CULTURAL COMPETENCE: EDUCATING PUBLIC SCHOOL TEACHER CANDIDATES IN MATTERS OF DIVERSITY

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CULTURAL COMPETENCE: EDUCATING PUBLIC SCHOOL TEACHER
CANDIDATES IN MATTERS OF DIVERSITY

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Dissertation

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ABSTRACT

The cultural make-up of the United States is ever-changing as the country becomes increasingly diverse. Every racial/ethnic category, except White, has significantly increased over the past several decades. This is a clear indication of how the U.S. has changed in ethnic and cultural composition over a short period of time. Cultural competence is a concept that has evolved over time from various perspectives and has been integrated into policy in many fields based on the needs of policymakers. This research has accepted the current evidence presented in the literature regarding the need for culturally competent teachers in the public school system based on the fact that the population of students within public schools continues to become more diverse. Also, in order for all children to be provided an effective, quality education, teachers must be able to relate to, understand, and be equipped with the tools necessary to meet state standards and address federal guidelines related to providing a quality education for all students.

The federal government continues to urge states to set higher standards for schools and has funded several initiatives designed to implement cultural competence standards within education. The federal government has also set a national agenda to address diversity in education and encourages culturally and linguistically appropriate collaborations aimed at producing equitable outcomes for students. States are setting higher standards for their school systems and are emphasizing the importance of diversity
in the hiring and retaining of qualified teachers. School systems are desperately calling for culturally competent teachers to help them meet standards set by the states. Higher education plays a vital role in producing qualified teachers to effectively teach in diverse classrooms with the knowledge, skills, and abilities necessary to facilitate an appropriate teaching and learning environment for children.

This research study was designed to explore the change in teacher candidate perceptions of disposition and adaptability related to cultural competence. Specifically, this research focuses on examining the learning outcomes of students at The University of Akron who are enrolled in a targeted course aimed at increasing cultural competence amongst teacher candidates by examining changes in students’ perceptions of their own disposition and adaptability (the two key attributes of cultural competence). Overall, the cultural competence course had no significant effect on any of the five attributes of disposition, or the four attributes of adaptability, as they relate to cultural competence. Therefore, we can conclude that the cultural competence course had no significant effect on teacher candidates’ disposition or adaptability. While this study is centered on a single undergraduate teacher candidate population at a single public university, the study has important potential implications regarding the educational well being of the nation. This research may begin to bridge that gap regarding what we know and do not know about cultural competence education amongst teacher candidates by providing further information linking the course aimed at increasing cultural competence and actual outcomes.
DEDICATION

This dissertation is dedicated to one of the strongest women that I have ever known, my mother and Guardian Angel, Elizabeth “Jeanie” Willingham. Although at times I did not see it, my mom was my biggest cheerleader. She was proud of my accomplishments, and always encouraged me to follow my dreams. She was an amazing grandmother and spent countless hours watching Wonder Pets with Nya while I attended classes and worked towards achieving my goals. My mother fought a fight for her life like no other; it takes a very strong and courageous person to be able to battle the way she did, all the while humble with a gracious smile. My mom was a bright light, somebody who got along with everybody, somebody that you wanted to be friends with, and most importantly, somebody that you could never forget. I love you and miss you very much mom, and thank you!
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I would like to thank my Aunt Lisa and Uncle George who have always supported my educational pursuits and who have dedicated so much time and effort into helping me with Nya; I could not have done this without you guys. Lisa, thank you for all that you have done for me and for always being there for me no matter what; you are not only my aunt, but also one of my very best friends.
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CHAPTER I

INTRODUCTION AND REVIEW OF CULTURAL COMPETENCE LITERATURE

Introduction

Cultural competence is a concept that has evolved over time from various perspectives and integrated into policy in many fields based on the needs of policymakers. Cross, Bazron, Dennis and Isaacs (1989), in development of one of the first definitions of cultural competence, grounded the concept which has overlapped into several fields, and has since been evolved and modified from diverse perspectives; but the core principles have remained intact. Cross et al (1989) defines cultural competence as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable that system, agency or those professionals to work effectively in cross-cultural situations” (p.13). This definition of cultural competence is the most widely used definition across disciplines and will be used as the foundation for this research.

The cultural make-up of the United States is ever-changing as the country becomes increasingly diverse. Over time, the country’s population has continued to evolve; groups that are considered minority populations are now demonstrating notable increases. A synthesis of historical census statistics on population totals by race from
1790-1990 for the United States utilizing U.S. Census data was conducted by Gibson & Jung (2002). Table 1 reveals the percentage of the U.S. population by race from 1940-2000. Every racial/ethnic category, except White (which decreased almost 15% within the sixty year time period), has significantly increased from 1940-2000. Namely, the Black population rose from 9.8% in 1940 to 12.3% in 2000, Asian and Pacific Islander rose from 0.2% in 1950 to 3.6% in 2000, and Hispanic rose from 6.5% in 1980 to 12.5% in 2000. This data is an indication of how the U.S. has changed its ethnic and cultural composition over a short period of time. It is also a representation of how the population will continue to change and evolve becoming increasingly diverse. According to Schmidley & Robinson (2003), the estimated size of the foreign-born population in the U.S. was 32.5 million--an increase of 12.7 million (64% increase) from the 19.8 million in the 1990 census.

