice program which includes a multi-disciplinary approach to the curriculum incorporating vocational and theoretical courses as well as the development of critical thinking skills. This prepares students to adopt a holistic perspective of criminal justice (Birzer &

Palmiotto, 2002). Innocent people may be put in harm's way if a criminal justice professional does not have the skill set to analyze and diffuse a volatile situation. Criminal justice professionals, without the ability to think critically, have the potential to exacerbate dangerous situations (Phillips & Burrell, 2008).

### **Summary**

Although extensive literature exists on defining, teaching, and assessing critical thinking, few studies were found focusing on critical thinking and community colleges (Bers, 2005; Southerland et al., 2007). No studies were found pertaining to the way criminal justice faculty members in a community college define, teach, and assess critical thinking. Chapter 3 summarizes research methodology including the research design, selection of participants, data collection procedures, and analysis and synthesis of the data.

## **Chapter 3**

### **Methods**

Research consistently supports the importance of providing students instruction in critical thinking as being crucial to their future success (Cavdar & Doe, 2012; Facione & Facione, 1996; Kalelioglu & Gulbahar, 2012). “Critical thinking is one of the most frequently discussed higher order skills, believed to play a central role in logical thinking, decision making, and problem solving” (Liu, Frankel, & Roohr, 2014, p. 1). Definitions of critical thinking exist for higher education, but how community college faculty in a criminal justice program define, teach, and assess critical thinking has not been studied. This qualitative study was designed to explore how faculty members teaching in a criminal justice program at a large Midwestern community college defined, taught, and assessed critical thinking.

### **Research Design**

The researcher selected a qualitative research design to acquire a holistic perspective of the manner in which community college criminal justice faculty members defined, taught, and assessed students’ ability to think critically. The qualitative method employed a phenomenological approach, which permitted the researcher to interpret the events being studied through the eyes of the participants (Lunenburg & Irby, 2008, p. 90). This enabled the researcher to identify and analyze themes which emerged from an interview process related to criminal justice faculty members’ methods of defining, teaching, and assessing students’ ability to think critically. Lunenburg and Irby (2008) elaborated on Wimpenny and Gasses’ (2000) assertion of the role of the researcher in phenomenological studies and explained the meaning of the data is the result of “co-

creation between the researcher and the researched and not just the interpretation of the researcher...” (p. 1487). This interpretation of the phenomenological approach to research exemplifies a symbiotic relationship between the researcher and the participants.

### **Selection of Participants**

In the current study, the population consisted of community college criminal justice faculty members. The sample consisted of twelve criminal justice program faculty members at a large Midwestern community college. The phenomenological methodology employed in this study utilized a nonrandom, purposive sampling technique to conduct semi-structured interviews. As the participants were all members of an intact program, purposive sampling was selected. The participants in the present study were faculty from the same department. This benefited the researcher by providing a richer understanding of the common teaching experiences of the faculty members during the interview process and afforded the researcher a more nuanced understanding of the language used by the participants.

A nonrandom sampling approach, such as purposive sampling, is used when the common experiences and knowledge of the participants and researcher aids in identifying common themes revealed in an analysis of the interview data. The researcher selects purposive sampling when the relationship between the ideas (of the participants) and evidence (data) is significant as in the present study (Emmel, 2013; Gall, Gall, & Borg, 2005). Vogt, Gardner, and Haeffele (2012) described purposive sampling as a “researcher’s deliberate choice to select participants based on characteristics of the individuals which are relevant to the study and consequently more representative”

(p. 348). Hill and Williams (2012) discussed a form of qualitative research, consensual quality research. The term refers to studying the participants in depth, which provides the researcher an opportunity to “gain a rich, detailed understanding” (p. 14).

The strategy used in this study to identify sample participants was important for two reasons. First, the researcher’s knowledge of the participants and their experience in teaching criminal justice courses resulted in the collection of robust interview data. The researcher and participants were from the same college program, which increased the level of trust during the interview and encouraged the participants’ cooperation. Second, a phenomenological approach was selected to capitalize on common experiences for this population with the expectation that the results of the study could be used to implement future program modifications.

When conducting phenomenological studies, Rowley (2012) cautioned the researcher to be cognizant of the sample size. When the selected sample is small (as in the present study), there could be a concern the results may not be generalizable to the population, but with careful design of the interview and selection of the participants, the study has the potential to generate “useful understandings and insights” (p. 262). In this situation, it was preferable to use a purposive sample for data collection using a criterion approach.

The criterion for selection of the participants in the sample group for the current study was employment experience in an area of criminal justice; teaching experience in a criminal justice program of study; and employment in the identified large suburban Midwestern community college. Six criminal justice faculty members at the large

Midwestern community college met these criteria and served as the sample in the current study.

The identified areas of criminal justice employment experience for the faculty members included law enforcement, corrections, juvenile justice, private security, criminal law, and crime analysis. Faculty members with law enforcement experience included the following job titles: patrol officer, detective, and police administrator. Those with corrections experience included the following job titles: prisons and community corrections. Individuals employed in juvenile justice roles included the following job titles: juvenile correctional officer and juvenile specialist. Those with private security experience included the following job titles: corporate loss prevention and corporate crime. Individuals employed in law-related positions included the following job titles: private criminal attorney and district attorney. Those with crime analysis employment experience included the following job titles: crime mapping and crime analyst.

### **Measurement**

The researcher designed a demographic inquiry (Appendix A) and interview protocol (Appendix B) to collect data from the participants. These instruments were designed based on the researcher's experience in higher education in criminal justice programs in community colleges, a review of literature, and assistance from content experts. A demographic inquiry was used to collect data to verify qualifications needed to be included as a participant in the current study. Participants were asked the following demographic questions prior to the interview. The questions were designed to assist in analysis of the data.

1. How long have you been working as an educator in the criminal justice program at this community college?
2. Do you have experience working in the field of criminal justice?
  - 2(a). In what part of the criminal justice system do you have experience?
  - 2(b). How long have you been or were you employed in this area of criminal justice?

In addition to the creation of the demographic inquiry, a semi-structured interview composed of open-ended questions related to how faculty teaching in a criminal justice program at a Midwestern community college defined, taught, and assessed critical thinking in their classrooms was created to collect data from each faculty member. Lunenberg and Irby (2008) suggested the use of open-ended interviews for qualitative research. In open-ended interviews, questions are developed in advance and follow-up questions are asked during the interview based on the participant's response. The research questions, as well as the interview questions, were designed in consultation with the large Midwestern community college director of the Office of Outcomes Assessment, Baker University's doctoral program research analyst, and the researcher's major academic advisor. The goal of the interview questions was to elicit information from criminal justice faculty members regarding how they defined, taught, and assessed critical thinking in the classroom.

Interviews provided the researcher the ability to tap into the participants' subjective experiences and attitudes (Perakyla & Ruusuvuori, 2013). Rowley (2012) supported this assertion by stating interviews are appropriate when the researcher is "interested in collecting 'facts', or gaining insights into or understanding of opinions,

attitudes, experiences, processes, behaviors, or predictions” (p. 261). In the present study, interviewing criminal justice faculty about defining, teaching, and assessing critical thinking in criminal justice courses was of primary importance.

Hill and Williams (2012) described goals for the researcher to consider when developing the interview protocol. They include building rapport with the participant by gathering rich, descriptive data; including information unique to the participant about the phenomenon; and the participants’ reflection on process issues such as motivation for participation as well as additional thoughts or comments related to the research topic. The interviews in the current study consisted of demographic and open-ended questions. Vogt, Gardner, and Haeffele (2012) suggested the choice of site for the interview be carefully considered in advance to ensure the comfort of the participants. If possible, it is preferable all interviews occur in the same location to avoid introducing any contextual variables into the interview process.

In the present study, the researcher utilized the interview protocol to facilitate the interview process with each participant. The interview questions were crafted to elicit the participants’ perceptions of the research question topics. Each participant was asked the same questions. Rowley (2012) stated each interview question should contain sub-questions which are designed to permit the researcher to prompt the participant to fully explore the interview question. As the participants provided comments, additional questions posed by the researcher clarified the information. Care was taken to ensure the procedure was consistent among the participants.

For guidance in creating the interview protocol, Hill and Williams (2012) recommended the researcher design between three and thirty interview questions for an



hour-long interview and use open-ended questions to prevent forcing the participants to choose only from pre-determined answers. Data were collected using an interview protocol designed by the researcher and created to align with the research questions. The questions for each research question served as a template for the interviews. They were utilized as prompts to provide structure and consistency among the interviews. Details were elicited through nondirective probes such as “could you please elaborate” or “can you tell me more about...”.

Owen (2014) described interview design as starting with identification of a framework for collection of the data. This framework drives the research process, influences the design methodology, and shapes the instruments used to collect the data. The framework for the research in the present study was to investigate critical thinking from the perspectives of criminal justice community college faculty members. The interview protocol was designed to develop a rapport between the researcher and participant and facilitate the exchange of information between the researcher and participant. The interview questions were specifically designed to align with the Research Questions.

**RQ1.** How do criminal justice faculty members in a Midwestern community college define critical thinking?

***IQ1(a).*** Please discuss components necessary to describe critical thinking.

***IQ1(b).*** What should critical thinking look like in criminal justice classes at this college?

***IQ1(c).*** Is there anything else you think is important related to how critical thinking is defined in a community college criminal justice program?

**RQ2.** How do criminal justice faculty members in a community college teach critical thinking?

*IQ2(a).* How do you explain critical thinking to your students?

*IQ2(b).* What assignments have you used in your classes to teach or promote critical thinking?

*IQ2(c).* What readings have you used in your classes to teach or promote critical thinking?

*IQ2(d).* Have you used any activities inside the classroom to teach or promote critical thinking? If so, please describe the activity and identify the course(s).

*IQ2(e).* Are there any activities you have used outside the classroom to engage students in critical thinking?

**RQ3.** How do criminal justice faculty members in a community college assess critical thinking?

*IQ3(a).* Please describe how students demonstrate critical thinking skills in your classes.

*IQ3(b).* Describe ways you assess critical thinking in the criminal justice classes you teach.

*IQ3(c).* Should critical thinking be assessed in the same manner for all criminal justice courses? Please explain.

It behooves the researcher to recognize how personal biases influence the work of collecting the interview data. Consequently, researchers must be cognizant of the manner in which they have selected the interview topics and analyzed data from the study participants. Any preconceptions or prejudices on the part of the researcher are subject to

influencing the interview questions and analysis of the data and should be reported (Lewis, 2009). The researcher is obligated to demonstrate responsiveness through sensitivity, creativity, insight and a commitment to the integrity of the research process (Morse, Barret, Mayan, Olson, & Spiers, 2002).

Reliability and validity are important in qualitative research. Guba and Lincoln (1985) and Golafshani, (2003) asserted there can be no validity without reliability. Morse, et al, (2002) contended that to establish reliability and validity in qualitative research, rigor should be an integral element of the process from its inception to its conclusion. Rigor was incorporated into the current research process through methodological coherence by the researcher's commitment to consistency among the research questions, methodology, and analysis. Another strategy used in the present study was to select a sample which represented participants with knowledge of the research topic. Community college criminal justice faculty members from the large Midwestern community college were the obvious choice of participants to best represent community college criminal justice faculty members' perception of defining, teaching and assessing their students' ability to think critically. By concurrently collecting and analyzing the data the researcher was able to cumulatively layer the information and maintain the integrity of the research process. The researcher remained constantly attentive to the process to ensure consistency between the data and the analysis. Finally, in the present study, the researcher thought theoretically by moving "with deliberation between a micro perspective of the data and a macro conceptual/theoretical understanding" (Morse, et al., p. 13).

Validity may be viewed as a concept more frequently applied to quantitative research, but it is also important in qualitative research. To establish the validity of qualitative research, several strategies exist including informant feedback (obtaining feedback about the accuracy of the data), and leaving an audit trail (involved extensive documentation of records and data) (Lewis, 2009; Onwuegbuzie & Leech, 2007). The researcher used member feedback and an audit trail to establish validity in the present study. After collection and transcription of the interview data, each participant received a copy of the data and was asked to review the information for accuracy. The audit trail was created by the researcher's use of verbatim notes of the interview, transcribed recordings of the interview, and reflective notes made during each interview to collect and interpret the results. There are different elements of an instrument's validity. Face validity refers to the concept of whether an instrument makes reference to what is being measured (Kember & Leung, 2008). Face validity was established in the present study by the use of experts, specifically, Baker University doctoral advisors and the large Midwestern community college director of the Office of Outcomes Assessment, to review the research and interview questions.

### **Data Collection Procedures**

Prior to conducting the research, the researcher obtained permission to conduct the study at the large Midwestern Community College. The Midwestern Community College's Research Participant Protection Program (RPPP) form was submitted for consideration on September 28, 2017 (see Appendix C) and the research was approved on October 2, 2017 (see Appendix D). After receiving approval from the Midwestern community college's RPPP to conduct the study, the process to obtain permission from

the Baker University IRB was initiated. An IRB request was submitted on October 2, 2017 (see Appendix E) and the research was approved October 11, 2017 (see Appendix F). After obtaining approval from the Midwestern Community College IRB and Baker University IRB committees, the faculty members in the criminal justice program at the large Midwestern community college were contacted via an email that included a brief explanation of the research (Appendix G) and consent forms (Appendix H). A follow-up contact was made to any potential participants who did not respond to the email 2 days after the initial email was sent to solicit participation.

To provide the potential participants an opportunity to review the emailed material, the researcher immediately contacted criminal justice faculty members who agreed to participate by telephone to clarify information about the study and to arrange a mutually-agreeable date and time for the interview. Finally, an email reminder about the date and time was sent to each participant by the researcher the day before each scheduled interview.

The researcher and participant met at the mutually arranged date and time for the interview. Prior to the collection of data, participants signed consent forms and were advised they had the ability to withdraw from the study at any time and that they had the option of not answering any questions found objectionable (see Appendix H). The consent form advised participants that an identification number known only to the researcher would be applied to each interview summary to protect confidentiality. The consent form also indicated that direct quotes from interviews might be used in the study summary, but none would be associated with any identifying information related to the

interviewee. The participant was advised that signing the consent form indicated approval for the interview be audio taped.

After receiving verbal and written permission, to enhance the flow of the dialogue, the researcher began with questions designed to build rapport with each participant. Suggestions to build rapport include initiating the interview with a topic peripheral to the study, but not directly related to the research questions, and the use of scripted questions designed to collect information about the participants' attitudes, beliefs and feelings concerning the phenomenon being studied (Vogt et al., (2012).

Bachman and Schutt (2017) encouraged the researcher to treat the participants "with respect, as knowledgeable partners, whose time is valued" (p. 274).

Each interview lasted approximately sixty minutes and during the interview, the researcher took notes of the participant's responses as well as any contextual information relevant to the interview. The researcher created an audio recording of each interview.

During the interview, the researcher used the demographic inquiry protocol (Appendix A) with each participant to guide the discussion. The demographic inquiry questions focused on the number of years interviewees had worked at the large Midwestern community college and their work experience in the criminal justice field. The interview protocol (Appendix B) was based on structured questions designed to align with the research questions. During the interview, the researcher listened carefully and recorded the participants' responses, noting any unusual occurrences. Any responses which were unclear were followed with clarifying questions. In addition to this process, consistency was achieved as the interviews were all conducted within a five-day period. After the interviews had been completed, the audio tape of each interview was

transcribed by the researcher and an identification code was assigned to each participant. Notes taken during the interview were used to assist the researcher in remembering important contextual information that occurred during each interview.

To document the research process, an audit trail was created using the procedure recommended by Gall, Gall, and Borg (2005). The audit trail contained the sources and methods used to collect the raw data, interviewer's notes, information about development of the instruments used to collect the data, and the process used to analyze the data. In addition to the audit trail, member checking was also used to verify accuracy of the transcripts. The participant's transcribed comments were returned to each participant to confirm accuracy of the transcription. All artifacts of the interview were collected and stored in a locked file cabinet located in the research's private office for five years.

### **Analysis and Synthesis of Data**

The purpose of data analysis involves "segmenting and taking apart the data (like peeling back the layers of an onion) as well as putting it back together" (Creswell, 2014, p. 195). A variety of techniques are used for analysis and synthesis of research data. Bachman and Schutt (2017) explained the core of data analysis is "conceptualization, coding, and categorizing" (p. 422). Gall et al., (2005) described interpretational analysis as a "systematic set of procedures to code and classify qualitative data to ensure that the important constructs, themes, and patterns emerge" (p. 315). Miller and Salkind (2002) recommended the use of procedural steps starting with identifying significant statements, followed by reducing the significant statements into meaning units or themes, analyzing the context in which the individuals experienced the meaning units or themes, and finally, writing a detailed analysis of the 'essence' of the experience for the participants.

Vargas (2015) described the data collection and analysis process to include: sorting participant's responses in a table database to highlight similarities or differences; analyses of the data through coding, which involves interpreting the data to identify themes and generate categories; and coding, which includes developing an explanatory schema through inductive analysis.

To analyze qualitative data, Chowdhury (2015), Stalp and Grant (2001), Stuckey (2015), and Thomas (2006) discussed the use of an inductive approach. In the present study, the researcher was guided by an inductive approach to create a strategy for data analysis. The process involved the following steps:

1. After transcribing the interviews and reading the transcriptions thoroughly, the researcher identified the objectives of the evaluation which provided a focus for the analysis. In the present study, the objectives were directly related to the purpose of the study: how did criminal justice faculty members teaching in a criminal justice program at a large Midwestern community college define, teach, and assess critical thinking? Stuckey (2015) referred to this process as creating a storyline.