Table 1: U.S Population Percentages by Race 1940-2000

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>American Indian, Eskimo, and Aleut</th>
<th>Asian and Pacific Islander</th>
<th>Other race</th>
<th>Hispanic origin (of any race)</th>
<th>Two or More Races</th>
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<tr>
<td>2000</td>
<td>75.1</td>
<td>12.3</td>
<td>1.0</td>
<td>3.6</td>
<td>5.5</td>
<td>12.5</td>
<td>2.4</td>
</tr>
<tr>
<td>1990</td>
<td>80.3</td>
<td>12.1</td>
<td>0.8</td>
<td>2.9</td>
<td>3.9</td>
<td>9.0</td>
<td>(NA)</td>
</tr>
<tr>
<td>1980</td>
<td>83.1</td>
<td>11.7</td>
<td>0.6</td>
<td>1.5</td>
<td>3.0</td>
<td>6.4</td>
<td>(NA)</td>
</tr>
<tr>
<td>1970</td>
<td>87.5</td>
<td>11.1</td>
<td>0.4</td>
<td>0.8</td>
<td>0.3</td>
<td>(NA)</td>
<td>(NA)</td>
</tr>
<tr>
<td>1960</td>
<td>88.6</td>
<td>10.5</td>
<td>0.3</td>
<td>0.5</td>
<td>0.0</td>
<td>(NA)</td>
<td>(NA)</td>
</tr>
<tr>
<td>1950</td>
<td>89.5</td>
<td>10.0</td>
<td>0.2</td>
<td>0.2</td>
<td>0.0</td>
<td>(NA)</td>
<td>(NA)</td>
</tr>
<tr>
<td>1940</td>
<td>89.8</td>
<td>9.8</td>
<td>0.3</td>
<td>0.2</td>
<td>(X)</td>
<td>(NA)</td>
<td>(NA)</td>
</tr>
</tbody>
</table>

NA – Not Available
X – Not Applicable
Sources: Gibson & Jung (2002); US Census 2007 American Community Survey
Passel & Cohn (2008), the authors of the Pew Research Center Social & Demographics Trends Report, indicated that the United States population is expected to rise to 438 million in 2050 (296 million in 2005). Passel & Cohn (2008) project that “of the 117 million people added to the population during this period due to the effect of new immigration, 67 million will be the immigrants themselves and 50 million will be their U.S.-born children or grandchildren (i-ii). Among the other key population projections:

- Nearly one in five Americans (19%) will be an immigrant in 2050, compared with one in eight (12%) in 2005. By 2025, the immigrant, or foreign-born, share of the population will surpass the peak during the last great wave of immigration a century ago.

- The major role of immigration in national growth builds on the pattern of recent decades, during which immigrants and their U.S.-born children and grandchildren accounted for most population increase. Immigration’s importance increased as the average number of births to U.S.-born women dropped sharply before leveling off.

- The Latino population, already the nation’s largest minority group, will triple in size and will account for most of the nation’s population growth from 2005 through 2050. Hispanics will make up 29% of the U.S. population in 2050, compared with 14% in 2005.

- Births in the United States will play a growing role in Hispanic and Asian population growth; as a result, a smaller proportion of both groups will be foreign-born in 2050 than is the case now.

- The non-Hispanic white population will increase more slowly than other racial and ethnic groups; whites will become a minority (47%) by 2050.

- The nation’s elderly population will more than double in size from 2005 through 2050, as the baby-boom generation enters the traditional retirement years. The number of working-age Americans and children will grow more slowly than the elderly population, and will shrink as a share of the total population (i-ii).
America can no longer be considered a melting pot, but instead should be viewed more like a salad bowl, where cultural distinctions are visible and valuable to the U.S. Each individual or group of individuals has something valuable to contribute to society. Historically, the country was focused on meshing cultures into one dominant culture that would morph into what could be considered U.S. culture. Now, we are realizing that the distinctions that can be made from group to group, or individual to individual, can be seen as a significant benefit.

Very few countries besides the United States has a demographic make-up of such diverse groups of people, including race, ethnicity, religion, etc. which is a tool that can be used to connect to the rest of the world. Demographic changes in the United States should be perceived as an asset in terms of the mixture of different perspectives, talents, resources, and opportunities necessary to compete in a global economy (Mays, DeLeon and Viehweg, 2002).

Conversely, challenges have been presented due to the extreme disparities that exist in various facets of U.S. society, such as healthcare, education, and employment (Tensile, 2000; Mays et al, 2002). Specific groups of people, including racial minorities, women, gay/lesbian population, religious minorities, etc. have experienced significant barriers and limited access to employment, healthcare, and educational opportunities.

Higher education remains an influential institution in the United States that plays a vital role in society. “Institutions of higher education are in a unique position for addressing issues of race and culture. To some extent, these institutions serve a captive population, and at an age and time when this population is motivated to learn and eager to garner new experiences. It is therefore imperative that colleges and universities provide
diverse cultural experiences that facilitate cultural learning and understanding” (Brown, L.I., 2004, p.28). Therefore, colleges and universities hold an immense amount of power in terms of the future of the country.

Colleges and universities serve a purpose unlike any other segment of society, which largely affects directly or indirectly many areas of society through the education of its students. Students enrolled in higher education institutions are trained in their various fields to be competent in their relative field and to effectively go out into the world and contribute to society by providing services related to that field. Graduating incompetent individuals and releasing them into the world to be ineffective is not quality education.

Therefore, it is the responsibly of institutions of higher education to assure that individuals are prepared with the knowledge, skills, and abilities to do their part in moving us as a society in the right direction. Consequently, a compelling national interest exists related to effective higher education and if issues, such as diversity and cultural competence are not addressed, society will be marginalized and unable to compete on a global level.

According to the National Center for Education Statistics in the U.S. Department of Education (2009), there are approximately 18.3 million students attending two- and four-year colleges in the U.S. and that number is expected to reach around 20.4 million by 2016. These students enter the workforce and are expected to effectively perform the jobs they were trained to do. It is necessary to examine the changing characteristics of America’s demographics in relation to the emphasis the country places on quality higher education because of the ways in which it translates into society.
Diversity and cultural competence issues and education are becoming a mandated part of curriculums at many colleges and universities, and addressing issues of diversity in the curriculum effectively translates into students entering the world prepared to serve a diverse population. Institutions of higher education have an obligation to train and prepare their students for the experiences they will face in the workforce that will allow them to use their attitudes, abilities, and skills to be effective and competent employees.

The profession of teaching can be identified as one of the most significant and influential fields that a college student may enter. Teaching young people, whether effectively or not, has a profound effect on society as a whole. Choosing to become a teacher comes with the enormous task of educating young people in this country to eventually become productive and effective members of society themselves. Through the educating of children, teachers are expected to do so with an understanding of young people, the way they think, act, and perceive and receive instruction. In addition, teachers must have the ability to interact appropriately with the families of the children that they teach.

Too often, teachers are not culturally competent enough to teach in diverse classrooms. The students that are not part of what could be considered “mainstream society” often fall through the cracks of the country’s educational system. Teachers with good intentions are often not educated enough in the realm of diversity and cultural competence to have the skills necessary to tailor instruction to fit the needs of the classroom, or to have the insight into other cultures as to have the ability to relate to individual students differently.
Cultural competence is important because the United States’ diverse population is growing, especially amongst groups considered “minorities”. With the increase of globalization, it is vital to systems and agencies to embrace cultural competence, and to incorporate the concept into the policies and practices of the system. This can be done through implementing appropriate services based on the proposition that when doing so, the increased success of the organization is inevitable.

An organization, school, or any other entity for that matter, cannot deliver effective services if it does not recognize the population of people in which it serves. It cannot deliver effective services if those that deliver the services are not representative of those that are served. It cannot deliver effective services if those that deliver services are not educated on the characteristics of that population. And it cannot continue to deliver effective services unless policies and practices, including on-going cultural competence training and development, as well as evaluation are incorporated.

King, et al (2006) demonstrate the necessity to enhance school-based support in the realm of diversity and cultural competence based on the rising student population and diverse classroom settings. This is not limited to increasing cultural competence amongst students, professors, and administrators only on campus. This also means by increasing efforts through educating college students on issues of diversity and aiming to increase their cultural competence.

Addressing cultural competence in higher education is imperative in preparing any student for their future in their chosen field, but possibly even more imperative for teacher candidates. Educating future educators and cultivating teacher candidates to be
effective educators to all students should be a vital part of the curriculum and learning process.

If teachers develop knowledge of the cultural similarities and differences between ethnic groups, they are more likely to embrace those differences positively, and therefore will be able to effectively teach a diverse classroom of students from various cultural backgrounds. In turn, teaching in a way as to value all students, and provide quality instruction to all students, creates the same type of cultural competence in the children being taught.

Teachers have a significant impact on, not only the educational development of the children, but also the social development of the children. Teachers are some of the most vital role models for children, therefore, demonstrating cultural competence to students through their own actions, can increase cultural competence in the classroom and with each individual student. In effect, culturally competent teachers, can in turn, positively affect how students relate to each other, other authority figures, and society in general. Producing culturally competent children can reduce discrimination, acts of bullying, and miscommunication throughout the educational process that often carries on into adulthood.