2. The researcher categorized the data into codes. Stuckey (2015) explained the codes may be identified 'a priori' or emerge from the data. In the present study, the 'a priori codes' were "define", "teach", and "assess" critical thinking as derived from the research questions. In addition to these a priori codes, additional codes were emergent, meaning they were derived from the data and not predetermined. Another aspect of coding involved the use of the researcher's notes for clarification and interpretation. The use of the researcher's notes from each interview permitted the researcher to strengthen



the audit trail by documenting the purpose in developing and making decisions about the codes.

3. The researcher created categories from the coded data. Categories were labeled with a descriptive word or phrase which encapsulated the meaning of the category.

Categories were linked based on commonalities.

4. Themes emerged from the categories.

5. The themes were incorporated into a model or framework to provide context for the categories (Thomas, 2006). In the present study, the categories were identified based on an open model as there were no predetermined frameworks identified by the researcher.

### **Researcher's Role**

Robertson (1983) discussed bias as being inevitable, but manageable. "I do not think it is possible to eliminate bias completely from any piece of writing, but it is possible to compensate for that bias by recognizing it..." (p. 63). Miyazaki and Taylor (2008) also contended "interaction involves the possibility that data collected from study participants will be biased by the presence of the researcher(s) conducting the study" (p. 789).

Due to the nature of the professional relationship between the researcher and participants in the present study, this researcher was cognizant of the possibility of bias. The potential for bias could derive from a participant's eagerness to provide comments that reflected the perceived expectations of the researcher; or the potential for a vague antagonism on the part of the participants toward the researcher; or the tendency of the researcher to seek out responses that supported preconceived notions (Gall et al., 2005).

The researcher occupied dual roles in the present study - researcher and past department chair for the participants. Consequently, the researcher maintained an awareness of the potential bias and made a commitment to observing objectivity during the collection and analysis of the data to ensure the integrity of the study. However, as Petschler (2012) noted when she was in a similar situation,

This experience of looking at the same issues from my own different viewpoints-as a researcher and as a member of the school-led to a greater, more grounded understanding of the need to incorporate a breadth of perspectives within my writings. (p. 171).

### **Limitations**

Pollock (2012) asserted the ethical nature of qualitative research “can only be safeguarded through the practice of ‘micro-ethics’ based on the judgement and integrity of researchers in the field” (p. 13). Identifying limitations is a method for the researcher to consider potential ethical conflicts in a study. The present study may have been limited by the number of faculty members available in the criminal justice department at the community college where this study was conducted. The study may have been limited since all participants were from the same type of institution. Faculty from other types of institutions may define, teach, and assess critical thinking differently due to the culture of universities versus community colleges. The study may have also been limited by the participants’ willingness to accurately describe methods of defining, teaching, and assessing critical thinking.

**Summary**

This chapter summarized the research design, selection of participants, measurement, data collection procedures, analysis and synthesis of data, researcher's role, and limitation of the current study. Chapter 4 provides a summary of the data analyses.

## Chapter 4

### Results

This qualitative study was designed to explore how faculty members teaching in a criminal justice program at a large Midwestern community college defined critical thinking. Another purpose of the study was to determine how faculty members teaching in a criminal justice program at a large Midwestern community college taught critical thinking. A final purpose of this study was to examine how faculty members teaching in a criminal justice program at a large Midwestern community college assessed critical thinking.

The researcher interviewed six current faculty members of the criminal justice program at a large Midwestern community college. Each participant was assigned a discrete code which provided no identifiable information about the participant and was designed to preserve confidentiality and maintain anonymity of the participant. For example, ADMJ #4 indicated this participant was the 4<sup>th</sup> of six interviews, but offered no identifiable information about that participant. The following descriptors provide characteristics of the criminal justice faculty members represented in this study.

a. Years of experience as a criminal justice faculty member in the large Midwestern community college ranged from 4-15 years (51 years cumulatively).

b. Criminal justice experience: Each participant has worked or is working in one of the following areas of criminal justice: law enforcement (55 years cumulatively); corrections (60 years cumulatively); juvenile justice (8 years cumulatively); criminal law (28 years); and crime analyst (13 years).

c. Gender: Female participants comprised 60% of the study ( $n = 4$ ), while males comprised 40% of the study participants ( $n = 2$ ).

Qualitative data from the participants' responses to individual interviews using open-ended questions were analyzed to gain an understanding of:

1. how criminal justice faculty members from a large Midwestern community college defined critical thinking.
2. how criminal justice faculty members from a large Midwestern community college taught critical thinking.
3. how criminal justice faculty members from a large Midwestern community college assessed critical thinking.

There was no consensus among the participants concerning the definition of critical thinking. While the following responses did not fall within the identified themes, this researcher included representative data from the participants' definition of critical thinking to illustrate the variance among participants' responses. ADMJ #2 stated: "It's thinking outside the box. It's forcing someone to look at something differently than how they are comfortable looking at it." ADMJ #3 stated: "Critical thinking is the ability to reason, analyze, and assess information in an attempt to make things better." ADMJ #5 stated: "Take something basic and apply it to many different situations."

While there was no consensus about the manner in which the criminal justice faculty members defined, taught, or assessed critical thinking, three themes emerged which addressed the research questions for this study:

Theme 1. The manner in which criminal justice faculty members taught or assessed critical thinking was varied by two types of criminal justice courses being taught.

Theme 2. The manner in which critical thinking is addressed varied by instructor.

Theme 3. The use of the instructor's 'real-world' experience was an important component of addressing critical thinking in the classroom.

**Theme 1: The manner in which criminal justice faculty members taught or assessed critical thinking was varied by two types of criminal justice courses being taught.**

Theme 1 consistently emerged from the content of the six interviews (see Appendix I). Themes were determined after reading all interview transcripts multiple times and identifying commonalities. Appendix I color codes commonalities for each identified theme. The curriculum consists of two types of criminal justice courses: specialized and theoretical. Theoretical courses provide an overview of the topic, while specialized courses provide specific skills-training used by professionals in the field. Some faculty members teach both theoretical and specialized criminal justice courses, while others teach only specialized courses. Generally, faculty members who teach specialized courses tended to use specific tasks that simulate actions which would be found in the workplace to teach critical thinking. These activities may be instruction about how to search a room or how to handcuff a person. Theoretical courses typically involve more discussion to teach critical thinking. An example of a discussion in a theoretical course might involve distinguishing between types of crimes or criminals. In the examples below, ADMJ #5 described the process of 'hands-on' instruction for a specialized course. But, ADMJ #2 used videos in specialized and theoretical courses for

different purposes. In the Criminology course, the video was used to generate discussion by asking about all the theories which are illustrated in the video; in the second, the video was used to provide answers to specific course content.

When asked what assignments were used to teach critical thinking, a faculty member who teaches a specialized course, ADMJ #5, responded:

So, we do what I call 'lab work', where whatever activity that I'm teaching for that period of time, they'll do that and kind of show their skills in doing specific tests, or different processes and then taking that and applying it to a more all-encompassing crime scene scenario where they're either interacting, more of a role-player thing, or maybe there's just a lot of unanswered questions that they have to fill out as they're going and use that critical thinking to decide what path they're gonna take to process something. So, I do a lot of that, and then I have a couple or more written assignments to kind of show me their thought process on paper.

Another participant, ADMJ #2 (who teaches both specialized and theoretical courses), gave this response when asked what assignments were used to teach critical thinking:

Netflix has become huge for me. I'll use the example from Criminology, "The Killer Speaks", and I ask them to watch the shows, watch the interviews with this killer and then they have to break it down according to the different theories in criminology.

And I'm getting ready to figure out how to use one on 5th Amendment for Criminal Procedure. A different show, where it's all practical, it's all this

person just talking about their background and what they did, and I'm asking them to dissect that interview according to the different points that I want them to hit.

The interview questions did not evoke a consistent response from all participants due to the number of participants involved in the study, but 3 of the 5 participants who taught both specialized and theoretical courses conveyed they taught specialized courses differently than theoretical courses.

**Theme 2: The manner in which critical thinking is addressed varied by instructor.**

Faculty members held different views about the role of critical thinking in their classroom. Viewpoints ranged from critical thinking being important to unnecessary as it occurs naturally throughout the educational process. For example, ADMJ #3 felt critical thinking was important enough to integrate it into the course using a variety of assignments:

I use discussion questions and then general class discussion; and then my research papers, I'll have a critical thinking theme to them. They research, so as an example, the Ethics class that I get to teach this semester, their research paper is on an ethical dilemma. They have to find one, and then they have to research sides of it and present their outcome, which is the critical thinking part. So, the outcome has to be: "OK. This is going on, what is the best way to handle this?"

Other faculty felt critical thinking should be organically-introduced into the course content. ADMJ #6 shared:



It is something we try to capture as part of the learning process, but I don't believe I ever had a discussion about "we're gonna look at critical thinking," or "here's the components," or different things. I think it's just kind of a given and then we kind of talk about the nature of the particular assignments or aspect of the system and related to the classes.

**Theme 3: The use of the instructor's 'real-world' experience was an important component of addressing critical thinking in the classroom.**

All the criminal justice faculty members in the present study have been or are currently working as a criminal justice professional. A common theme among the responses was that each faculty member integrates examples of their 'real-world' experience to share the importance of critical thinking with students. There were a variety of opinions about the advantages critical thinking skills afforded students based on the faculty member's experience working in criminal justice. ADMJ #6 shared this example of coursework based on experience in criminal justice:

I have some movies that I use that I think help broaden perspective, you know, they show different aspects of the system, and people who are victims or victimized, or offenders who have been in all those roles, and they, hopefully by broadening their view, and then asking to discuss it, and so they are able to say what they've learned, what surprised them. I can use some current news articles, that are relevant to the work, you know, real work, rather than this textbook stuff.

Another example of faculty members incorporating situations encountered in the 'real-world' to class room experiences came from ADMJ #1:

I show them scenarios, and I just literally pull up, you know, a police officer making an arrest. I did a high-speed chase once, I used that in Report Writing; I just had them watch it and I would go ‘Tell me exactly what happened, you need to write it down, cause you’re gonna need to write a report.’ And they’d go ‘Can we see it again? No.’ Because you can’t rerun it when you’re out in the community. And a lot of them would go ‘Oh my God, this is so hard’. And I said ‘yeah, because you need to pay attention’.

### **Summary**

This study was designed to determine how criminal justice faculty members define, teach, and assess critical thinking. The data provided by the participants were analyzed to determine themes that helped explain how criminal justice faculty members in a large Midwestern community college define, teach, and assess critical thinking. The manner in which critical thinking is addressed varied by instructor. There was no consistency in how criminal justice faculty members in a large Midwestern community college defined, taught, or assessed critical thinking. However, three themes emerged from the data analysis: 1) the manner in which criminal justice faculty members taught or assessed critical thinking varied by two types of criminal justice courses being taught; 2) the manner in which critical thinking is addressed varied by instructor; and 3) the use of the instructor’s ‘real-world’ experience was an important component of addressing critical thinking in the classroom. Chapter 5 provides an interpretation of the data results and a discussion of implications for action, and recommendations for future research.

## Chapter 5

### Interpretation and Recommendations

The purpose of this qualitative study was to explore how faculty members teaching in a criminal justice program at a large Midwestern community college defined critical thinking. A second purpose of this study was to determine how faculty members teaching in a criminal justice program at a large Midwestern community college taught critical thinking. A third purpose was to explore how faculty members teaching in a criminal justice program at a large Midwestern community college assessed critical thinking. Chapter 5 provides a study summary, including a review of the problem statement, the purpose of the study, research questions, methodology, and major findings. This chapter also relates the findings of the study to current literature and concludes with a discussion of implications for action, recommendations for future research, and concluding remarks.

#### Study Summary

**Overview of the Problem.** This study was designed to explore how faculty members teaching in a criminal justice program at a large Midwestern community college defined, taught, and assessed critical thinking. An overview of the problem, purpose statement and research questions, review of the methodology, and major findings are summarized in this section.

Research has highlighted the importance of critical thinking for first responders including law enforcement officers and emergency medical technicians (Feemster, 2010; Philips & Burrell, 2009). As criminal justice professionals regularly experience novel situations, the ability to think critically and to react proactively is vital. Learning to act

proactively requires a paradigm shift from a focus on training individuals to respond to singular crimes, to training the criminal justice professional to protect the country from potential threats (Broadhurst, 2006). This will require educating future criminal justice professionals to change the focus from preparing to react to individual circumstances to preparing students to think more globally. The ability to act proactively must be nurtured in the classroom through acquiring the ability to think critically (Broadhurst, 2006).

Critical thinking is considered to be a valuable skill in higher education for students in general (Bok, 2006; Halpern, 1993; Halpern, 1998). Individuals with a degree in higher education are expected to have the ability to analyze context (Battersby & Bailin, 2011), accurately assess problems, be proficient in problem-solving (Courtright, Mackey, & Packard, 2005), possess the ability to think critically (Alwehaibi, 2012; Holt, Young, Keetch, Larsen, & Moller, 2015), and engage in critical analytical thinking (Alexander, 2014). Tsui (2001) noted that teachers from two and four-year colleges identified one of their primary roles as educators was to “help students develop higher-order thinking skills” (p. 18).

Although higher education acknowledges a need to foster students with good critical thinking skills, there is also a realization this does not occur on a consistent basis (Ab Kadir, 2017; Flores et al., 2012). Student learning, a product of classroom instruction, is influenced by the educator’s intent, which is directly related to the instructor’s sense of self-efficacy (Ab Kadir, 2017). When educators are confident in their teaching abilities, they take actions to achieve the targeted outcomes (Ab Kadir, 2017). Sims (2006) noted that a student-centered learning environment which utilizes

critical thinking is especially relevant for criminal justice students who routinely focus on sensitive topics such as gun control and individuals' constitutional rights.

While defining and teaching critical thinking are important, educators also have a role in assessing students' ability to think critically. Standardized assessment instruments augment educator's efforts to assess students' ability to think critically (Landis, Swain, Friche, & Coufal, 2007). Butler (2012) addressed the question of whether critical thinking assessment instruments such as The Halpern Critical Thinking Assessment (HTCA) have the ability to predict graduates' ability to successfully enter the workforce after graduation. He noted individuals who can think critically have the ability to make good decisions about a wide range of life events.

The criminal justice program in this study is involved in a program-wide outcome assessment of critical thinking which involves tailoring an assignment for each course, whether required or elective, to measure the students' ability to think critically. Currently, no studies exist to determine how faculty members in the criminal justice program at a large Midwestern community college define, teach, or assess critical thinking.

**Purpose Statement and Research Questions.** This qualitative study was designed to explore how criminal justice faculty members in a community college defined critical thinking. The researcher also sought to understand how criminal justice faculty members in a community college taught critical thinking. Finally, the researcher evaluated how criminal justice faculty members in a community college assessed critical thinking. Three research questions guided this study:

**RQ1:** How do criminal justice faculty members at a community college define critical thinking?

**RQ2:** How do criminal justice faculty members at a community college teach critical thinking?

**RQ3:** How do criminal justice faculty members at a community college assess critical thinking?

**Review of the Methodology.** Upon receipt of the Midwestern community college Research Participant Protection Program approval form on October 2, 2017 and Baker's approved IRB form on October 11, 2017, the researcher emailed faculty members in the criminal justice program at the large Midwestern community college an explanation of the research and a letter of invitation to participate in the study (Appendix G). A follow-up contact was made to any potential participants who did not respond to the email 2 days after the initial email request was sent to solicit participation. The researcher immediately contacted criminal justice faculty members who agreed to participate by telephone to arrange a mutually-agreeable date and time for the interview. Each participant completed consent forms (Appendix H) prior to the interview which lasted approximately sixty minutes. The interview was recorded and included a combination of demographic and open-ended questions related to defining, teaching, and assessing critical thinking. After each interview was completed, it was transcribed by a professional transcriber. Interviewees were provided an opportunity to review their transcript and provide corrections. Themes related to the research questions emerged from the transcribed interview data through the following process: the researcher

organized the data into codes: “define”, “teach”, and “assess” and then created categories from the coded data. Three themes emerged from the categories.

**Major Findings.** Analysis of data collected from the interviews identified three emerging themes: (a) The manner in which criminal justice faculty members defined, taught, or assessed critical thinking was related to the type of criminal justice course; (b) The manner in which critical thinking is addressed varied by instructor; and (c) The use of the instructor’s ‘real-world’ experience was an important component of addressing critical thinking in the classroom.

### **Findings Related to the Literature.**

A review of the literature was conducted to examine the way critical thinking is defined, taught, and assessed. Available literature regarding community college and critical thinking was reviewed and the relationship between critical thinking and criminal justice programs of study was examined. The next section summarizes how findings from the current study relate to the literature on defining critical thinking, teaching critical thinking, and assessing critical thinking. Literature related to each of the three themes is also summarized.

**Defining critical thinking.** The literature suggested critical thinking is important in higher education, but difficult to define. Bailin, Coombs, and Daniels (1999) stated definitions of critical thinking are vague and confusing and use terminology inconsistently. Ab Kadir (2017) noted these imprecise definitions of critical thinking contributes to the problem. The findings of this study concurred that the definition of critical thinking is not consistent. Each participant had a personal way of defining it (e.g., Bailin et al., 1999). Jafarigohar et al. (2006) noted that different elements of critical

thinking have been offered as a comprehensive definition. However, in the current study, only singular attributes of critical thinking such as inference (ADMJ #1) and evaluation (ADMJ #2) were used as comprehensive definitions of critical thinking. Participants offered singular elements of critical thinking as a comprehensive definition but no consistent definition emerged from the data.

**Teaching critical thinking.** A review of the literature revealed critical thinking began with Socrates (Gellin, 2003) and continues to be inextricably linked to educational pedagogy (Oyler & Romanelli, 2014; Ryan, Shuai, Ye, Ran & Haomes, 2013). Dewey (1909) was instrumental in integrating critical thinking into the curriculum by asserting critical thinking should be a central aim of higher education (Gellin, 2003). Lipman (1988) suggested that if we are to provide our students the best pedagogy available for the task, it is incumbent upon educators to become more knowledgeable about the preferred strategies to teach critical thinking. Critical thinking skills are essential in higher education courses as they allow individuals to gain a deeper understanding of the content (Dwyer, Hogan & Stewart, 2014).