Many of the issues related to being culturally incompetent in the United States can stem from White practitioners having little to no meaningful interactions with groups of individuals unlike themselves prior to interaction on the job (Proctor & Davis, 1994). The education research demonstrates that teachers are most often White (83.7%), female (75.2%), and come from middle-class backgrounds (National Center for Education Statistics, 2006; National Education Association, 2003). This may be a significant
problem, in that these teachers may not be equipped with the necessary knowledge, skills, and abilities to do the job effectively.

By increasing the cultural competence of our future educators through undergraduate and graduate education, the issues surrounding certain groups not receiving a quality education will begin to decrease. Kruzich, Friesen, Murphy, & Longley (2002) reinforce the need for practitioners to, not only undergo formal training, but to also be exposed to other experiences and opportunities that heighten their understanding and cultural competence amongst all. Fortunately, teacher candidates are subject to student teaching assignments that have the potential to enlighten these future educators on what is to come when entering the field related to diversity. The question remains if these types of experiences are substantial enough to increase cultural competence amongst teacher candidates to a level that allows them to educate all students effectively.

Producing culturally competent teachers entering the field of education provides students, teachers, families, and school systems multiple benefits. Children learn in different ways; therefore, teachers possessing the ability to identify strategies relevant to instruction, communication, and disciplining students are essential to the learning process. The ability to tailor different strategies based on what a teacher knows (and what a teacher does not know) about the students in his/her classroom can make a difference in how successful a student is in that particular educational setting and the students’ future educational process.

For example, a student of a particular ethnicity may feel uncomfortable or unfamiliar with direct eye contact, or other non-verbal cues; a teacher that knows and
understands this can tailor his/her methods appropriately. In addition, some groups (i.e., African-Americans, Middle-Eastern decedents, Native-Americans, Gay/Lesbian, etc.) have experienced discrimination and lack of access in many areas in U.S. society for decades, and from these experiences, mistrust has grown towards the dominant cultures in the country and have been passed down generationally. Acquiring this type of knowledge and understanding of the historical context in which certain groups operate in society can constructively be used to inform educational policy.

All students, even those with exceptionalities or those from varying demographics (ethnicity, race, socio-economic, etc.), if provided meaningful and effective educational experiences, have the ability to grow into successful students and valuable members of the workforce and society. Teachers knowing and understanding their students will increase opportunities for communication and collaboration with parents. This includes being able to more effectively draw parents into the educational process and giving parents strategies at home to supplement the educational process tailored to specific students.

In addition, culturally competent teachers will be better equipped with the skills necessary to recognize and identify areas in which students and/or families may need additional resources. This can add depth to the educational process and create avenues which can generate more meaningful collaborative relationships between teachers, counselors, families, etc.

Knowing and addressing the needs of a student outside the classroom can only increase the likelihood of success for students. For example, if a child is so hungry that he/she cannot focus on school work, the culturally competent teacher might have the
ability to identify these types of issues instead of labeling the child with a behavioral
issue or assuming the child has a learning disability. Being able to identify these types of
needs of the child outside of the classroom can assist the teacher in their quest to
effectively teach the child. According to Richards, et al. (2005):

“With increasing numbers of students from different backgrounds, schools are finding it difficult to provide an appropriate education to all. Moreover, the school system is plagued by student underachievement, dropouts, and excessive special education referrals and placements, particularly among students from culturally and linguistically diverse backgrounds. The problem of disproportionate representation of students from culturally and linguistically diverse backgrounds in special education has emerged as one of the system’s greatest challenges, occurring for reasons ranging from inappropriate or inadequate instruction to flawed assessment practices” (p.3).

Also, culturally competent teachers may have the ability to identify specific issues
within the classroom and be able to identify curriculum or other instructional methods
that can be used to treat clinical symptoms of aggression, behavioral issues,
hyperactivity, and/or depression. Other benefits to children having culturally competent
teachers, as was briefly mentioned previously, include children learning to become
culturally competent themselves, which can translate into their lives in several ways,
including how they relate to others, communication, attitudes, etc.

Another major benefit to students, teachers, and schools is that cultural
competence standards create and challenge teacher creativity in the classroom. Teachers
are challenged to “step out of the box” and to create innovative techniques to effectively
educate diverse classrooms of students with unique backgrounds and experiences each
new year. King et al. (2006) argue that ultimately, children will benefit greatly in many
ways from culturally competent services.
Utilizing relevant material and curriculum to that of the demographics of the classroom can elicit positive changes in students’ perceptions of the teacher and the overall educational process itself. Instructional practices can be developed into new tools for learning, not just what is in the book. For example, students from specific cultural backgrounds who have experienced discrimination, who have grown up with an awareness of inequity and injustices towards their social group, sometimes develop complex feelings of inferiority based on their perceptions of how the dominate American culture views them. A culturally competent teacher has the ability to utilize cultural knowledge and delve into his/her cultural competence tool box in order to develop teaching materials and practices into new practical tools relative to the classroom. For example, teaching students about African-Americans history and the heroism behind individuals from that particular cultural group (i.e., civil rights activists), if taught appropriately, can evoke a sense of pride in African-American students, while at the same time instilling a sense of value, understanding, new beliefs, attitudes, and knowledge in students from other cultural backgrounds.

Higher education institutions have the ability to educate teachers in a way that can help school systems, and ultimately states, achieve and address the academic standards set forth. A need for educators to be culturally competent becomes a necessity beyond being tolerant of the differences of others. It becomes about being able to move beyond the minimal standards of what is, and moving towards what should be. The understanding of teacher candidates’ level of cultural competence can and will determine how effective they will be as educators. A teacher is only as good as they can relate to their job, colleagues, and most importantly, the students that they serve.
In the public sector, there is an obligation to respond to the needs of the community and to ensure standards of equity, efficiency, and effectiveness. The major educational need in this country is to provide a quality education to all students and to address the major disparities that exist in education within specific populations. Therefore, colleges and universities should then feel overwhelmingly obligated to educate future teachers in a way as to address those educational needs of the community.

What we do not yet know definitively is exactly what types of education and intervention is most effective in institutions of higher education in regards to teacher candidates. Currently, indisputable statistical evidence does not exist to make that determination. We also do not know how much a teacher candidates’ demographic make-up and background, including parents, childhood friends, schools, neighborhoods, previous courses taken, experiences, age, gender, etc. affect their level of cultural competence, but more importantly, how these variables may affect their ability to increase cultural competence. Studies on an intermediate level have demonstrated positive outcomes of cultural competency education and/or practical experiences; however, we cannot be certain that students are answering the questions proficiently, as there is a high probability that they may be responding socially desirable.

This research has accepted the current evidence presented in the literature regarding the need for culturally competent teachers in the public school system based on the disparities that exist within specific populations (e.g., low-income, racial minorities). In addition, the need for culturally competent teachers exists from the mere fact that based on what we know about the changing demographics of the population, we also know that the population of students within public schools continues to get more diverse.
In order for all children to be provided a quality education, teachers must be able to relate to, understand, and be equipped with the tools necessary to meet state standards and address federal guidelines related to providing a quality education to all students. This research also accepts the presumption that the level of effective education received by students preludes to positive educational experiences. A positive educational experience can also be a significant determinant in how effective the children become in the future, whether it be in school, college, in the workforce, or in society. This study will not be an examination of pedagogical arguments between classroom instruction versus service learning/practical instruction, nor on the specific instructor styles, or course formats, but instead focus on outcomes of the specific training geared towards educating teacher candidates about diversity and increasing cultural competence.

This research will examine undergraduate teacher candidates at The University of Akron through a specific mandatory course through The College of Education targeted at teaching diversity and aimed at increasing the cultural competence of future educators. The research will also utilize a comparison group of teacher candidates enrolled in an introductory course. While this research is centered on examining the outcomes of a course involving a single undergraduate teacher candidate population at a single public university, the study has major potential implications regarding educational policy. The study may be used to inform educational policy regarding higher institutions in regards to how we are educating our future educators.
Defining Cultural Competence

Cultural differences have been a point of inquiry for centuries. Additionally, race relations and diversity have been studied for decades. The evolution of study in these areas led to a movement of diversity education and awareness, where the constructs of “cultural sensitivity” and “cultural awareness” of the late twentieth-century were developed and used. According to the Center for Effective Collaboration and Practice (2003), terms such as cultural awareness and cultural sensitivity refer to previous ideals behind improving cross-cultural relations and organizational capacity to improve service delivery.

Cultural awareness includes internal transformations (i.e., attitudes, values, beliefs, knowledge) regarding development of understanding and sensitivity towards others. Basically, it required organizations (or individuals) to recognize cultural differences and shape the values of the organization to be tolerant of others. The Texas Department of Health, National Maternal and Child Health Center of Cultural Competence (1997) defined cultural sensitivity as recognition of cultural differences and similarities, but being able to do so without assigning negative values to the differences. Cultural sensitivity was a step beyond cultural awareness in that it not only required recognizing and acknowledging diversity, but focusing on equality and acceptance as opposed to mere tolerance.

With more inquiry and understanding on the subject, the term cultural competence has become the accepted term and definition widely utilized. Scholars (Cross et al., 1989; Davis, 1997) define and refer to cultural competence as a step further than past terminology and initiatives. Benjamin (1993) emphasizes that cultural competence has
moved well beyond the concepts of cultural awareness or cultural sensitivity. In essence, as the terminology has evolved over time, the meanings and implications behind them have as well, translating into shaping and reshaping policy.