Researchers have identified teaching strategies to improve critical thinking which include active student-centered learning techniques including collaborative learning (Birzer, 2004), problem-based learning (McCoy, 2006), ill-defined problems (Bers, 2005), and experiential learning (Pithers, 2000). The current study did not support these findings. There was no consensus among participants' responses regarding specific strategies to teach critical thinking in criminal justice courses.

**Assessing critical thinking.** In addition to commercial standardized assessment instruments such as the California Critical Thinking Skills Test (Facione, 1990) and the



Watson-Glaser Critical Thinking Appraisal (Watson, 1980), a variety of outcome evaluation techniques have been identified as useful to accurately assess the development of students' critical thinking skills. These include formal evaluation programs (Halpern, 1993), student self-report (Halpern, 1993), cognitive growth and development (Hanrahan & Isaacs, 2001), and expert-like mental representations (Halpern, 1993). The question of whether assessments should be subject-specific or a general measure of critical thinking was addressed by Renaud and Murray (2008). They speculated gains in critical thinking skills may be better detected with assessments which focus on specific course content, not general information, as instructors tend to focus on subject-specific context during instruction. The current study did not support these findings. There was no consensus among the participants' responses regarding how critical thinking was assessed in criminal justice courses.

While the research questions were not fully addressed by the data, three themes emerged from an analysis of the data: (a) the manner in which criminal justice faculty members taught or assessed critical thinking was varied by two types of criminal justice courses being taught, (b) the manner in which critical thinking is addressed varied by instructor, and (c) the use of the instructor's 'real-world' experience was an important component of addressing critical thinking in the classroom.

**Theme 1: The manner in which criminal justice faculty members taught or assessed critical thinking was varied by two types of criminal justice courses being taught.**

Theme 1 consistently emerged from the six interviews (see Appendix I). The criminal justice curriculum described in the present study consisted of two types of

criminal justice courses: theoretical and specialized. Theoretical courses provided an overview of the topic, while specialized courses provided specific skills-training used by professionals in the field. Some faculty members taught both theoretical and specialized criminal justice courses, while others taught only specialized courses. Faculty members who taught theoretical courses typically used discussion to teach critical thinking. Faculty members who taught specialized courses tended to use specific tasks to simulate actions which would be found in the workplace to teach critical thinking.

Criminal justice faculty members who incorporate appropriate teaching and assessing techniques into their courses improve their students' ability to think critically (Broadhurst, 2006, Phillips & Burrell, 2009). Typical curricula measure the students' ability to think critically and measure a student's progress in mastering specific discipline-specific content such as specialized courses (Lim, 2011; Nutefall & Ryder, 2010). However, not all research supported the idea that teaching and assessing critical thinking is appropriate for both theoretical and specialized courses (Halliday, 2000; Rubin, 2013).

The interview questions did not evoke a consistent response from all participants due to the number of participants involved in the study. However, a majority of the participants who taught both theoretical and specialized courses did convey they taught theoretical courses differently than specialized courses.

**Theme 2: The manner in which critical thinking is addressed varied by instructor.**

Faculty members held different views about the role of critical thinking in their classroom. Viewpoints ranged from critical thinking is important to

unnecessary as it occurs naturally through the educational process (see Appendix I). One participant felt critical thinking was important enough to integrate it into the course using a variety of assignments. Other participants believed critical thinking is embedded in the learning process and occurs naturally.

When faculty members incorporate student-centered learning environments into their courses, it improves the students' ability to think critically (Sims, 2006). de Zafra (1957) recognized critical thinking occurs at different levels and the ability to think critically is not acquired in the same manner for each individual. In the current study, faculty assigned different levels of importance to instructing and assessing student's critical thinking abilities and that is not atypical. In 1990, The American Philosophical Association (APA) recognized the varied perceptions of the importance of critical thinking when the consensus definition, which included elements of teaching and assessing critical thinking, was designed (APA, 1990). The interview questions in this study did not evoke a consensus from all participants. Participants held different views about incorporating critical thinking into their courses ranging from viewing critical thinking as being very important, to a belief that critical thinking occurs naturally in the course.

**Theme 3: The use of the instructor's 'real-world' experience was an important component of addressing critical thinking in the classroom.**

All the criminal justice faculty members in the present study have been or are currently working as a criminal justice professional. Therefore, all faculty members had the ability to connect professional experiences with teaching and assessing techniques as

illustrated in Chapter 4 (see Appendix I). Faculty members are skilled at selecting teaching and assessing strategies to illustrate the point necessary to make the connection between the class activity and education goal – teaching or assessing. The instructor’s ability to make decisions, de-escalate situations, and solve problems is related to the criminal justice professional’s experience (Sereni-Massinger, 2016). Consequently, their experience makes them successful at teaching and assessing the skills necessary to acquire the ability to think critically. Faculty members’ experience with real-world situations increases their sense of self-efficacy and improves their ability to teach and assess the critical thinking (Ab Kadir, 2017).

A common theme among interviewee responses in this study was that faculty members integrated examples of their ‘real-world’ experience to share the importance of critical thinking with students. There were a variety of opinions about the advantages critical thinking skills afforded students based on the faculty member’s experience working in criminal justice. Techniques used by participants to reinforce the value of incorporating real-world experience into the classroom included the use of videos to help broaden the student’s perspective and illustrate the importance of observation. One participant described showing a video of a crime and asked the students to write a report after viewing the video. When the students asked to see the video again before writing the report, the participant was able to convey the lesson that a missed opportunity is a lost opportunity when you are out in the field. Other faculty members combined the use of news articles and scenarios with examples from faculty members’ real world experiences to illustrate the importance of critical thinking in criminal justice courses.

## Conclusions

Findings from the current study represented how criminal justice faculty members at a large Midwestern community college defined, taught, and assessed critical thinking. While the research questions were not fully addressed by the data, three major themes were identified through interviews with criminal justice faculty members. The data suggested the manner in which criminal justice faculty members taught or assessed critical thinking was varied by two types of criminal justice courses being taught – theoretical or specialized. The data also suggested criminal justice faculty members placed a diversified emphasis on incorporating critical thinking into their courses. Some faculty members were purposeful in including critical thinking in courses, while others believed critical thinking occurred naturally. Finally, the data suggested criminal justice faculty members used their ‘real-world’ experience to emphasize critical thinking in criminal justice courses.

**Implications for action.** The current study presents implications for students, faculty members, and criminal justice agencies as no studies currently exist to determine how faculty in a criminal justice program at a community college define, teach, and assess critical thinking. The current study provides guidance for criminal justice programs in higher education institutions to create or enhance implementation of critical thinking into the curriculum. It may be useful to utilize the themes identified in this study as a guide to encourage faculty discussion related to how critical thinking is defined, taught, and assessed in a criminal justice curriculum. An increasing number of high schools offer Public Safety programs. Faculty members in these programs could benefit from the information provided in this study as a way to integrate critical thinking into the

curriculum. Finally, the results from the current study could be shared with professional organizations such as the National Academy of Criminal Justice Sciences, that provide training and education for higher education faculty who teach in criminal justice programs.

**Recommendations for future research.** The current study's findings present opportunities for future research. The present study was limited by the number of participants. Future studies should include a larger number of subjects. Extending the scope of research to include related disciplines such as psychology and sociology could also enhance the understanding of how critical thinking is defined, taught, and assessed in the community college setting. This study focused on one academic major in a community college setting. Conducting similar studies in public and private undergraduate institutions could also broaden understanding about how critical thinking is addressed in higher education.

While the current study did not focus on the characteristics of student generations, especially millennials, Werth and Werth (2011) suggested there may be implications for teaching critical thinking for this population. This topic of matching preferred pedagogy to characteristics of student generations is rich for future research.

**Concluding remarks.** The use of critical thinking is important for higher education and critical for criminal justice professionals. The present study identified three themes from the data: (a) the manner in which criminal justice faculty members taught or assessed critical thinking was varied by two types of criminal justice courses being taught – theoretical or specialized; (b) the manner in which critical thinking is

addressed varied by instructor; and (c) the use of the instructor's 'real-world' experience was an important component of addressing critical thinking in the classroom.

## References

- Ab Kadir, M. A. (2017). What teacher knowledge matters in effectively developing critical thinkers in the 21<sup>st</sup> century curriculum? *Thinking Skills and Creativity*, 23, 79-90.
- Alexander, P. A. (2014). Thinking critically and analytically about critical-analytic thinking: An introduction. *Educational Psychological Review*, 26, 469-476.
- Alwehaibi, H. U. (2012). Novel program to promote critical thinking among higher education students: Empirical study from Saudi Arabia. *Asian Social Science*, 8(11), 193-204. doi: 10.5539/ass.v8n11p193
- American Philosophical Association (1990). Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction.
- Arum, R., & Roksa, J. (2011). *Academically adrift: Limited learning on college campuses*. Chicago, IL: University of Chicago Press.
- Bachman, R. D., & Schutt, R. K. (2017). *The practice of research in criminology and criminal justice* (6<sup>th</sup> ed.). Los Angeles, CA: Sage.
- Bailin, S., Case, R., Coombs, J. R., & Daniels, L. B. (1999). Common misconceptions of critical thinking. *Journal of Curriculum Studies*, 31(3), 269-283.
- Baker, T. E. (2009). Police criminalistics: Learning modalities and evaluation. *The Forensic Examiner*, 18(3), 52-57.
- Battersby, M., & Bailin S. (2011). Critical inquiry: Considering the context. *Argumentation*, 25, 243-253. doi:10.1007/s105003-011-9205-z



- Behar-Horenstein, L. S., & Niu, L. (2011). Teaching critical thinking skills in higher education: A review of the literature. *Journal of College Teaching and Learning*, 8(2), (February 2011), 25-41.
- Beistly, K. S., & Palmer, L. B. (2014). Exploration of critical thinking in dental hygiene education. *Journal of Dental Hygiene: JDH/American Dental Hygienists' Association*, 88(6), (December 2014), 394-402.
- Berrett, D. (2016). The next great hope for measuring learning. Retrieved from The Chronical of Higher Education website: <http://www.chronical.com/article/The-Next-Great-Hope-for/238075>
- Bers, T. (2005). Assessing critical thinking in community colleges. *New Directions for Community Colleges*, 2005(130), 15-25. doi:10.1002/cc.192
- Birzer, M. L. (1999). Police training in the 21<sup>st</sup> century. *FBI Law Enforcement Bulletin*, 68(7), 16-19.
- Birzer, M. L. (2003). The theory of andragogy applied to police training. *Policing: An International Journal of Police Strategies & Management*, 26(1), 29-42.
- Birzer, M. L. (2004). Andragogy: Student centered classrooms in criminal justice programs. *Journal of Criminal Justice Education*, 15(2), 393-411.
- Birzer, M. L. & Palmiotto, M. J. (2002). Criminal justice education: Where have we been? and where are we heading? *The Justice Professional*, 15(3), 203-211.
- Black, S. M., & Ellis, R. B. (2010). Evaluating the level of critical thinking in introductory investment courses. *Academy of Educational Leadership Journal*, 14(4), 99-106.

- Boghossian, P. (2006). Socratic pedagogy, critical thinking, and inmate education. *Journal of Correctional Education*, 57 (1), 42-63.
- Bok, D. (2006). *Our underachieving colleges*. Princeton, NJ: Princeton University Press.
- Bridges-Rhoads, S., & Van Cleave, J. (2016). # The standards: Knowledge, freedom, and the common core. *Language Arts*, 93(4), 260-272.
- Broadhurst, R. (2006). Developments in the global law enforcement of cyber-crime. *Policing: An International Journal of Policy Strategies & Management* 29(3), 408-433. doi:10.1108/13639510610684674
- Brookfield, S. D. (1987). *Developing critical thinkers*. San Francisco, CA: Jossey-Bass.
- Brown, N. J., Afflerbach, P. P., & Croninger, R. G. (2014). Assessment of critical-analytic thinking. *Educational Psychology Review*, 26, 543-560. doi:10.1007/s10648-014-9280-4
- Bufkin, J. (2004). Criminology/criminal justice master's programs in the United States: Searching for commonalities. *Journal of Criminal Justice Education*, 15(2), 239-262.
- Burbach, M. E., Matkin, G. S., & Fritz, S. M. (2004). Teaching critical thinking in an introductory leadership course utilizing active learning strategies: A confirmatory study. *College Student Journal*, 38(3), 482
- Butler, H. A. (2012). Halpern critical thinking assessment predicts real-world outcomes of critical thinking. *Applied Cognitive Psychology*, 26, 721-729. doi:10.1002/acp.2851

- Calderone, S. M. (2005). Critical thinking sources and information for community college educators. *New Directions for Community Colleges, 2005*(130), 97-106. doi:10.1002/cc.200
- Carlan, P. E. (2006). The criminal justice degree and policing: Conceptual development or occupational primer? *Policing: An International Journal of Police Strategies & Management, 30*(4), 608-619. doi:10.1108/13639510710833893
- Cavdar, G., & Doe, S. (2012). Learning through writing: Teaching critical thinking skills in writing assignments. *PS: Political Science and Politics, 45*(2), (April 2012), 298-306. doi:10.1017/S1049096511002137
- Cetin, F. (2013). Effect of democratic classroom management approach towards critical thinking levels of students. *International Journal of Academic Research, 5*(5), 180-183.
- Chabrank, N., & Craig, R. (2013). Student imaginings, cognitive dissonance, and critical thinking. *Critical Perspectives on Accounting, 24*, 91-104.
- Chowdhury, M. F. (2015). Coding, sorting and sifting qualitative data analysis: Debates and discussion. *Quality & Quantity, 49*(3), 1135-1143. doi:10.1007/s11135-014-0039-2
- Clark, J. (2006). Perspectives of enhanced thinking skills in prisons in the United Kingdom: A qualitative case study. *The British Journal, 8*(1), 12-23.
- Clear, T. R. (2001). Has academic criminal justice come of age? *Justice Quarterly, 18*(4), 709-726. Retrieved from <https://search-proquest-com.exprozy.jccc.edu/docview/228160726?accountid=2200>

- Courtright, K. E., Mackey, D. A., & Packard, S. H. (2005). Empathy among college students and criminal justice majors: Identifying predispositional traits and the role of education. *Journal of Criminal Justice Education, 16*(1), 125-144.  
doi:10.1080/1051125042000333514
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Daud, N. M., & Husin, Z. (2004). Developing critical thinking skills in computer-aided extended reading classes. *British Journal of Educational Technology, 35*(4), 477-487. doi:10.1111j.0007-1013.2004.00405x
- Dewey, J. (1909). *How We Think*. New York, NY: Loki's Publishing.
- de Zafra, C., (1957). Teaching for critical thinking. *The Clearing House, 31*(8), (April 1957), 453-456. Retrieved July 10, 2017, from  
<http://www.joster.org/stable/30187554>
- DeSimone, F., & Buzzza, J. (2013). Qualitative pedagogical finding to improve critical thinking skills. *American Journal of Business Education, 6*(6), 631-639.
- Divsar, H. & Jafarigohar, D. (2016). Critical thinking: A review of the approaches and models. *Modern Journal of Language Teaching Methods, 6*(7), 51-63.
- Dwyer, C. P., Hogan, M. J., & Stewart, I. (2014). An integrated critical thinking framework for the 21<sup>st</sup> century. *Thinking Skills and Creativity, 12*, 43-52.
- Emir, S. (2013). Contributions of teacher's thinking styles to critical thinking dispositions (Istanbul-Fatih Sample). *Educational Sciences: Theory & Practice, 13*(1), 337-347.

- Emmel, N. (2013). *Sampling and choosing cases in qualitative research: A realistic approach (1<sup>st</sup> ed.)*. GB: Sage Publications Ltd.
- Ennis, R. H. (1993). Critical thinking assessment. *Theory into Practice*, 32(3), Summer, 179-186.
- Ennis, R. H. (2016). Critical thinking across the curriculum: A vision. *Springer Science*.  
Online publication. doi:10.1007/s11245-016-9401-4
- Ennis, R. H., Millman, J. & Tomko, T. N. (2005). Cornell critical thinking test:  
Administration manual. California: Critical Thinking Company
- Facione, N. C., & Facione, P. A. (1996). Externalizing the critical thinking in knowledge development and clinical judgement. *Nursing Outlook*, 44(3), 129-136.
- Facione, P. A. (1990). Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction. *American Philosophical Association, ERIC Doc. No. ED 315-423*.
- Facione, P. A., & Facione, N. C. (2007). Talking critical thinking. *Change*, 39(2), (March/April), 39-44.
- Facione, P. A., Sanchez, C. A., Facione, N. C., & Gainen, J. (1995). The disposition toward critical thinking. *The Journal of General Education*, 44(1), 1-25
- Feemster, S. L. (2010). Addressing the urgent need for multi-dimensional training in law enforcement. *Forensic Examiner*, 19(3), (Fall 2010), 44-49.
- Feteris, E. T. (2008). Strategic maneuvering with the intention of the legislator in the justification of judicial decisions. *Argumentation*, 22, 335-353.  
doi:10.1007/s10503-008-9100-4

- Finckenaue, J. O. (2005). The quest for quality in criminal justice education. *Justice Quarterly*, 22(4), 413-426.
- Flores, K. L., Matkin, G. S., Burbach, M. E., Quinn, C. E., & Harding, H. (2012). Deficient critical thinking skills among college graduates: Implications for leadership. *Educational Philosophy and Theory*, 44(2), 212-230.  
doi:10.1111/j.1469-5812.2010.00672.xHi
- Fong, C. J., Kim, Y. Davis, C. W., Hoang, T. & Won Kim, Y. (2017). A meta-analysis on critical thinking and community college student achievement. *Thinking Skills and Creativity*, 26, 71-83.
- Gall, J. P., Gall, M. D., & Borg, W. R. (2005). *Applying educational research: A practical guide* (5<sup>th</sup> ed.). New York, New York: Pearson.
- Gellin, A. (2003). The effect of undergraduate student involvement on critical thinking: A meta-analysis of the literature. *Journal of College Student Development*, 44(6), 746-762.
- Geronazzo-Alman, L., Eisenberg, R., Shen, S., Duarte, C. S., Musa, G. J., Wicks, J., ... Hoven, C. W. (2017). Cumulative exposure to work-related traumatic events and current post-traumatic stress disorder in New York City's first responders. *Comprehensive Psychiatry* 74, 134-143.
- Gervey, R., Drout, M. O., & Wang, C.C. (2009). Debate in the classroom: An evaluation of critical thinking teaching technique within a rehabilitative counseling course. *Rehabilitation Education*, 23(1), 61-73.