Consequently, cultural competence is a term built on the compilation of the knowledge, attitudes, skills and abilities of individuals, groups, and organizations and how they utilize those attributes and skills to act and react effectively in differing cross-cultural situations. The term culture refers to the patterns of behavior related to race, ethnicity, or social groups, which most often include thoughts, actions, beliefs, values, communications, etc. Competence involves possessing the capacity to function in a specific way (i.e., to function within the context of a cultural setting defined by a particular group). Competency in cross-cultural situations requires learning new patterns of behavior and having the ability to effectively apply them to the appropriate situations (Osher & Osher, 1995; King, Sims & Osher, 2006). One can receive education on diversity issues, other cultures, social disparities, etc., but cultural competence also encompasses how an individual applies that knowledge in the field.

Other scholars and practitioners have also contributed to how we define cultural competence in relation to other various fields. Davis (1997) addressed cultural competence in reference to health outcomes and defined the concept as the integration and transformation of knowledge about individuals and groups of individuals into specific standards, policies, practices, and attitudes used in appropriate cultural settings to increase the quality of services, thereby producing better outcomes. This has been done in the healthcare field by developing standards of service delivery related to delivering culturally and linguistically competent services.
According to Mays et al. (2002) “cultural competence is a set of congruent behaviors, practices, attitudes and policies related to embracing cultural differences that are integrated into a system or agency or among professionals” (p. 139). Williams (2006) suggests that “cultural competence should be defined by the capacity to work across multiple paradigms to find ways to engage with clients” (p.209). According to Taylor-Brown, Garcia and Kingson (2001), “Cultural competence requires more than an understanding of a person’s racial, ethnic, or cultural identity; it involves assessing the interactive influence of multiple factors…[we] must acknowledge and understand these variables and use them to assess who we are and what we do in our interactions with those we serve” (p.185). It is apparent that although differing slightly, the core principals of the various cultural competence definitions presented here are similar.

As mentioned, Cross et al (1989), laid the groundwork for operationalizing cultural competence by developing the most widely used definition of the construct as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable that system, agency or those professionals to work effectively in cross-cultural situations” (p.13). Scholars have explored cultural competence in the system of care and identified principles, provided a framework for understanding the concept of cultural competence, and determined that cultural competency runs along a continuum (Cross et al., 1989; Goode & Jones, 2009). Cross et al. (1989) explains that cultural competence is a developmental process and occurs along a continuum with six positions: cultural destructiveness, cultural incapacity, cultural blindness, cultural pre-competence, cultural competence, and cultural proficiency. It is essential for agencies to assess where they fall along the continuum in order to help the
agency understand the culture of their organization and assist with further organizational
development.

Cross (1995, 1997) compared two worldviews for understanding culture; the linear world
view, and the relational worldview, and said that it is necessary for the relational worldview to be incorporated into agencies, which should then translate into services. Cross et al. (1989) asserts there are five elements that are necessary at every level in an organization and should be clear through the attitudes, policies, and practices of that organization: (1) valuing diversity, (2) having the capacity for cultural self-assessment, (3) being conscious of the dynamics inherent when cultures interact, (4) having institutionalized culture knowledge, (5) having developed adaptations to service delivery reflecting an understanding of cultural diversity (National Center for Cultural Competence, 2009).

Scholars, such as Cross et al. (1989) discuss cultural competence in an organizational context, where cultural competence moves fluidly through an organization and urges taking cultural competence to the next level by incorporating cultural competence into practice and mastering cultural development. The National Center for Cultural Competence modified Cross’s definition of cultural competence stating that it is a developmental process for organizations, but also for individuals, regarding their levels

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1 “On our globe today, there are two predominant worldviews - linear and relational. The linear worldview is rooted in European and mainstream American thought. It is very temporal, and it is firmly rooted in the logic that says cause has to come before effect. In contrast, the relational worldview sees life as harmonious relationships where health is achieved by maintaining balance between the many interrelating factors in one’s circle of life” (Cross, 1997).
of knowledge, skills, and awareness along the cultural competence continuum that evolve over time (Goode & Jones, 2009).

Kelley & Meyers (1992, 1995, and 1999) describe the need for individuals to self-assess in order to improve skills in interacting with people from other cultures; and later developed a self-assessment tool designed to inform individuals regarding cross-cultural adaptability. Like many other aspects of organizations that require ongoing monitoring, cultural competence must also be consistently assessed on an on-going basis in order to assure effective culturally and linguistically appropriate services are being provided. This allows organizations to continue to learn and grow from itself, as well as to be progressive in cultivating a culture of competence.

Adaptability, Disposition, and Social Desirability

This study will look at cultural competency on the individual level as opposed to an organizational level. This model, like the Cross continuum, suggests that cultural competency is also fluid on the individual level, moving on a continuum. Therefore, moving towards higher levels of cultural competency requires individuals to demonstrate increases in social constructs that make up the core attributes of what cultural competence is: adaptability and disposition. Based on what we know about self-reported survey data regarding answering socially desirability, this concept will also be explored. For purposes of this research, the literature surrounding cultural competence training and education for teacher candidates will be explored, as well as the social constructs related to cultural competency, which include adaptability, disposition, and social desirability.
Adaptability

The first major social construct examined in this study is adaptability; the ability to adapt and respond practically to culturally diverse and cross-cultural populations and situations (Kelley & Meyers, 1992). Calarco & Gurvis (2006) describe adaptability as a necessary skill in order to respond effectively to change, which requires understanding first what adaptability is, and also the elements of adaptability; cognitive flexibility, emotional flexibility, and dispositional flexibility.