- Giancarlo, C. A., & Facione, P. A. (2001). A look across four years at the disposition toward critical thinking among undergraduate students. *The Journal of General Education*, 50(1), 29-55.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), (December), 597-607.
- Guba, E. G. & Lincoln, Y. (1985). Fourth generation evaluation as an alternative. *Educational Horizons*, 63(4), 139-141.
- Gul, R., Cassum, S., Ahmad, A., Khan, S., Saeed, T., & Parpio, Y. (2010). Enhancement of critical thinking in curriculum design and delivery: A randomized controlled trial for educators. *Procedia Social and Behavioral Sciences*, 2, 3219-3225.  
doi:10.1016/j.sbspro.2010.03.491
- Hall, D. E., Ventura, L., & Lambert, E. G. (2007). Factors influencing higher education decisions of criminal justice professionals. *American Journal of Criminal Justice*, 32, 116-128. doi:10.1007/s12103-007-9003-1
- Halliday, J. (2000). Critical thinking and the academic vocational divide. *Curriculum Journal*, 11(2), 159-175. doi:10.1080/09585170050045182
- Halpern, D. F. (1993). Assessing the effectiveness of critical thinking instruction. *Journal of General Education*, 42(4), 238-254.
- Halpern, D. F. (1998). Teaching critical thinking for transfer across domains: Dispositions, skills, structure training, and metacognitive monitoring. *American Psychologist*, 53(4), 449-455. doi:10.1037/0003-066X.53.4.449

- Halx, M. D., & Reybold, L. E. (2005). A pedagogy of force: Faculty perspectives of critical thinking capacity in undergraduate students. *The Journal of General Education, 54*(4), 293-315.
- Handy, S. A., & Polimeni, R. S. (2015). Engaging student-use of active learning activities to enhance student learning in an introductory managerial accounting course. *Journal of Applied Research for Business Instruction, 13*(3), 1-9.
- Hanrahan, S. J. & Isaacs, G. (2001). Assessing self- and peer-assessment; The students' views. *Higher Education Research & Development, 20*(1), 53-70.
- Harris, C. M., & Zha, S. (2013). Concept mapping: A critical thinking technique. *Education, 134*(2), 207-211.
- Hill, C. E., & Williams (2012). The Sample. In C. Hill, (Ed.), *Consensual Qualitative Research, 71-79*.
- Holland, C. & Ulrich, D. (2016). Critical thinking cards: An innovative teaching to bridge classroom knowledge with clinical decision making. *Teaching and Learning in Nursing, 11*, 108-112.
- Hilton, M. (2015). Preparing students for life and work. *Issues in Science and Technology, 31*(4), (Summer 2015), 63-66.
- Holmes, N. G, Wieman, C. E., & Bonn, D. A. (2015). Teaching critical thinking. *Psychological and Cognitive Sciences, 112*(36), 11199-11204.
- Holt, E. A., Young, C., Keetch, J., Larsen, S., & Mollner, B. (2015). The greatest learning return on your pedagogical investment: Alignment, assessment or in-class instruction? *PLoS One 10*(9): e0137446. doi:10.1371/journal.pone.0137446



- Howard, L. W., Tang, T., L. & Austin, M. J. (2015). Teaching critical thinking skills: Ability, motivation, intervention, and the Pygmalion effect. *Journal of Business Ethics, 128*, 133-147. doi:10.1007/s10551-014-2084-0.
- Jafarigohar, M., Hemmati, F., Rouhi, A., & Divsar, H. (2016). Instructor's attitudes towards the reflection of critical thinking in course syllabi: Evidence from an expanding circle. *Theory and Practice in Language Studies, 6*(1), 59-67. doi:http://dx.doi.org/10.17507/tpls.0601.08
- Johnson, R. H., & Hamby, B. (2015). A meta-level approach to the problem of defining critical thinking. *Argumentation, 29*, 417-430. doi:10.1007/s10503-015-9356-4
- Kalelioglu, F., & Gulbahar, Y. (2014). The effect of instructional techniques on critical thinking and critical thinking dispositions in online discussion. *Educational Technology & Society, 17*(1), 248-258.
- Kember, D., & Leung, D. (2008). Establishing the validity and reliability of course evaluation questionnaires. *Assessment & Evaluation in Higher Education, 33*(4), (August), 341-353.
- Kincheloe, J. L., (2000). Making critical thinking critical. *Counterpoints, 110*, 23-40.
- Kinkade, P., Fuentes, A. I., & Leone, M. C. (2004). Criminal justice education in relation to law school expectation: A failure of confidence. *Journal of Criminal Justice Education, 15*(1), Spring, 33-44.
- Kuhn, D. & Dean, Jr., D. (2004). Metacognition: A bridge between cognitive psychology and educational practice. *Theory into Practice, 43*(4), 268-273.
- Kurfess, J. G. (1988). Critical thinking: Theory, research, practice, and possibilities. ERIC report No 2.

- Lai, E. R. (2011). Critical thinking: A literature review. *Pearson's Research Reports*, 6, 1-44.
- Landis, M., Swain, K. D., Friche, M. J., & Coufal, K. L. (2007). Evaluating critical thinking in class and online: Comparison of the Newman Method and the Facione Rubric. *Communication Disorders Quarterly*, 28(3), 135-143.
- Lederer, J. M. (2007). Disposition toward critical thinking among occupational therapy students. *The American Journal of Occupational Therapy* 61(5), 519-526.  
doi:10.5014/ajot.61.5.519
- Lewis, A., & Smith, D. (1993). Defining higher order thinking. *Theory into practice*, 32(3), (Summer), 131-137.
- Lewis, J. (2009). Redefining qualitative methods: Believability in the fifth moment. *International Journal of Qualitative Methods*, 8(2), 1-14.
- Lim, L. (2011). Beyond logic and argument analysis: Critical thinking, everyday problems and democratic deliberation in Cambridge International Examinations' Thinking Skills curriculum. *Journal of Curriculum Studies*, 43(6), 783-807.
- Lipman, M. (1988). Critical thinking- What can it be? *Educational Leadership*, 46(1), 38.  
Retrieved from <https://search-proquest-com.exproxy.jccc.edu/docview/224859179?accountid=2200>
- Liu, L. L., Frankel, L., & Roohr, K. C. (2014). *Assessing critical thinking in higher education: Current state and directions for next-generation assessment* (ETS RR-14-10). Retrieved from Wiley Online Library website:  
<http://onlinelibrary.wiley.com/doi/10.1002/ets2.12009/full>

- Lunenburg, F. C., & Irby, B. J. (2008). *Writing a successful thesis or dissertation: Tips and strategies for students in the social and behavioral sciences*. Thousand Oaks, CA: Corwin Press.
- Lunney, M., Frederickson, K., Spark, A., & McDuffie, G. (2008). Facilitating critical thinking through online courses. *Journal of Asynchronous Learning Networks*, 12, 85-97.
- Martin, V. S. (2011). Andragogy, organization, and implementation concerns for gaming as an instructional tool in the community college. *New Directions for Community Colleges*, 2011(154), 63-71. doi:10.1002/cc.447
- McClellan, S. E., & Gustafson, B. G. (2012). Communicating law enforcement professionalization: Social construction of standards. *Policing: An International Journal of Police Strategies & Management*, 35(1), 104-123.  
doi:10.1108/13639511211215478
- McCoy, M. R. (2006). Teaching style and the application of adult learning principles by police instructors. *Policing: An International Journal of Police Strategies & Management*, 29(1), 77-90.
- Metropolitan Community College. <https://mccckc.edu/institutional-research-assessment/docs/Critical%20Thinking%20Rubric.pdf>
- Midwestern Community College. (2017).  
<http://www.Midwesterncommunitycollege.edu/about/story/facts/chronology.html>
- Miller, D. C., & Salkind, N. J. (2002). *Handbook of Research Design & Social Measurement (6<sup>th</sup> ed.)*. Thousand Oaks, CA: Sage Publications.

- Miyazaki, A. D., & Taylor, K. A. (2008). Researcher interaction biases and business ethics research: Respondent reactions to researcher characteristics. *Journal of Business Ethics, 81*, 779-795. doi:10.1007/s10551-007-9547-5
- Morse, J., M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods 1*(2), Article 2. Retrieved September 4, 2017 from <http://ualberta.ca/~ijqm/>
- Mulnix, J. W. (2012). Thinking critically about critical thinking. *Educational Philosophy and Theory, 44*(5), 464-479. doi:10.1111/j1469-5812.2010.00673.x
- Nair, G. G., & Stamler, L. L. (2013). A conceptual framework for developing a critical thinking self-assessment scale. *Journal of Nursing Education, 52*(3), 131-138. doi:10.3928/01484834-2012021-01
- Noddings, N. (2004). War, critical thinking, and self-understanding. *The Phi Delta Kappan, 85*(7), 488-495.
- Nutefall, J., E., & Ryder, P. M. (2010). The serendipitous research process. *The Journal of Academic Librarianship, 36*(3), 228-234.
- Onwuegbuzie, A. J., & Leech, N. L. (2007). Validity and qualitative research: An oxymoron? *Quality & Quantity 41*, 233-249. doi:10.1007/s11135-006-9000-3
- Owen, G. T. (2014). Qualitative methods in higher education policy analysis: Using interviews and document analysis. *The Qualitative Report, 19*(52), 1-19.
- Oyler, D. R., & Romanilli, F. (2014). The fact of ignorance: Revisiting the socratic method as a tool for teaching critical thinking. *American Journal of Pharmaceutical Education, 78*(7), Article 144, 1-9.

- Paul, R. (1992). Critical thinking: What, why, and how. *New Directions for Community Colleges*, 77, Spring, 3-24.
- Paul, R. & Elder, L. (2007). Critical thinking: The art of Socratic questioning. *Journal of Developmental Education*, 31(1), Fall, 36-37.
- Peerbolte, S. L. (2013). Disaster management and the critical thinking skills of local emergency managers: Correlations with age, gender, education, and years in occupation. *Disasters* 37(1), 48-60. doi:10.1111/j.1467-7717.2012.01291
- Perakyla, A., & Ruusuvuori, J. (2013). Analyzing talk and text. In N. K. Denzin & Y. S. Lincoln (Eds), *Collecting and Interpreting Qualitative Materials*, (277-281). Portland, Oregon: Ringgold, Inc.
- Petschler, J. (2012). Priorities and flexibility, trust and transparency: Conducting educational research from inside the school. *Qualitative Research Journal*, 12(2), 165-172.
- Phillips, W. E., & Burrell, D. N. (2009). Decision-making skills that encompass a critical thinking orientation for law enforcement professionals. *International Journal of Police Science & Management*, 11(2), 141-149.
- Pickett, L., Riley, R. W., & Fraser, B. (2010). Creating and assessing positive classroom learning environments. *Childhood Education*, 86(5), 321-326.
- Pithers, R. T. (2000). Critical thinking in education: A review. *Educational Research*, 42(3), 237-249.
- Polk, O. E., & Armstrong, D. A. (2001). Higher education and law enforcement career paths: Is the road to success paved by a degree? *Journal of Criminal Justice Education*, 12(1), 77-99.

- Pollock, K. (2012). Procedure versus process: Ethical paradigms and the conduct of qualitative research. *BMC Medical Ethics*, 13(25), 1-12.
- Raible, J., & Irizarry, J. G., (2010). Redirecting the teacher's gaze: Teacher education, youth surveillance and the school-to-prison pipeline. *Teaching and Teacher Education*, 26, 1196-1203.
- Renaud, R. D., & Murray, H. G., (2008). A comparison of a subject-specific and a general measure of critical thinking. *Thinking Skills and Creativity*, 3, 85-93.
- Roberg, R. & Bonn, S. (2004). Higher education and policing: Where are we now? *Policing*, 27(4), 469-485.
- Robertson, C. (1983). The pursuit of life histories: The problem of bias. *Frontiers: A Journal of Women Studies* 7(2), 63-69. <http://www.jstor.org/stable/3346288>  
Accessed September 16, 2017. doi:10.2307/3346288
- Rowley, J. (2012). Conducting research interviews. *Management Research Review*, 35(3-4), 260-271.
- Rubin, C. M. (2017). Character qualities in a 21<sup>st</sup> century curriculum. *The Education Digest*, 82(5), 17-20.
- Ryan, E., Shuai, X., Ye, Y., Ran, Y. & Haome, L. (2013). When Socrates meets Confucius: Teaching creative and critical thinking across cultures through multilevel Socratic method. *Nebraska Law Review*, 92(2), 289-348.
- Saldivar, K. M. (2015). Team-based learning: A Model for democratic and culturally competent 21<sup>st</sup> century public administrators. *Journal of Public Affairs Education* 21(2), (Spring), 143-164

- Schaber, P. & Shanedling, J. (2012). Online course design for teaching critical thinking. *Journal of Allied Health, 41*(1), Spring, 9-14.
- Schanz, Y. Y. (2013). Perceptions of undergraduate students on criminology and criminal justice education in the United States: An empirical analysis. *International Journal of Criminal Justice Sciences, 8*(2), 105-119.
- Schept, J., Wall, T., & Brisman, A., (2015). Building, staffing, and insulating: An architecture of criminological complicity in the school-to-prison pipeline. *Social Justice, 41*(4), (Winter), 96-115.
- Sen, S., & Sen, S. (2015). Connective learning pedagogy enhances students' academic performances by infusing critical thinking and problem-solving skills. *European Scientific Journal, 11*(10), 1-8.
- Sereni-Massinger, C., Bawden, J., & Rowe, W. (2016). Policy point-counterpoint mandatory law enforcement to receive annual certification in cultural diversity through critical thinking. *International Social Science Review, 91*, (2).  
Retrieved from  
[http://link.galegroup.com.ezproxy.jccc.edu/apps/doc/A459294849/WHICH?u=jcl\\_jccc&xid=0a05f42d](http://link.galegroup.com.ezproxy.jccc.edu/apps/doc/A459294849/WHICH?u=jcl_jccc&xid=0a05f42d)
- Shapiro, J. P., & Stefkovich, J., A. (2011). *Ethical leadership and decision making in education* (3<sup>rd</sup> ed.). New York, NY: Taylor & Francis (Routledge).
- Shor, R. (1992). *Empowering education*. Chicago, IL: University of Chicago Press.
- Sims, B. (2006). Creating a teaching and learning environment in criminal justice courses that promote higher order thinking. *Journal of Criminal Justice Education, 17*(2), 336-357. doi:10.1080/105112505003361161

- Southerland, M.D., Merlo, A. V., Robinson, L., Benekos, P. J., & Albanese, J. S. (2007). Ensuring quality in criminal justice education: Academic standards and the reemergence of accreditation. *Journal of Criminal Justice Education, 18*(1), 87-105.
- Snyder, J. (2012). *Peer led team learning in introductory biology: Effects on critical thinking skills* (Doctoral dissertation). Retrieved from Science Teaching Dissertations. (Accession No. 22).
- Splan, R. K., Porr, C. A., & Broyles, T. W. (2011). Undergraduate research in agriculture: Constructivism and the scholarship of discovery. *Journal of Agricultural Education, 52*(4), (October).  
doi:<http://dx.doi.org/10.5032/jae.2011.04056>
- Staib, S. (2003). Teaching and measuring critical thinking. *Journal of Nursing Education, 42*(11), (November), 498-508.
- Stalp, M. C., & Grant, L. (2001). Teaching qualitative coding in undergraduate field method classes: An exercise based on personal ads. *Teaching Sociology, 29*(2), 209-218.
- Stuckey, H. (2015). The second step in data analysis: Coding qualitative research data. *Journal of Social Health and Diabetes, 3*(1), 7.
- Stupple, E. J.N., Maratos, F. A., Elander, J., Hunt, T. E., Cheung, K. Y.F, & Aubeeluck, A. V. (2017). *Thinking Skills and Creativity, 2391-100*.
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation, 27*, 237-246.



- Tsui, L. (2001). Faculty attitudes and the development of students' critical thinking. *The Journal of General Education*, 50(1), 1-28.
- Tsui, L. (2002). Fostering critical thinking through effective pedagogy. *The Journal of Higher Education*, 73(6), 740-763.
- University of Louisville (2017). Retrieved from <http://louisville.edu/ideastoaction.resources>.
- United States of America v City of Ferguson (2016). (E.D.Mo), 12(2), 1-133. Retrieved from: <https://www.justice.gov/opa/file/833431/download>
- Vargas, J. M. (2015). *The perceived impact of private scholarship programs in Kansas City Hispanic students: An examination of access and persistence of scholarship recipients*. Doctoral dissertation. Retrieved from [https://www.bakeru.edu/images/pdf/SOE/EdD\\_Theses/Vargas\\_Julia.pdf](https://www.bakeru.edu/images/pdf/SOE/EdD_Theses/Vargas_Julia.pdf)
- Vogt, W. P., Gardner, D. C., & Haeffele, L. M. (2012). When to use what research design. New York, NY: Guilford Press.
- Walsh, C. M., & Hardy, R. C. (1999). Dispositional differences in critical thinking related to gender and academic major. *Journal of Nursing Education*, 38(4), 149-155.
- Walters, J. (2016). Safety training: The case for a more logical practice. *Professional Safety* 61(11), 33-39. Retrieved from <https://search-proquest-com.ezproxy.jccc.edu/docview/18474072008?accountid=2200>.
- Watson, G. (1980). *Watson-Glaser critical thinking appraisal*. San Antonio, TX: Psychological Corporation.

- Werth, E. P. (2011). Scenario training in police academies: Developing students' higher-level thinking skills. *Police Practice and Research, 12*(4), (August), 325-340.
- Werth, E. P., & Werth, L. (2011). *Effective training for millennial students*. Los Angeles, CA: Sage Publications. doi:10.1177/104515951102200302
- Wihbey, J. (2017). Retrieved from Journalist 's Resource website:  
<https://journalistsresource.org/about>
- Wimpenny, P., & Gass, J. (2000). Interviewing in phenomenology and grounded theory: Is there a difference? *Journal of Advanced Nursing 31*(6), 1485-1492.

## Appendices

## **Appendix A: Demographic Inquiry**

Participants were asked the following demographic questions prior to the interview. The questions were designed to assist in analysis of the data.

1. How long have you been working as an educator in the criminal justice program at this

community college?

2. Do you have experience working in the field of criminal justice?

2(a). In what part of the criminal justice system do you have experience?

2(b). How long have you been or were you employed in this area of criminal justice?

**Appendix B: Interview Protocol**

Research Study: Community College Faculty Definition, Teaching, and  
Assessment of Students' Critical Thinking Skills

Time of Interview:

Date:

Location:

Interviewer:

Interviewee:

RQ1. How do criminal justice faculty members in a Midwestern community college define critical thinking?

*IQ1(a)*. Please discuss components necessary to describe critical thinking.

*IQ1(b)*. What should critical thinking look like in criminal justice classes at this college?

*IQ1(c)*. Is there anything else you think is important related to how critical thinking is defined in a community college criminal justice program?

RQ2. How do criminal justice faculty members in a community college teach critical thinking?

*IQ2(a)*. How do you explain critical thinking to your students?

*IQ2(b)*. What assignments have you used in your classes to teach or promote critical thinking?

*IQ2(c)*. What readings have you used in your classes to teach or promote critical thinking?

*IQ2(d)*. Have you used any activities inside the classroom to teach or promote critical thinking? If so, please describe the activity and identify the course(s).

*IQ2(e)*. Are there any activities you have used outside the classroom to engage students in critical thinking?

RQ3. How do criminal justice faculty members in a community college assess critical thinking?

*IQ3(a)*. Please describe how students demonstrate critical thinking skills in your classes.

*IQ3(b)*. Describe ways you assess critical thinking in the criminal justice classes you teach.

*IQ3(c)*. Should critical thinking be assessed in the same manner for all criminal justice courses? Please explain.



**Appendix C: Midwestern University IRB**



*Johnson County Community College  
Research Participant Protection Program  
Application for Exempt Research Involving Human Subjects*

**A. GENERAL INFORMATION**

1. Principal Investigator(s): Kay King
2. College/University: Johnson County Community College//Baker University
3. Department/Program: ADMJ//School of Education Graduate Studies HE
4. Campus Address: PA 136
5. Phone Number: x4704
6. E-mail Address: kking05@jccc.edu
7. Faculty Supervisor (if student project): NA
8. Title of Project: Community College Faculty Definition, Teaching, and Assessment of
9. Type of Project: Dissertation Research
  - Faculty/Staff Research
  - Student Research
  - Class Project (Please specify class)
  - Other (Please explain)
10. Expected Project Start Date: 10-05-17
11. Expected Project Completion Date: 11-01-17
12. Is this a funded project?  Yes  No
  - If yes, please specify:
  - Funding Source:
  - Duration of Funding:

**Appendix D: Midwestern University IRB Approval**



**Exemption Date: 10/02/2017**

**Kay King  
PA 136  
Ext. 4704**

**RE: Protocol # 170928 – Community College Faculty Definition, Teaching, and Assessment of Critical Thinking**

Dear Investigator:

Thank you for submitting your research protocol. Your study was reviewed through the RPPP's exempt review process and has been granted exemption under Category 1.

The RPPP does not grant approval for exempt studies but instead issues a determination that a study meets the criteria for exemption in at least one of the federal exempt categories. Please read and observe the guidelines below regarding continuation of your study:

1. Exempt research does not require continuing review from the RPPP. However, in order to keep our files current, we ask that you inform the RPPP chair if you plan to continue your study beyond October 2, 2018. *Unless you request an extension, your study will terminate on this date.* Please contact the RPPP chair if you have questions about this.
2. *Changes to your research design may result in re-classification of your study as non-exempt.* If you want to make *any change* to the study, you must obtain the RPPP's prior approval of the change, including alterations of selection and recruitment methods, changes to consent form, changes in research personnel, or changes in instruments used.
3. If a participant in your study is injured *in connection with their participation*, you must inform the RPPP immediately regarding this adverse event.

Please inform the RPPP when you complete your research. If the RPPP can be of assistance, do not hesitate to contact Eve Blobaum, RPPP Chair, at 913-469-8500 ext. 4965 or [eblobaum@jccc.edu](mailto:eblobaum@jccc.edu).

Best wishes for a successful study.

Thanks,

A handwritten signature in black ink that reads "Eve M. Blobaum".

Chair, Research Participant Protection Program  
Johnson County Community College  
Phone: 913-469-8500 ext. 4965  
Email: [eblobaum@jccc.edu](mailto:eblobaum@jccc.edu)

*The Research Participant Protection Program at Johnson County Community College (IRB # - IRB00006437) is registered with the U.S. Department of Health and Human Services, Office for Human Research Protections.*

**Appendix E: Baker University IRB**



### IRB Request

Date 10/10/17

IRB Protocol Number \_\_\_\_\_  
(IRB use only)

#### I. Research Investigator(s) (students must list faculty sponsor)

Department(s) GSOE

Name	Signature	
1. <u>Kay King</u>	<u>Kay King</u> <small>Digitally signed by Kay King Date: 2017.10.10 13:53:08 -0500'</small>	Principal Investigator
2. <u>Tes Mehring</u>	<u>Tes Mehring</u> <small>Digitally signed by Tes Mehring Date: 2017.10.09 09:23:25 -0500'</small>	<input checked="" type="checkbox"/> Check if faculty sponsor
3. <u>Li Chen-Bouck</u>	<u>Li Chen-Bouck</u> <small>Digitally signed by Li Chen-Bouck Date: 2017.10.10 14:00:31 -0500'</small>	<input type="checkbox"/> Check if faculty sponsor
4. _____	_____	<input type="checkbox"/> Check if faculty sponsor

Principal investigator contact information

Phone

816.309.4622

Note: When submitting your finalized, signed form to the IRB, please ensure that you cc all investigators and faculty sponsors using their official Baker University (or respective organization's) email addresses.

Email

kayeking@stu.bakeru.edu

Address

P.O. Box 1875

Lees Summit

Missouri 64063

Faculty sponsor contact information

Phone

Baker ext. 1236

Email

tmehring@bakeru.edu

Expected Category of Review:  Exempt  Expedited  Full  Renewal

#### II. Protocol Title

Community College Faculty Definition, Teaching, and Assessment of Students' Critical Thinking Skills

### III. Summary:

The following questions must be answered. Be specific about exactly what participants will experience and about the protections that have been included to safeguard participants from harm.

A. In a sentence or two, please describe the background and purpose of the research.

The purpose of this study is to explore how faculty members teaching in a criminal justice program at a community college define, teach, and assess student's critical thinking skills. The study will consist of individual interviews of faculty members teaching in a criminal justice program at a large Midwestern community college.

B. Briefly describe each condition, manipulation, or archival data set to be included within the study.

There are no conditions, manipulations or archival data in the study. Only individual interviews of community college faculty will be included in the study.

### IV. Protocol Details

A. What measures or observations will be taken in the study? If any questionnaire or other instruments are used, provide a brief description and attach a copy.

Interviews of community college faculty teaching in a criminal justice program of study will be used in this study. Demographic and Interview Protocol questions include the following:

Demographic Questions:

Are you employed as an educator in the criminal justice program at XYZ community college?

A. How long have you been employed by XYZ community college?

2. Do you have experience working in the field of criminal justice?

B. Will the subjects encounter the risk of psychological, social, physical, or legal risk? If so, please describe the nature of the risk and any measures designed to mitigate that risk.

Subjects will not encounter any psychological, social, physical, or legal risks.

C. Will any stress to subjects be involved? If so, please describe.

Subjects should not experience any stress. They can withdraw from the study at any time or indicate that they do not wish to respond to any of the demographic or interview protocol questions.

D. Will the subjects be deceived or misled in any way? If so, include an outline or script of the debriefing.  
Subjects will not be deceived or misled in the proposed study.

E. Will there be a request for information which subjects might consider to be personal or sensitive? If so, please include a description.  
No personal or sensitive information will be requested.

F. Will the subjects be presented with materials which might be considered to be offensive, threatening, or degrading? If so, please describe.  
No.

G. Approximately how much time will be demanded of each subject?  
No more than one hour.

H. Who will be the subjects in this study? How will they be solicited or contacted? Provide an outline or script of the information which will be provided to subjects prior to their volunteering to participate. Include a copy of any written solicitation as well as an outline of any oral solicitation.

Subjects will include all faculty who teach in the criminal justice program at a large Midwestern community college who agree to participate in an interview related to defining, teaching, and assessing critical thinking in the courses they teach. An email request will be sent to all faculty in the criminal justice program once Baker IRB approval is received. See copy of email invitation below.

#### **INVITATION TO PARTICIPATE**

I. What steps will be taken to insure that each subject's participation is voluntary? What if any inducements will be offered to the subjects for their participation?

Each subject who volunteers to participate in the study will sign an informed consent form (see Consent Form below). No inducements will be offered to interview participants.

#### **Consent Form**

**Purpose of This Study:** The focus of my research is critical thinking. Specifically, I am interested in  
Baker IRB Submission form page 3 of 4



J. How will you insure that the subjects give their consent prior to participating? Will a written consent form be used? If so, include the form. If not, explain why not.

Prior to each interview, the researcher will provide the consent form to each participant. A signature will indicate consent to participate in the interview as well as consent to audiotape the interview. The Consent Form was provided in question I above.

K. Will any aspect of the data be made a part of any permanent record that can be identified with the subject? If so, please explain the necessity.

No

L. Will the fact that a subject did or did not participate in a specific experiment or study be made part of any permanent record available to a supervisor, teacher, or employer? If so, explain.

No

M. What steps will be taken to insure the confidentiality of the data? Where will it be stored? How long will it be stored? What will be done with the data after the study is completed?

Each subject will be assigned a numerical ID number known only to the researcher. Data will be kept in a locked file for five years and then will be destroyed.

N. If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subjects or society?

No

O. Will any data from files or archival data be used? If so, please describe.

No

**Appendix F: Baker University IRB Approval**

*Baker University Institutional Review Board*

October 11<sup>th</sup>, 2017

Dear Kay King and Tes Mehring,

The Baker University IRB has reviewed your research project application and approved this project under Exempt Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.

Please inform this Committee or myself when this project is terminated or completed. As noted above, you must also provide IRB with an annual status report and receive approval for maintaining your status. If you have any questions, please contact me at [npoell@bakeru.edu](mailto:npoell@bakeru.edu) or 785.594.4582.

Sincerely,



*Nathan Poell, MA*  
Chair, Baker University IRB

Baker University IRB Committee  
Scott Crenshaw  
Erin Morris, PhD  
Jamin Perry, PhD  
Susan Rogers, PhD

**Appendix G: Invitation to Participate**

Dear ADMJ faculty member:

My name is Kay King. I am a doctoral candidate in the Baker University School of Education, Graduate Program. Currently, I am conducting a research study as a partial requirement of my doctoral dissertation. This correspondence is to invite you to participate in a research study.

The focus of my research is critical thinking. Specifically, I am interested in gathering information about the way criminal justice faculty members at a large Midwestern community college define, teach, and assess students' critical thinking skills. My research will consist of individual interviews to learn how criminal justice faculty members define, teach, and assess students' critical thinking skills. The interview will consist of questions about your existing teaching practices for students' critical thinking skills.

The meeting will occur at a mutually acceptable time and place. The interview should take no more than one hour; there will only be one interview. Each participant will be assigned an identification number known only to the researcher which will be applied to each participant's interview summary. The interview will be digitally recorded so that I can accurately reflect on our discussion. I will transcribe and analyze the record of the interview.

Participation is voluntary and confidential. Study information will be kept in a secure location, accessible only to me. The results of the interviews will be included in my dissertation and may be presented at professional meetings, but your identity will not be revealed. Your contribution to the body of knowledge on

critical thinking may be useful to criminal justice faculty members in other institutions.

Participating in this study is your decision and you may choose not to participate without any negative consequences to you. You may choose to stop the interview at any point or decline to answer any questions you choose. If you choose to participate, you will have my gratitude for your part in collecting this information.

I would be happy to answer any questions you may have about the study. You may contact me at: Kay King, [kayaking@stu.bakeru.edu](mailto:kayaking@stu.bakeru.edu), (816) 309.4622, P. O. Box 1875, Lee's Summit, Mo 64063.

Again, thank you for considering to participate in this research study. If you are able to participate, please contact me at the email or phone number listed above, and I will contact you to schedule our meeting

With kind regards,

Kay King

**Appendix H: Consent Forms**

**Purpose of This Study:** The focus of my research is critical thinking. Specifically, I am interested in gathering information about the way criminal justice faculty members at a large Midwestern community college define, teach, and assess students' critical thinking skills.

**Participation Requirements:** As the interviewee, you will respond to a series of face to face interview questions related to critical thinking in the criminal justice classes you teach at JCCC. Your responses will help me to better understand how critical thinking is defined, taught, and assessed in the criminal justice program of study. Demographic questions and questions related to critical thinking were sent to you via email prior to this interview session. The interview will last no longer than 60 minutes, depending upon if additional questions arise from your provided responses to the initial discussion prompts. Each interview will be audio recorded, transcribed, and uploaded to a secure database. Once your interview has been transcribed, I will share your transcription with you, and you will have the opportunity to review your responses in written format. Additionally, after I have compiled all themes and findings, I will share the overall findings, and you will have the opportunity to provide a final comment.

**Potential Risks/Discomforts:** There are no known anticipated risks in this study.

**Benefits:** There are no direct benefits to you as a participant in this study. The results of this study may be of interest to criminal justice faculty at JCCC as well as other faculty at this institution or other higher education institutions.

**Confidentiality:** Any feedback you provide in this study will be handled confidentially. Your data will be anonymous which means that your name will not be linked to the data. Your name will be coded (e.g., John Doe would be listed as Participant A in the dissertation analysis) to keep your anonymity.

**Voluntary Participation:** Participation in this study is completely voluntary.

**Right to Withdraw from the Study:** You have the right to withdraw from the study without penalty. Should you decide to withdraw from the study, your audio recording will be destroyed.

**How to Withdraw from the Study:** If the interview is in progress and you wish to withdraw, tell the researcher, "Stop the interview." If you would like to withdraw before the interview or after your materials have been submitted, please contact the researcher at [KayEKing@stu.bakeru.edu](mailto:KayEKing@stu.bakeru.edu). There is no penalty for withdrawing.

**Compensation:** You will receive no compensation for participating in this study.



**Consent Form Signature:** Your signature below indicates that you have agreed to participate in this research study and to audio taping of the interview.

**For Questions Regarding This Study, Contact:**

**Principle Investigator:**

Kay King

[kayeking@stu.bakeru.edu](mailto:kayeking@stu.bakeru.edu)

(816) 309.4622

[P.O. Box 1875, Lee's Summit, MO, 64063.](#)

**Academic Advisor:**

Tes Mehring, PhD

School of Education, Baker University

[7301 College Boulevard, Suite 120](#)

[Overland Park, KS 66210](#)

(913) 344-1236

[tmehring@bakeru.edu](mailto:tmehring@bakeru.edu)

**Agreement:** I agree to participate in the study described above and to audiotaping of the interview.

**Name (Printed):** \_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

You will receive a copy of this form for your records.

**Consent for Participation in a Research Study****TITLE OF RESEARCH PROJECT**

Community College Criminal Justice Faculty Definition, Teaching, and Assessment of Students' Critical Thinking Skills

**NAME OF PRINCIPAL INVESTIGATOR**

Kay E. King

**INTRODUCTION**

You are being invited to participate in a research study that will explore how faculty in a criminal justice program define, teach, and assess students' critical thinking skills. Thank you for taking time from your busy schedule to consider participating.

**PURPOSE**

The purpose of this study is to explore how faculty members teaching in a criminal justice program at a community college define, teach, and assess students' critical thinking.

**PROCEDURES**

This study will consist of individual interviews at the JCCC Police Academy, Room 142. Each participant will meet with the researcher at a mutually agreeable date and time for the interview. The researcher seeks to identify how Johnson County Community College Administration of Justice faculty members define, teach, and assess students' critical thinking abilities. The interview will last approximately one hour. The session will be digitally recorded and transcribed to ensure accurate reporting of the information that you provide. No follow-up interviews will be required.

**PARTICIPANT POPULATION**

All JCCC Administration of Justice faculty members will be invited to participate in this study.