Jonas (1994), in stating that adaptability relates to when a teacher can identify an obstacle and tailor instruction to accommodate the needs of the student(s), found in a study of preservice teachers, that without a conscious effort and focus on improving and increasing adaptability, the service learning and student teaching experiences do little to promote it alone. Therefore, as adaptability increases, the more the individual will be able to effectively overcome challenges associated with cultural differences and equitably solve problems.

Kelley & Meyers (1992) provide insights into how one’s individual level of adaptability translates into situations, including interacting and communicating with others, maintaining sense of self in new/different surroundings, as well as teaching diverse groups. These authors identify four critical skill areas within the construct of adaptability in relation to cultural competence which include: emotional resilience, flexibility/openness, perceptual acuity, and personal autonomy. It is based on these constructs that Kelly & Meyers (1995) developed a self-assessment instrument, the Cross-Cultural Adaptability Inventory, to measure these concepts relating to adaptability as well as overall adaptability of individuals. For a teacher candidate to demonstrate
adaptability related to cultural competence not only translates into their ability to adapt to certain situations, but also could be a significant indicator of an individual’s ability to continue to move further along the cultural competence continuum.

Disposition

The second major social construct being examined in this study is disposition; the moral stance and sense of social justice (McElroy, 2007). Calarco & Gurvis (2006) also identify disposition as a vital element of adaptability. Therefore, as adaptability can be described as the key element of cultural competence, disposition can be described as the key element of adaptability. Teachers’ dispositions translate into how effectively they teach students, in terms of how they act and react to situations and circumstances in the classroom (Carter, 1993).

Disposition, related to cultural competence, can be attained and cultivated through the teacher candidate curriculum and experiences (Jung, 2009). This social construct of disposition is a vital component to cultural competence and without higher dispositions of teacher candidates, cultural competence does not exist.

The National Council for Accreditation of Teacher Education (NCATE) has pushed for states to evaluate teachers on their dispositions. Teachers are evaluated on their stance and sense, or perceptions, of social justice, diversity, and other major social constructs. This suggests that areas of “social justice” curriculum requirements be incorporated into teacher training programs across the country. According to Jung (2009) “the assessment of dispositions has thus been essential in developing a baseline for the design of an educational program to cultivate those qualities. The current disposition
assessment approach with its character-related emphasis in many institutions has not yet been an important consideration factor in curriculum design, planning, and assessment, and is frequently utilized as a sorting-out device to identify those who appear to be inadequately disposed” (Jung, 2009, p. 1).

Teacher candidates with high cultural dispositions possess aspects of self-directed learning, transformative learning, critical thinking, reflection, and awareness of their own biases and assumptions, and generate an increased ability for an individual to become more effective at understanding and communicating with others. Colville-Hall & Liang (2003) developed a standardized assessment instrument to measure dispositions of teacher candidates related to cultural competence by examining knowledge, beliefs, values, and norms of teacher candidates. Like adaptability, a teacher candidate that can demonstrate high disposition related to cultural competence may also be indicative of individual’s ability to continue to move further along the cultural competence continuum.

Social Desirability

Another construct explored and utilized in this study is social desirability. The question remains, if teacher candidates, when responding to questions regarding their perceptions of how comfortable and competent they are in their abilities to effectively educate a diverse body of students, are responding socially desirable, or if they are in fact answering proficiently. This makes social desirability a very important variable to control for and therefore will be measured and used as a control variable for this research.

The literature surrounding social desirability bias explains that individuals act in ways that are considered socially acceptable or desirable if we think that someone is
observing us in some way, or as not to violate social norms (Colman, 2001; Streb; Burrell, Frederick & Genovese, 2006; Heerwig & McCabe, 2008). Marlowe & Crowne (1961) developed an assessment tool, the Marlowe-Crowne Social Desirability Scale, comprised of items designed to measure approval dependence and defensiveness, in essence, what scholars determine to be the major attributes of social desirability. Several short versions of the Marlowe-Crowne Social Desirability Scale were developed from the original version by Strahan & Gerbasi (1972) to determine whether the teacher candidates are in fact responding proficiently or socially desirable.

Cultural Competence: The Literature

A significant portion of the cultural competency literature can be found in the fields of health care and social work. However, over the past couple decades, scholars have drawn from that research and begun to look at the importance and implications behind cultural competence relative to other fields, including public administration and education. The following section will explore the cultural competence literature in general, and specifically in the field of higher education, especially related to educating teacher candidates to become effective and culturally competent educators.