**VOLUNTARY PARTICIPATION**

Your participation in this research study is entirely voluntary. You may choose not to participate in this study or withdraw at any time without penalty or loss of benefits. Please be aware that this research study can be discontinued at any time without your consent. If for some reason the principal investigator believes you are not fully participating or that this study is contrary to your best interest, your participation can be discontinued.

**FEES AND EXPENSES**

There are no costs for participation in this study.

**COMPENSATION**

There will be no compensation for your participation in this study, but your participation will be appreciated.

**RISKS AND INCONVENIENCES**

There are no risks associated with this study.

**BENEFITS**

This study will contribute to the body of knowledge on critical thinking. Faculty members in JCCC's ADMJ program may be interested in the results of this study.

**ALTERNATIVES TO PARTICIPATION**

There are no alternative procedures for participation in this study.

**CONFIDENTIALITY**

All interview notes, recordings, and transcripts will be password protected and only the principal investigator and research analyst will have access to the raw data. If you choose to participate, you will be assigned an identification number, known only to the researcher. Your identity will not be known or available from the transcripts. Direct quotes from the interviews may be used in the study summary, but none will be associated with any identifying information related to the participant. There will be no names attached to the tapes or transcripts, and there will be no identifying information or names used in any written reports or publications which result from this evaluation project. Your participation will be strictly confidential. All tapes, transcriptions and notes from the interviews will be kept in the researcher's private office in a lock file cabinet for five years. After five years, all records will be placed in a secure container at the Police Academy designated for destruction of documents.

**IN CASE OF INJURY**

If you believe you have received any type of injury or harm by participating in this study, please contact Eve Blobaum, Research Participant Protection Program Chair, Johnson County Community College, 12345 College Blvd, Box 36, Overland Park, KS 66210, 913-469-8500, ext. 4965, [eblobaum@jccc.edu](mailto:eblobaum@jccc.edu).

**QUESTIONS**

If you have any questions or concerns about this study, please contact: Kay King, Johnson County Community College, 12345 College Blvd., Box 72, Overland Park, KS 66210, 913-469-8500, ext. 4704, [kking05@jccc.edu](mailto:kking05@jccc.edu).

**CONSENT SIGNATURES**

You have voluntarily agreed to participate in this research study. You fully understand the purpose of the research and what is expected of you as a participant, as well as the risks and benefits associated with this research study. You have had the opportunity to ask questions concerning this research study and you have had them answered.

You will be given a signed copy of this consent form to keep for your records.

---

Research Participant's Name (Printed)

---

Signature of Research Participant

---

Date

---

Name of Person Obtaining Consent (Printed)

---

Signature of Person Obtaining Consent

---

Date

Appendix I: Coded Interviewee Transcripts

**INTERVIEW of ADMJ #1: 10.25.17**

**Theme One: Teaching/assessing varied by type of courses**

**Theme Two: Manner critical thinking is addressed varied by instructor**

**Theme Three: Instructor's 'real-world' experience a component of addressing critical thinking**

KK This is October the 25<sup>th</sup>, and I'm interviewing ADMJ #1. These are demographic questions. I'm looking at difference in terms of how people have a different history with criminal justice / critical thinking.

How long have you been working as an educator in a Criminal Justice Program at this Community College?

ADMJ #1 Four years. I can't believe it's four years already. Time flies.

KK Do you have experience working in the field of Criminal Justice?

ADMJ #1 Yes.

KK In what part of the system do you have experience?

ADMJ #1 Juvenile and Corrections.

KK And what kind of Corrections?

ADMJ #1 Federal.

KK How long, or have you been employed in that area of Criminal Justice?

ADMJ #1 Thirty years.

KK There are three research questions and it's basically how do Criminal Justice faculty members at a large Midwestern community college define, teach and assess critical thinking. OK, the first interview question: Please discuss the components necessary to describe Critical thinking. Basically, what I am asking is your definition of Critical thinking. **[RQ1/IQ1(a)]**

ADMJ #1 Critical thinking to me, as far as Law Enforcement is the ability to take a situation or a problem and to go through the components and critically think them through: "OK what's the problem, you know, how we address the problem, and if I have to discuss it, how do I discuss the problem and understand the problem. And I just think that they do not do enough critical thinking at the high school level because you can see how they struggle with critical thinking. I just don't think they do enough, because I get that deer-in-the-headlight look when I give them, you know, I give them, especially in Criminology, they have—they give you a scenario and they go through and they go "so what would be a different avenue, or do you think this would work." And they have real problems doing that, and it's because I don't think they've done it enough to be able to assess and, like I tell them, your opinion is your opinion; however, you have to be able to back up your opinion with evidence and to be able to defend that, your) decision; and they have real problems defending their decision, they become very wishy washy on it. If that's your opinion, that's awesome. If that's your decision, that's awesome. Back it up, do the research that shows that you can back up what you're saying, and defend your decision. They have to defend their decision.

KK Ok. Next question: What should critical thinking look like in a criminal justice class at this college? **[RQ1/IQ1(b)]**

ADMJ #1 Because it's law enforcement I think it's essential for them to be able to critically think through situations, and, because when they go out into the real world, whether they're going to do corrections, or probation, they have got to make, to assess everything that's going on to critically think it through and come up with the best solution for the individual and I said, you know, whatever decisions you make, in law enforcement especially, you could end up in court defending your decision. It's not like other areas, other fields, you gotta be able to defend your decision and stand by it. Because if your decision is made, and I give them an example, like you have someone on probation and you are ready, you are trying to determine whether you should continue them in the community, I said, the one thing you always have to look at is, you have to protect the community in any kind of law enforcement, I don't care what you do, police officer, corrections, probation, is all about keeping the society safe, so if you determine to continue them on probation and he commits a homicide, they're coming to you first to say why did you made this decision, how did you critically think through this decision, how did you come to this decision. Why did you think you could continue him into the community? Those are tough questions that you gonna have to answer. With me, I got sued all the time, and I had to defend my decisions. So if you're going in this field, you better be able to critically think through and make sure that you made the right decision, because you gonna have to be able to defend that decision.

KK What did they say when you said that?

ADMJ #1 Oh their mouths just dropped open. They're like, oh! That's why I say, that's why I'm forcing you to defend your decision; because if you don't, if you don't learn that and you're a cop on the street, and you're going through procedure and you shouldn't kill someone, you better be able to defend your decision. Look at all the trials that are going on. So I think that, especially in criminal justice, it's essential. If they cannot come up with a decision and stand by it, they don't belong in the field. They just don't.

KK Ok. Next question: Is there anything else that you think is important related to how critical thinking is defined in a community college Criminal Justice program? So is there anything else about this that we should be considering?  
[RQ1/IQ1(c)]

ADMJ #1 Well, a lot of what I see is the lack of their being able to write, and I do not think anybody has asked these hard questions of them. I think in high school, especially their Senior year, they should make them defend decisions. I mean I'm surprised that, you know how they actually make everybody learn public speaking, I don't know why they don't make mandatory to do debate, or make it mandatory here, like an Intro class, because when you're debating, you're defending your decision and you're critically thinking. So I think that another thing that any college can do is make it mandatory to take a debating class. Actually, I think they should get rid of the public speaking and do the debate, because most students will never public speak. Well, the thing is, our writing is totally different, you know that. Ours is more report writing, which you and I have had long discussions about report writing; but I will tell you this, what is interesting about the report writing class is that one of my students moved out to

Colorado and she got a job at the police department in her city, and she's at the front desk taking reports and she told me "Thank God I took that report writing class," because the minute – she said, they said "well this is how you do it" and she's like "Oh you do it like blog date and time" and they're looking at her like "Yes" – report writing, and she was thinking "well thank god I took the class" cause, it's all about the facts, you know, and so yeah, in this field, you need to learn how to write.

KK If we had an ideal situation and we didn't have to worry about anything else, how would writing play a part in the ADMJ curriculum?

ADMJ #1 I think that if we just, kind of, like the Criminology book I love, because if you look at it, especially when it says "thinking like a criminologist," so they give you a scenario and then you have to make a decision. So if all departments had scenarios where they were required to make a decision – report writing is all about that. I think that if we just started at the beginning, at the intro class, and have scenarios built into each class, and maybe even have it so that, as a group the scenarios are set by the administrator and decide, well, should we do five scenarios, should we do six, and make them start defending your decisions right away in every class; then I think the critical thinking would set it. But we're literally gonna have to develop scenarios for each one. If we want to judge the critical thinking we all have to use the same scenarios. So then, if you're teaching Criminology, everyone uses the same textbook anyway, then we'd have all the instructors – ok, I want you pick six scenarios that you think are relevant, and then you use THAT SIX. It's not hard for each class to come up with scenarios, because we show them videos all the time w/scenarios.

KK Question 2: How do Criminal Justice faculty members in a community college teach critical thinking. First interview question: How do you explain Critical thinking to your students? [RQ2/IQ2(a)]

ADMJ #1 You should walk them through the process, like you say 'Ok, I'm gonna give you a scenario and you need to research it, you know; there're some, no matter where you work, whether you're in the Criminal Justice or not, you know, whatever field, your boss is gonna say 'Ok, this is our problem, give me a solution, and back it up with, whether there is legal, can we do this legally, can we do this ethically,'" you know, what's the cost-effectiveness of doing this. Any business does this, so they have to be able to defend—I keep saying this over and over again—they have to defend your decision, cause you're gonna defend it sooner or later.

KK Ok, second question: What assignments have you used in your classes to teach or promote critical thinking? [RQ2/IQ2(b)]

ADMJ #1 In Criminology I used the books, *Thinking Like a Criminologist*, the little scenarios they got in there, and in Report Writing, I show them videos and have them write the reports. And then I go through each report and tell them what key words they shouldn't use, and ask, you know, "So how did you come to this decision? How did you come to the decision of arresting them for DUI? "Ok? If you look at the video, there're some procedures you have to follow, but ultimately it's your decision whether to charge them with DUI or not. You know? So, and then in corrections I show them a very serious assault on video and I have them



write the incident report with all the supporting documentation. So, in every class I have them doing some kind of ---and they struggle with that; and they should, you know, because they don't know how to do it, but they still should be able to do it, if that makes sense, they should be able to think through the process.

KK Ok – Third question: What readings have you used in your classes to teach or promote critical thinking? [RQ2/IQ2(c)]

ADMJ #1 Well, it is whatever, which books I choose. It's the textbooks I choose.

KK Have you used any activities inside the classroom to teach or promote critical thinking? [RQ2/IQ2(d)]

ADMJ #1 My videos. I show them scenarios, and I just literally pull up, you know, a police officer making an arrest. I did a high speed chase once, I used that in Report Writing; I just had them watch it and I would go "OK. Tell me exactly what happened." I'd say "you need to write it down, cause you're gonna need to write a report." And they'd go "Can we see it again?" "No." Because you can't rerun it when you're out in the community. And a lot of when would go "Oh my God, this is so hard" and I said "Yeah, because you need to pay attention" just paying attention. Oh my God! (Laughs)

KK OK, last one of these questions: Are there any activities you used outside the classroom to engage students in critical thinking? [RQ2/IQ2(e)]

ADMJ #1 I don't – not outside of classroom.

KK Research Question #3: How do you assess critical thinking? First question: Please describe how students demonstrate critical thinking skills in your classes. [RQ3/IQ3(a)]

ADMJ #1 Their homework, the *Thinking Like a Criminologist*, really show me their ability to critically think. And that's an upper level class, so they should be able to critically think. Now, in the intro classes is a little different, because you don't use a lot of critical thinking in the intro classes, cause it's an intro, but in the upper level, like in Criminology, they do a lot of writing.

KK Next question: Please describe the ways you assess critical thinking in the Criminal Justice classes you teach. [RQ3/IQ3(b)]

ADMJ #1 I go though, in Criminology especially, the first day I say "OK. You have to read this and answer these questions," and then I go through one scenario with them and say "so, what are your thoughts? And no matter what the subject is, they'll go "Well, I don't agree with that." OK. You can disagree with it, because – and one of them is, you know, the governor of your state has asked you to assess how – whether we should charge juveniles as adults and whether we should keep them in the juvenile system. Some say "I just want them to go adult" and I say "OK that's fine. You can't just tell the governor "yeah, let's just charge them as adults." You're the expert, I've been saying. When you get this degree, you're going to be the expert in the field, that's why they hired you, because you have a degree and you need to be able to back what you're saying. I just go over and over this – I say the same thing, because you have to repeat that. And I give them, you know, I tell them at my Corrections class, I say, "you know, we're all human beings, you know, and we can be pushed to the brink; believe me, they can push our buttons and push our buttons, and push our buttons, and we may do something, but it's your job as the adult and as the expert in Corrections to –

never stoop to their level, you bring them to yours.” I said “so go ahead and use more force than is necessary, and then you’ve got a lawsuit; because I’m telling you this, if you want to go into that gray area, when you get a lawsuit, the first thing, the Attorney General’s office, they figure out, “did she cross the line? Can we defend her? So I said, “go ahead and have the U.S. Attorney General saying “we are not defending you, you have to pay for your own attorney.” They’re telling you, you’re on your own. And so “Go ahead and have that happen, cause guess what he’s getting; he’s getting your retirement, you’re losing your job, he’s getting your pension, he’s getting your house, he’s getting any future earnings. Is that worth it to you? They just look at me and they go “No,” AND that would be the point. And it doesn’t matter if it’s Corrections, Law Enforcement, anything. Go ahead and cross the line and get a lawsuit; they can’t defend you. And then you’re gonna understand. They all go “gosh miss (*ADMJ #1*)” – that’s our job though. We all do the extreme, (*ABC*), , you, me, (*ADMJ #2*), you know, we all, all of us do the same thing. It’s such a great group because we all are pretty hardcore and you don’t sugarcoat the truth with any of these kids. But I have students that have gone on to the four-year and go “oh my God, these people have never been in the field” and I go “I know.” Yeah, when you go into some of the bigger colleges, you know, like the University of XYZ they’re scholars, they’re not practical, BUT you still need that scholar, you still need that insight before you make your decisions.

KK Ok, last question: Should critical thinking be assessed in the same manner for all Criminal Justice courses? [RQ3/IQ3(c)]

ADMJ #1 Yes, it should. I think we’ve discussed that. I think the only way to assess it accurately is to have all of us use the same scenarios; because I may use one and someone may use another, but if we all use the same scenarios to assess, that gives you better – OK! We’ve all used the same thing, so now let’s see how we are assessing them. Cause if not, you’re assessing on everybody’s individual idea of what critical thinking is. That’s the other problem: Do we all think the same as critical thinkers? But if we all use the same scenarios, we don’t – correct? I mean, you would know. That’s the way to assess it, and every department should do the same.

KK That’s all the questions I have. I really appreciate your time. Thank you so much.

ADMJ #1 No problem! I’m sure that no one else, you know, I just think it’s rude, so I just want them to be their best. I would hate for them to go out and don’t have all the skills and then someone gets charged with murder because we didn’t do our job. It’s different for us than for other departments.

**INTERVIEW of ADMJ #2: 10.23.17**

**Theme One: Teaching/assessing varied by type of courses**

**Theme Two: Manner critical thinking is addressed varied by instructor**

**Theme Three: Instructor's 'real-world' experience a component of addressing critical thinking**

- KK This is October the 19<sup>th</sup>, 2017. I'm interviewing ADMJ #2. We begin with the demographic inquiry questions.  
How long have you been working as an educator in a criminal Justice Program at this community college?
- ADMJ #2 I think this is my fourth year.
- KK You had experience working in the field of Criminal Justice.
- ADMJ #2 If you take it as far as the Courts yes, but not till the Court aspect.
- KK How long have you been or were you employed on the side of the Criminal Justice of the Court, so how long have you been working in the Courts?
- ADMJ #2 Hmmm . . . Since 1989
- KK OK so, you've seen the questions before, so you know it's all about critical thinking. So, I'm looking at how you define Critical Thinking, what kind of things you do in your class to teach it, and how you assess Critical Thinking. So, I think people are going to have different expectations about what Critical Thinking is, that's what I'm going in there expecting to find. That's what all the literature says you are going to find, so I would assume people are going to teach it different ways.
- ADMJ #2 I'm sure. I would think so.
- KK Please discuss components necessary to describe Critical Thinking. What I'm getting at with this question is just your definition of what Critical Thinking is.  
**[RQ1/IQ1(a)]**
- ADMJ #2 To me? It's thinking outside the box. That's what I think it is. It's forcing someone to look at something differently that how they are comfortable looking at it.
- KK What do you think Critical Thinking should look like in a Criminal Justice class at this college. So what our Critical Thinking should look like in this program?  
**[RQ1/IQ1(b)]**
- ADMJ #2 Personally I try to get them to look at it from outside their Johnson County bubble. Since we are a Johnson County Community College, the vast majority of our students have lived, at least for several years, in this bubble, where we are safe and things don't go wrong. So in my class I'm constantly asking them to look at things like they lived in Wyandotte County inner city, or over in Kansas City, Missouri. Look at things from a different perspective and I'm trying to get them to look at it where it's the norm, and we talk about, you know, like right now in Criminal Procedure, when we're talking about interrogation techniques and things like that. I'm trying to get them to think what is it like for somebody that grows up in Fifth and Harrison, for someone who grows up at 125th and Antioch. How is it different? How are they being treated differently, things like that. That's how I perceive Critical Thinking here.

KK Is anything else you think is important related to how you think Critical Thinking is defined in a community college Criminal Justice program? Is there anything else that could be, that you think should be a part of the Critical thinking aspect of a Criminal Justice program? [RQ1/IQ1(e)]

ADMJ #2 I think this program is so different. If we were teaching English I think we could all look at it the same way, almost have one definition of Critical Thinking, but since all of us have our own little niche areas, I don't think the way, like (ADMJ #1), she would look at Critical Thinking totally differently how she's teaching than I do, because she has to, I mean, everybody has their little thing; when you're teaching Report Writing it has to be totally different than me explaining to you the 4<sup>th</sup> Amendment. That's why I think there has to be a lot of different definitions for us, and we're also teaching practical; it's not like we're teaching some esoteric liberal arts topic. We're talking practical, these kids are taking this with them when they go down the hall to the Police Academy and this is knowledge they all have to have to do their job, and that's why I think that everybody has to have their own definition and their own way of approaching it, so we can try to hit as many different areas as possible.

KK OK. Next question is--we're moving more toward how you're teaching it in the classroom-- How do you explain Critical thinking to your students? [RQ2/IQ2(a)]

ADMJ #2 I don't. That question when I saw it actually made me laugh. My actual first thought to my husband was, well, at least I don't have the program anymore, so I can admit I don't (laughs.) If it was I wouldn't do it.

KK What assignments have you use in your classes to promote Critical Thinking? [RQ2/IQ2(b)]

ADMJ #2 I a lot of times will use either programs off of Netflix, Netflix has become huge for me. I will ask them to look at, I'll use the example from Criminology, "The Killer Speaks" is the show I use, and I ask them to watch the shows, watch the interviews with this killer and then they have to break it down according to the different theories in criminology: what did you see, what led you to think it was this theory, what did he say that sent you there. I have them break down these shows in different ways depending upon what subject we are looking at. And I'm getting ready the figure out how to use one on 5th Amendment for next week for Criminal Procedure, a different show that I have seen in the past, where it's all practical, it's all this person just talking about their background and what they did, and I'm asking them to dissect that interview according to the different points that I want them to hit. I used to use a lot of cases and I think cases are more boring than "Hey let's watch Netflix." They find that more entertaining.

KK Ok. Next part of this question: What readings have you used in your classes to teach or promote critical thinking? [RQ2/IQ2(c)]

ADMJ #2 Lots of cases. Usually they are a little bit older cases and I always try to pull from the United States Supreme Court.

KK Have you used any activities inside the classroom to teach or promote Critical Thinking? [RQ2/IQ2(d)]

ADMJ #2 Pulled up a lot of videos on YouTube. I have pulled up Netflix shows. I have them watch them and I will always do that before I give them an assignment

to do it, that way we've done it as a group first and they understand what I'm looking for; so we'll do a group breakdown of some type of interview. Today actually we pulled up a YouTube video and broke it down on to the 4<sup>th</sup> Amendment. It's interesting, you have them watch it one time, just for entertainment's sake and then you have them watch segments of it again looking for very for specific information and there's this "Oh we didn't think about that."

KK Is there any activity you've used outside the classroom to engage your students in Critical Thinking? [RQ2/IQ2(e)]

ADMJ #2 I have them doing the same type of thing at home for paper assignments. The other thing I've used is movies. I didn't even think about that. Like World of Crime, I've used movies to do it, so it's a little bit longer time commitment for them than just a Netflix show. Yeah, this is for online courses. I won't have them do it, I won't do it in an in-class class because I think that is asking a lot of time outside, but online I will assign movies and have them break down a movie according to what we are covering in that particular chapter. I have found in all these years that the more you can teach someone as they think they're being entertained, the more they will learn.

KK OK. The last question is about assessment. Please explain how students demonstrate Critical Thinking in your classes. [RQ3/IQ3(a)]

ADMJ #2 Again, when I get an answer that I know has forced them to think outside the box. When they look at The Killer Speaks and they pull the sentence that leads them to think it's a certain theory, or they pull an action that he says he took and they're able to apply the theory – "Well, yeah, he did this and it's very clear that it comes from this theory and this is what he did." When they are able to identify which amendment was violated, which theory we're talking about, whatever may be based on the class, I can see that they ARE using the other side of their brain and they're thinking more and they are able to see it. I think the class I have the hardest time with Critical Thinking is Criminal Law. I think it's that one because it's more set in place, it's one of my "Lists" classes "this and this and this," "you checked all the boxes," "yes, it's murder one because you checked all the murder one boxes." There is a lot less creativity. I think, in my idea of Critical Thinking, it does take a lot of creativity; it forces you to look at things very differently, and when they are able to use their creativity and see it and identify it, that's how I know that I've gotten there – And in some classes it is just A LOT easier to do. Criminology is probably the easiest, and World Crime is to some extent, but Criminology is easy.

KK Please describe the way you assess Critical Thinking in the Criminal Justice class you teach -- so do you do it in exams . . . [RQ3IQ3(b)]

ADMJ #2 Papers. I do a little bit in quizzes in Criminal Procedure. But those are the essay questions. I can't figure out Critical Thinking in true/false – multiple choice; but in essays, again, forcing them TO THINK, that's the easiest way for me to assess it. It's either short essays, or long papers, longer papers.

KK And last question: Should Critical Thinking be assessed in the same manner for ALL Criminal Justice courses, please . . . [RQ3IQ3(c)]

ADMJ #2 Heck no! Absolutely not! Cause we all need to do it differently. I wouldn't have any clue how to do it in any courses that you teach, or ADMJ #1, or ABC, or

anybody, because you guys are teaching more practical skills, while mine is more philosophical in some ways. Yeah, students stare at me like, “Really? The 4<sup>th</sup> Amendment is important? Why?”

“Come on! Really? OK. Put yourselves in the seat of the person who’s being pulled over. Yes, you will think the 4<sup>th</sup> Amendment is important.”

KK And you said your courses tend to be more philosophical, or some of the courses you teach are \_\_\_

ADMJ #2 Some are – some are. So I think, it’s probably easier for me; now, ethics I can see obviously being where you can think outside the box a little bit more, but come on, Report Writing, maybe Criminal Behavior would be a little bit more, you could be a little more creative, I’m not sure, but Criminal Procedure, Criminology, World of Crime, I definitely think you can be more creative; Criminal Law not so much, Intro probably not so much, because, again, those are more, I called them “Lists” classes: This is what need to prove to do this and it’s more like “check-box” classes to me, vs. the more creative ones.

KK Is there anything that I didn’t ask you about that you want to share about Critical Thinking, your thoughts about Critical Thinking?

ADMJ #2 I guess I didn’t think about the fact that I do, I force them to do more of it than I thought I did. So that was the one thing last night after I read the questions I was “OK . . . Hey, I DO do this.” When I first started I thought “Oh my God! I don’t do this” and then when I started thinking about the classes I said “No no no no, I do.”

KK Ok, I appreciate it, I’m done. That’s all the questions I have. Thank you so much.



### INTERVIEW of ADMJ #3: 10.26.17

**Theme One: Teaching/assessing varied by type of courses**

**Theme Two: Manner critical thinking is addressed varied by instructor**

**Theme Three: Instructor's 'real-world' experience a component of addressing critical thinking**

KK This is October the 26<sup>th</sup> 2017. I'm interviewing ADMJ #3. I start with two demographic questions. How long have you been working as an educator in the Criminal Justice Program at this community college?

ADMJ #3 Ah fifteen years?

KK You have experience working in the field of Criminal Justice.

ADMJ #3 Yes

KK In what part of the Criminal Justice system do you have experience?

ADMJ #3 Law Enforcement

KK How long have you been or were you employed (Hmmm?) in this area of Criminal Justice?

ADMJ #3 Thirty years.

KK OK, now to the research questions. So, first research question is how Criminal Justice faculty define critical thinking. The first interview question: Please discuss components necessary to describe critical thinking. What I'm asking here is a definition of critical thinking. What I'm asking here is: what's your definition of critical thinking. [RQ1/IQ1(a)]

ADMJ #3 Critical thinking is the ability to reason, analyze and assess information in an attempt to make things better. I think the "making things better" is an important part.

KK Seems like you've kind of given it some thought before.

ADMJ #3 Well, yeah. It means – in two separate areas. In my teaching area it's important to me that the students understand that while everybody says critical thinking, this is kind of what I think I want you to be able to do. I want you to be able to reason things out, I want you to be able to analyze data points, and I want you to be able to research and do those things in an attempt to find something to make things better, so it's important. And then on my – for my department one of the things that I have is – and I'll actually give you one, and it's a challenge coin, and it simply says "do the right thing for the right reason." Ahm and so, you have to be able to think your way through; doing the right thing is the ethical part; the tricky part is the doing it for the right reason. So, you know, it's . . .

KK So, the right reasons – Can you elaborate on that?

ADMJ #3 So, an example of doing it for the right – you can do the right thing, but you're doing it for the wrong reason. Charity is always the right thing. Giving to charity is always the right thing to do; to give to charity for your own notoriety, or the benefit of somebody knowing that you gave to charity, you've done it for the wrong reason. So I asked all of the officers who get this coin to, every decision they make, in Law Enforcement is doing the right thing first, but then make sure that you're doing it for the right reason. So every arrest, every traffic ticket, all of those things are thought and balanced off of those two things.

- KK           hmm – So, does it cancel it out, if you’re doing the right thing, but you’re doing it for the wrong reason?
- ADMJ #3     It doesn’t cancel it out, but it brings you – you have to look at yourself, and we have discussions about your own ethics, if you’re just doing the right thing because I’m watching? Or if you’re doing the right thing because you do the right thing. So, we’re trying to get – because police officers are out there by themselves – you wanna get it, so that they do the right thing for the right reason. So my point with the coin is, at least I want them to be thinking about doing it for the right reason. I want them to do the right thing—that’s kind of the most important part, but FOR THEM, doing it for the right reason should be the most advantageous.
- KK           I just wonder for students. Do you think that would work for students?
- ADMJ #3     It might be . . . So . . . The cost would be a little prohibited, because those coins are a little expensive. (Laughs) Tootsie roll or something might do the same thing. (Laughs)
- KK           OK, second question: What should critical thinking look like at a Criminal Justice class at this college? [RQ1/IQ1(b)]
- ADMJ #3     That’s really where I was like, OK, how do you –? Because in, online it looks one way, and then in the classroom, at least for me, it’s kind of two different things. So online, what it looks like mostly is our discussion questions and the way we do those, so what it looks like in the face-to-face classes, where I think we get the most out of it is in classroom discussion, which is a dying art, to get students to say anything. We might be better off if we could text them, so they can text us back with something (laughs,) but what it looks like is still in this reasoning, and questioning, and analyzing information, that they come back to it.
- KK           OK. Is there anything else you think it’s important about how critical thinking is defined a community college Criminal Justice program? [RQ1/IQ1(c)]
- ADMJ #3     You know, it can be defined in so many ways that – it can be defined personally, and ethically, and so forth, so I don’t know if there’s anything other than – you know; actually when I read through that question that’s when I thought of the “do the right thing for the right reason” part, cause it doesn’t do them a lot of good to critically think through something if they’re just trying to attack it, or trying to tear it down, without building it back up and making it better.
- KK           OK second research question: How do Criminal Justice faculty members in a community college teach critical thinking? First interview question: How do you explain critical thinking to your students? [RQ2/IQ2(a)]
- ADMJ #3     I use a little bit of the “do the right thing for the right reason” and then in my Department I used the same things; I talk about taking the easy way and if you’re taking the easy way most likely you simplify things too much and you’re doing it wrong; so because what I’m starting to learn about millennials and the new – they wanted fast and easy and simple, that big red easy button from whatever store that was, that kinda defines what they want and that doesn’t work, because if it’s easy, you missed something, because life is not supposed to be easy. If you’re looking at it, especially from a Law



Enforcement perspective, like we talk about either Ethics class or Criminal Investigation, man, if that investigation was easy, you missed something somewhere, because they're never easy; there's always something. So that's when I talk about explaining the way, and then going back to your reasoning and your analysis of everything, and your questioning; everything that you get you go "ok, there's that, why did I get that piece of information, where does it fit into the theme of what we're investigating and what we're looking at, and how that all works true.

- KK Ok. What assignments have you used in your classes to teach or promote critical thinking? [RQ2/IQ2(b)]
- ADMJ #3 I use discussion questions and then general class discussion; and then my research papers, I'll have a critical thinking theme to them. They research, so as an example, the Ethics class that I get to teach this semester, their research paper is on an ethical dilemma. They have to find one, and then they have to research sides of it and present their outcome, which is the critical thinking part. So the outcome has to be: "OK. This is going on, what is the best way to handle this? And in the Intro to Admin of Justice their research paper is on active shooters and so, I don't just want a historical perspective of active shooting in the United States. I ask them to pick a type, or several active shooting events and then analyze how that either could have been prevented, or what we can do in the future to prevent those types of events from happening.
- KK What readings have you used in your classes to teach or promote critical thinking? [RQ2/IQ2(c)]
- ADMJ #3 You know, I really haven't.
- KK Have you used any activities inside the classroom to teach or promote critical thinking? [RQ2/IQ2(d)]
- ADMJ #3 That's just in the class discussion, yeah. Ethics is a great one, cause we use ethical dilemmas, or pull something out of the news; the KCK shot just popped up on the news, so I use that and work through that; what to watch them work through and go "OK, there is a question I should be asking here.
- KK Are there any activities you've used outside the classroom to engage students in critical thinking? [RQ2/IQ2(e)]
- ADMJ #3 The online discussion question format. They have a discussion question that they have to answer, and then they have to pick something from someone else's answer and either challenge that, or further that thought process.
- KK OK third question: How do the Criminal Justice faculty members assess critical thinking? Please describe how students demonstrate critical thinking skills in your classes. [RQ3/IQ3(a)]
- ADMJ #3 Just the research,
- KK Can you touch on that? So do all your classes do research papers no matter what content?
- ADMJ #3 Every single one of them. Writing is a dying art. Professional writing is even further down than that.
- KK Describe ways you assess critical thinking in the Criminal Justice classes you teach. [RQ3/IQ3(b)]

ADMJ #3      The attention to detail and the “can’t take the easy way” and then working through those, that process, to make sure that they’ve actually conducted some research, put some of their own thoughts and ideas in it, and then put something out that explains how they wanna do something better. And that is in each one of those assignments.

KK      OK. Last question: Should critical thinking be assessed in the same manner for all Criminal Justice courses? **RQ3/IQ3(c)**

ADMJ #3      I don’t think it can. I think that the topic of the course leaves you two different parts of critical thinking. You see, ethics is really easy, I mean, it ALL needs to be critical thinking. But Intro to Admin of Justice not so much, I mean, you are just showing them the beginnings of Law Enforcement and the rest of Corrections and all of that stuff and so, applying critical thinking at that stage is gonna be – your expectations are a little less than they would be by the time they get to the more specific classes.

KK      Anything I needed to touch that I haven’t asked you about critical thinking?

ADMJ #3      No, this is gonna be an interesting –

**INTERVIEW of ADMJ #4: 10.27.17**

**Theme One: Teaching/assessing varied by type of courses**

**Theme Two: Manner critical thinking is addressed varied by instructor**

**Theme Three: Instructor's 'real-world' experience a component of addressing critical thinking**

KK Today is October 27<sup>th</sup> 2017 and I'm interviewing **ADMJ #4**. The research questions: how do faculty in a Criminal Justice program at a community college define, teach and assess critical thinking. I have two demographic questions: how long have you been employed at this college?

ADMJ #4 I have to think ... fourteen years ... thirteen, fourteen years?

KK In what part of the criminal justice system do you have experience?

ADMJ #4 Law enforcement and the juvenile justice system.

KK How long have you been employed in these areas of the criminal justice system?

ADMJ #4 Law enforcement for twenty-five years and I was in the juvenile justice system for approximately two to three years.

KK And the first research question is: How do people define critical thinking? The first interview question: Please discuss components necessary to describe critical thinking. What I'm asking with this is – how do you define critical thinking?

**[RQ1/IQ1(a)]**

ADMJ #4 I would, I guess define it as any kind of exercise or assignment that would force, I wanna say, a student to have to think beyond what's in the book. More so trying to grasp concepts and ideas as opposed to what is a definition of probable cause; I mean, going beyond all that. I mean, there's a difference between definition and **WHAT IS IT REALLY?**

KK What should critical thinking look like in a Criminal Justice class at this college?

**[RQ1/IQ1/(b)]**

ADMJ #4 I would think more so than we actually put towards it. We'd make it more of a requirement that a certain portion, I can't really come up with a percentage, of the class should be devoted to that type of assignment, because it really – you can grade everyone on a test, and it's the same standard they all have, but trying to assess how you're doing critical thinking and how that person is doing critical thinking is two different things. You have two different people, or thirty-two, or whatever, I think it has to be more of a participation grade based on the judgment of the professor – How well did they – did they participate? I got to know these students, and this student probably participated as much as they can, but this person is participating more, so it's not an apples for apples kind of assessment, and – did I answer your question?

KK Absolutely. Is there anything that you think is important related to how critical thinking is defined in a community college Criminal Justice Program? RQ1/IQ1!(c)

ADMJ #4 Yeah, I guess I'm a little confused. (Thinking) I mean, **I think it's a huge component because it can almost be where you have your classroom work, and I would almost go as far as to say it's an additional, maybe voluntary, additional class, club, something like that, where – some students are there just to do what is the minimum, but there're some people that always want to learn more, so giving them that outlet, that opportunity to be able to learn more, but it's always gonna**

cause more work on you. So, there's always great ideas, who's gonna implement them.

KK Second question: How do Criminal Justice faculty members in a community college teach critical thinking? How do you explain critical thinking to your students? **RQ2/IQ2(a)**

ADMJ #4 I don't come out and say this is critical thinking. I – this was not the way it was at the beginning, I had to learn by experience and trial and error, but I try to make a portion of the face-to-face class about lecture and a part about let's take some key concepts out of what we just learned and discuss them. It's always very open-ended, I try to draw everyone in, not just the people who want to answer every time, so I will try to discuss them a little bit in a group – I'm very big on giving – and I'm really not looking for a right or wrong answer. Let's say we are talking about search and seizure, I try not just to present my side, but why we have these rules.

KK What assignments have you used in your classes to teach or promote critical thinking? **[RQ2/IQ2(b)]**

ADMJ #4 That was the in-class one. I do an open discussion part of the class. Sometimes there might be a good thing, like with this Las Vegas shooting. If I scrapped my critical thinking question for online and whipped up something totally different. But I would have done that in class too. We've had different things come up stripped from the headlines, let's go with that. Online I'll have mandatory discussion questions, where it's usually, I break everything up to a week, one chapter per week and I will have a discussion, a.k.a. DQ assignment, and they're all open-ended. So I think it was Crime Scene Management, and the book kinda goes through a lot of first responder stuff, where as a detective, you're not really a first responder, but we use that and I said "Ok, you are the first detective on scene and your boss is not getting there for a while, for whatever reason. What do you think you need to do, in what order and why?" And that initial part just to get them thinking. And I had one who just had vapor lock, "Oh, I can't ... there's just so much to do" and I said "Well let's just think" and basically, I just usually refer to some guidance in the book, that they can see, "here's some basic things; how would you implement that?" and then I would get some people responding back "it's almost impossible, " "there's so many things", but then I would say "Welcome to the world of investigations; you are handed a crap sandwich and they tell you "go get them." That's what happens when you're on call. I just got over a week of that, "go get 'em". You're expected to know, you are a detective, you're no longer on patrol, where you have someone tell you what to do. You're given the freedom to make decisions on your own with the best knowledge you have at the time, and it's not always the right decision, but you're expected to make a decision, and you can only do – you gotta do the best job you can with what you've got.

KK What readings have you used in your classes to teach or promote critical thinking? **[RQ2/IQ2(c)]**

ADMJ #4 I have not. You're talking about additional readings? I have not.

KK OK. Have you used any activities inside the classroom to teach or promote critical thinking? [RQ2/IQ2(d)]

ADMJ #4 Yeah, that's pretty much it, you know. Group discussions are my biggest thing. Just don't listen to me, let's talk among ourselves.

KK Are there any activities you've used outside the classroom to engage students in critical thinking? [RQ2/IQ2(e)]

ADMJ #4 Uh . . . I mean, I've done field trips, I've brought in guest speakers – I guess there's one thing that goes both in and out, inside and outside. I've pulled out different movies or documentaries and used those as assignment tools, usually after what we've talked about. I use *Serpico* an awful lot, especially when it comes down to police corruption, so I've purchased the movie and we'll watch it in class, usually when we're talking about police corruption, cause it does, it gives a very good generalization of what happens, plus it's based on a true story of what happens group think, agency collusion, how easy it can happen and how hard it is to do the right thing.

KK OK. Third question: How do the Criminal Justice faculty members assess critical thinking? First question: Please describe how students demonstrate critical thinking skills in your classes. [RQ3/IQ3(a)]

ADMJ #4 The biggest way is by, when the group is coming back from the group discussion and they outline what they've found out. So I always encourage them to, or require them to come up with something, after you've built up your idea, come up with something totally contrary, look it up, and find some information to support it. I'm not saying you have to agree with it, but I want you to learn something that you didn't know about; so you can come to me and say, I really didn't know that before, or I had no idea that's how it happened. I don't agree with it, but I had no idea it happened like that. That's what I mean.

KK Please describe ways in which you assess critical thinking in the courses that you teach. [RQ3/IQ3(b)]

ADMJ #4 I assess it based on, again, participation. It is different for everyone. Some person – OK, online I will have people I start getting a feel for; they just wanna be challenged, and they keep – I don't mean argumentative, but they wanna be challenged, so I will actually give them more; and then there's some people that you have to – they're just gonna give you the minimum and you can poke them a little bit, but they still give you the minimum.

KK Last question: Should all critical thinking be assessed in the same manner for all Criminal Justice courses?

ADMJ #4 I'd be hemming myself in by saying yes, but I think there's such an ebb and flow – I think it should always be required, but to assess it, I think, any kind of critical thinking, is going to rise and fall based on the desire of the professor to teach, and any good exercise or assessment is going to cause more work for the professor, so it is gonna be all dependent on the professor. So I'd hate to say let's have this grandiose way to assess things for critical thinking, but you have professors "OK I'm doing it because I have to do it." It is gonna, I think it would actually hurt the students.

KK Anything else I haven't asked about that you think would be helpful for me to know?

ADMJ #4 No

**INTERVIEW of ADMJ #5: 10.24.17**

**Theme One: Teaching/assessing varied by type of courses**

**Theme Two: Manner critical thinking is addressed varied by instructor**

**Theme Three: Instructor's 'real-world' experience a component of addressing critical thinking**

(...)

KK Ok, second question. What does your critical thinking look like in a Criminal Justice class at this college? [RQ1/IQ1(b)]

ADMJ #5 So, I think it can be a lot of different things depending on probably what the focus is. I think Criminal Justice in general, you need to have – you know – thoughts and ideas applied to just different kinds of real world scenarios that someone is gonna encounter, whether that's, you know, in a jail, out on the road, in a crime scene, or wherever that case may be; and just being able to kinda test those skills, I guess, in the college class, whether that's by, like, writing your critical thinking process, or observing students doing an activity that will show their critical thinking.

KK Next question: Is there anything else you think is important related to how critical thinking is defined in a community college Criminal Justice program? Anything else about critical thinking and how we are defining it, how we are thinking about it? [RQ1/IQ1(c)]

ADMJ #5 Ummm, Yeah. It's an interesting question. I just think it's important to kind of know that it's gonna be defined differently depending on what the focus of the course is, because Criminal Justice spans such a wide variety of courses. You know, the critical thinking skills needed in an ever-evolving, rapid situation that someone might experience being an officer on the road might be different than when you have kind of more time, what you see at a crime scene where you're able to sit and weigh your options, so I just think, yeah, kind of, being able to put all that into one.

KK OK, these next few questions are about how criminal justice faculty members teach critical thinking in a community college – First interview question: How do you explain critical thinking to your students? [RQ2/IQ2(a)]

ADMJ #5 So, I don't know that I tell them "This is critical thinking," but I definitely emphasize that, you know, "you are here to memorize some things and be able to regurgitate them, but mainly what I would like to see is you applying those things to different situations and not just kind of being a robot, spitting out information that is not gonna do you any good when you're actually out working." So, sometimes I get students that even ask me, you know, "how come you don't do more homework, or something" and I tell them "I want to observe you doing the work," so we do more in-class activities where I can observe and watch and give feedback.

KK What assignments have you used in your classes to teach or promote critical thinking? [RQ2/IQ2(b)]

ADMJ #5 So, we do a lot of what I call "lab work," where whatever activity that I'm teaching for that period of time, they'll do that and kind of show their skills in doing specific tests, or different processes and then taking that and applying it to a

more all-encompassing crime scene scenario where they're either interacting, more of a role-player type thing, or maybe there's just a lot of unanswered questions that they have to fill out as they're going and use that critical thinking to decide what path they're gonna take to process something. So I do a lot of that, and then I have a couple or more written assignments to kind of show me their thought process on paper.

KK OK, can you tell me a little more about the written assignments or one of them, if you can?

ADMJ #5 Yeah! So, one that I have is for blood stain analysis, so I give them a series of photos from a crime scene from different perspectives and give them very minimal information about the crime, kind of like we would get if we were out at a crime scene, and then I have them go step by step – Describe the blood stains at their scene. “Tell me, based on those stains: What can that possibly mean about how the blood got there?” And then kind of extrapolate that out to “what does that mean about how people were moving around in the crime scene.” And one of the most important things in critical thinking is in what order things would have to happen in order to see the stains the way they are, and just kind of go step by step and, you know, how I would break it down for myself, just to see if they're hitting every component to get from the stain to the actual final reconstruction of it.

KK So, you're interested in process, not so much the answer to that, but how they get to that answer . . .

ADMJ #5 Yeah, so then I can tell if they're missing some big chunk, or if I didn't teach something correctly.

KK So what readings have you used in your classes to teach or promote critical thinking? [RQ2/IQ2(c)]

ADMJ #5 I don't necessarily have any, a lot of readings, I guess. I have a couple that are more on ethics and trying to think around things and how to – like, how to not be biased, I guess. It has a little bit of a critical thinking component to it.

KK Have you used any activities inside the classroom to teach or promote critical thinking? [RQ2/IQ2(d)]

ADMJ #5 No, just that I always try to find a final project that is incorporated into the final exam grade and that is a hands-on portion of the final exam, and that it kind of incorporates everything that we've talked about all semester, bringing it together; whereas most everything else I do is piecemeal.

KK Are there any activities you have used outside the classroom to engage students in critical thinking? [RQ2/IQ2(e)]

ADMJ #5 The only thing that I – I guess it'll be considered outside – that I do is try to encourage them to kind of stay up on any news that they've heard and then they come in and bring up any issues that they found and we talk through it – It could have a component of critical thinking.

KK How do the Criminal Justice faculty members assess critical thinking, and a portion of this question: Please describe how students demonstrate critical thinking in your classes. [RQ3/IQ3(a)]

ADMJ #5 So, I think most of it is by them showing me the steps that they are taking either hands-on, showing me what they're doing as they're going through it, or



filling out answers to questions for more, like, written assignments; or even the labs have answers to questions that are kinda step-by-step that they can show me what they're thinking.

KK Please describe ways you assess critical thinking in the Criminal Justice classes you teach. [RQ3/IQ3(b)]

ADMJ #5 Sometimes it's not easy, cause I try to explain to the students that "I'm not giving you a 'right or wrong,'" I mean, there're definitely some questions that have right or wrong answers, but I do look at the thought process that they're taking and say "ok, you're on the right track here and then here's where you got off a little bit." So it's almost like I do -- I do almost two kinds of assignments; one where they first learn the concept and they're gonna do a hands-on and kind of try it; and then I do one that's more, I guess, comprehensive of, you know, we already talked through it, you went astray here and then now maybe you should know a little bit more about it. I'm still not really judging them on right or wrong, but they should be now more on the right path, I guess.

KK So you give them a couple of tries to see if they understand –

ADMJ #5 Yeah, and then I sort of correct –

KK Should critical thinking be assessed in the same manner for all Criminal Justice courses? [RQ3/IQ3(c)]

ADMJ #5 Yeah, so I think it's probably really hard to do that, cause mine is very hands on, you know; I find that the most useful and the most telling for me to know that people are absorbing the information; whereas that's definitely not the case for other classes that don't have that kind of component. And for me, I find it harder to have more written assignments that kind of judge that critical thinking; some lend themselves to it a bit easier, but others there's just no way but watching somebody do it to know if they're able to kind of apply it.

#### INTERVIEW of ADMJ #6: 10.27.17

##### Theme One: Teaching/assessing varied by type of courses

##### Theme Two: Manner critical thinking is addressed varied by instructor

##### Theme Three: Instructor's 'real-world' experience a component of addressing critical thinking

KK Today is October the 27<sup>th</sup> and I'm interviewing ADMJ #6. I'm interested in how community college faculty members in a Criminal Justice program define, teach and assess critical thinking. There're a couple of demographic questions before we get started. How long have you been working as an educator in the Criminal Justice program at this Community College?

ADMJ #6 I think about three and a half years.

KK In what part of Criminal Justice system do you have experience?

ADMJ #6 Community-based corrections mostly, parole services.

KK How long have you been or were you employed in this area of criminal justice?

ADMJ #6 I'm still employed and I have worked there for 30 years.

KK And the first interview question: Please discuss the components necessary to describe critical thinking. What I'm getting at with this question is, how do you define critical thinking? [RQ1/IQ1(a)]

ADMJ #6 Well, I actually had to think about this because I don't, you know, I don't have a set definition right in my mind, but I was thinking things like, making sure people consider all the various aspects of an issue, you know, look at multiple perspectives, know to gather information from different perspectives, and then be willing to use all of those in a way that, you know, the information and the relevance in making a decision particular to the circumstance. I think they need to be open to new perspectives or – What I thought a lot about critical thinking and looking at the questions, I thought, well maybe taking people outside of what they know, right?

KK Ok, second question. What should critical thinking look like in a Criminal Justice class at this college? [RQ1/IQ1(b)]

ADMJ #6 I think it should look like helping students become aware of issues or aspects of the system or perspectives that they may not have been aware of previously and if they were, well then, give them more in-depth knowledge and – so that would include maybe facts about the system and how it works, and different aspects. But I think that, also a big portion of Corrections and current Justice is social issues and dealing with people, so I think, the sociological stuff, you know, maybe even family dynamics, but certainly economics, social class; I just have all those things sometimes interact, or may be present in the criminal justice stuff and I think just encourage them to be willing to, you know, consider those perspectives. We tend to see, I think – a lot of folks come to these kinds of careers, and often to these classes thinking it's a lot of enforcement -related process and that's all that there is, right? You know, and it's far more than that, so, helping people understand that, really, and it's not so much critical thinking, but understand what the reality of the career would be if they got into it.

KK Ok. Is there anything else you think it's important related to how critical thinking is defined in a community college Criminal Justice program? [RQ1/IQ1(c)]

ADMJ #6 Nothing really that I can think of, other than how it is used, or what the elements of it might vary by topic, you know, by class certainly. I think that what I described previously was general enough to capture it.

KK How do the Criminal Justice faculty members in a community college teach critical thinking? How do you explain critical thinking to your students? [RQ2/IQ2(a)]

ADMJ #6 Well, I don't know that I ever have, truthfully, you know, I mean, in my mind, you know, it is something we try to capture as part of the learning process, but I don't believe I ever had a discussion about “we're gonna look at critical thinking,” or “here's the components,” or different things. I think it's just kind of a given and then we kind of talk about the nature of the particular assignments or aspect of the system and related to the classes. Just like I said, I've never talked to students about critical thinking, I just address the underlying process.

KK What assignments have you used in your classes to teach or promote critical thinking? [RQ2/IQ2(b)]

ADMJ #6 Ah, Well, I think that a variety of things, just the giving of information, just by reading the textbook there is facts and information; we use scenarios in assignments that encourage or require students to pull from a set of information and make some determinations about it, judgements and recommendations, so in

community-based corrections, for example, you know, there's the case scenario, and here're the areas we're looking at. What are the factors involved and what rating would you give, and that kind of thing. So, a lot of case management scenarios in general, even just things that there's not a right answer, for example, release decisions, or how would you handle – The textbook offers some, like here's a probation situation, what would you do, or what are the options? I have some movies that I use that I think help broaden perspective, you know, they show different aspects of the system, and people who are victims or victimized, or offenders who have been in all those roles, and they, hopefully by broadening their view, and then asking to discuss it, and so they are able to say what they've learned, what surprised them; maybe they didn't learn too much from it; so I can use some current news articles, or you know, not too much topic papers, but articles or

pieces of information that are relevant to the work, you know, real work, rather than this textbook stuff. There's a research paper involved, and so they have to pick a topic and delve into it more closely, and that gives them an opportunity to discuss options, weigh them, get some feedback, so in looking at that, you kind of get a feeling of whether they're really thinking about things, or just spewing facts.

I think you have a question later about the class, when I teach in the classroom. I was always doing a tour, you know, I take them to the residential center –

KK What readings have you used in your classes to teach or promote critical thinking? [RQ2/IQ2(c)]

ADMJ #6 Oh, I think I have – there's one about women in jail and – I'm trying to think about specific articles I have some examples of outside assessments and things like that, but that isn't so much an article, but they're written work that they review and then most of the readings are mostly the textbook I think, and then I throw a few articles here and there. Sometimes group activities, like here's the topic or, let's say, you have sex offenders, and your group are mental health defenders and one of the top three topics or the issues, you know. And some of this is designed through class interaction, but it really gets the critical thinking, because they have to share information and think about other people. That and just specific assignments, I think, that I mentioned earlier, that are targeted towards getting people to think about all the aspects and then either kind of reiterate them, or blend them together and make a recommendation.

KK Are there any activities you've used OUTSIDE the classroom to engage students in critical thinking? [RQ2/IQ2(e)]

ADMJ #6 The tour, I think it would be mostly that –

KK So, third research question: How do Criminal Justice faculty members in a community college assess critical thinking? Please describe how students demonstrate critical thinking skills in your classes. [RQ3/IQ3(a)]

ADMJ #6 Well, I think participation in some of the activities we've just talked about, submission of assignments; I'm not sure that's what the question asked, you know; but when they submit written work and I evaluate it, you know, I can get a feel for that, and sometimes just their interaction, the questions they ask, the way – if there's a small group activity, the way they participate or share information, or contribute to it, or begin to think about a thought that somebody else raised.

- KK The discussion, the topics we talked about – Does that play in how you see critical thinking in your classes?
- ADMJ #6 You know, I think it really could. I think that in a classroom setting, it's so much easier to have a conversation, or get a question that really does get people thinking critically, even if that maybe wasn't a part of the full plan, right? Online, you know, it doesn't happen so much. So, I think a lot of how to have those discussions in a discussion forum is kind of hard, but yes, you certainly could use current topics. I tend to stick pretty close to whatever my plan is, items to cover, as you mentioned, the textbook. There're so many issues, so I just cover in class what I think are the most important.
- KK Should critical thinking be assessed in the same manner for all Criminal Justice courses? [RQ3/IQ3(c)]
- ADMJ #6 Well, I would think that in the same general manners that we just discussed, but I don't think there's a cookie-cutter, you know, a template or something like that; it's gonna depend on the nature of the course, and the kind of topic, and, I guess, if you're talking about Case Law or something like that and how you apply that, that's gonna be much more specific, so you would want consistency, more than these classes. But we're talking about "here's a scenario for a guy with five critical problems. What do we deal with first, or how can we deal with them?" It's more about process and options and discussion, than the right answer, so I would think that we all would be looking at the same collection of factors in how we evaluate if somebody is thinking appropriately and critically, but I think it's gonna go different.
- KK OK – so anything else I didn't ask you about that you think it would be helpful for me to know about critical thinking?
- JW I don't think so.