According to King et al. (2006), there are five elements that are essential to a system’s capability to enhance overall cultural competence within the context of the system, including service delivery, which should be demonstrated at every level through attitudes, behavior, values, and policies. Those five elements include: valuing diversity, developing adaptations to services based on understandings, institutionalizing cultural knowledge, consciously understanding the dynamics behind cultural group interaction,
and possessing the capacity to self-assess. Ortega (1999) highlights how important cross-cultural training and development has become in career mobility, since we must invest in human capital through education, on-the-job training and seniority programs in order to become skillful in cross-cultural communication.

There are large gaps in the overall literature and research on cultural competency within organizations and systems (with the exception of the healthcare field) regarding research designs, methodological issues, and the operationalization of concepts (Benjamin, 1993). The National Center for Cultural Competence (NCCC) at Georgetown University, a national organization, has become a premier contributor to what we know about cultural and linguistic competency. The Center’s major focal point is translating evidence into policy and practice in healthcare, administration, and education. The organization has pulled from research to demonstrate many reasons why incorporating cultural competence into organizational policy is necessary, including: responding to demographic changes, improving quality of services and outcomes, eliminating disparities in health and educational settings, and addressing issues surrounding access to groups from diverse cultural backgrounds.

Implementing strategies and policies that will impact the quality of graduates from higher education institutions, in terms of the graduates being culturally competent, will, in fact, benefit not only the graduates, but also society. Institutions of higher education desire to be effective in educating students and administrators are becoming progressively more motivated to implement cultural competency programs that will increase cultural awareness and diversity and that will have a positive effect on society (Hurtado, Carter, and Spuler, 1996; Lopez-Mulnix, 2006).
However, the way in which a policy or procedure is implemented will determine how effective it will be. Lopez-Mulnix (2006), in a study of college retention programs, discovered that “campus culture—determined to a large extent by the dominant coalition or power elite—is critical to the success or failure of effective multicultural policies and procedures in the literature, power is not generally acknowledged when considering multicultural competence” (p.19). Therefore, when the administration is not supportive of a particular policy or program, the effectiveness of the policy or program will be limited.

According to the Association of American Medical Colleges (2005), “for a cultural competence curriculum to be effective, there are certain institutional requirements:

- The curriculum must have the institutional support of the leadership, faculty, and students.
- Institutional and community resources must be committed to the curriculum.
- Community leaders must be sought out and involved in designing the curriculum and providing feedback.
- The institution and its faculty need to commit to providing integrated educational interventions appropriate to the level of the learner.
- A cultural competence curriculum must have a clearly defined evaluation process that includes accountability and evaluation (p.2).

Brown, E. (2004) concludes that, from a review of the literature related to diversity on college campuses, that faculty are imperative to students on whether their classrooms either allow or disallow dialogue and education on diversity and cultural issues and in turn affect how students understand other cultures which will permeate into society after graduation. Even early in research, Allport (1954) stated that interactions between different cultural groups can either decrease or increase bias between groups depending on what, and how, the interactions are implemented. Springer et al. (1996)
found that white college students’ gender and major of study were significantly related to attitudes regarding diversity.

Resistance to cultural diversity education, and conflict during the process, remains an issue for administration and faculty but should be expected and transformed into a valuable part of the process of educating on multiculturalism (Skinner & Richardson, 1988; Green, 1989; Pascarella et al., 1996; Bell, Washington, Weinstein, & Love 1997; Karp & Sammour, 2000; Kardia, Bierwert, Cook, Miller & Kaplan, 2002; Mildred & Zuniga, 2004). For example, Skinner & Richardson (1988) discovered in their study of patterns of adaptations that take place in institutions with diversity issues, that conflict is part of the process that can help institutions make essential policy decisions and changes.

In addition, Green (1989) also stated that this conflict can create cultural learning experiences for students (Organizing for Diversity, 2005). Campinha-Bacote (1999) addressed issues surrounding barriers to cultural competence and examined the role of training and staff development as key in addressing these barriers.

Scholars have emphasized the importance of linguistic and cross-cultural competence for students and educators in the light of demographic, economic, and social changes in society, as well as the necessity for teachers in inner-city schools to become culturally proficient in educating all children (Genesse, 1998, 2007; Guerra, 2007). Relevant to higher education in general, Woody (1991) addressed issues early on regarding planning for cultural competence, assessment, future trends, demographic changes, staff development, and curriculum development.

At the beginning of the twenty-first century, the push for cultural competence within school systems, and the effective education of teacher candidates to enter the field,
policy began to respond to the needs of a diverse and growing population. The National Council of Accreditation of Teacher Education (NCATE), in the development of standards for accreditation of higher education programs, has identified cultural competence as essential amongst the standards of service delivery.

Cultural competence appears in several NCATE standards, including: Standard 1 - *Candidate Knowledge, Skills, and Professional Dispositions*, a standard designed around preparing teachers to work in diverse settings and stresses the importance for them to be able to demonstrate the knowledge, skills, and dispositions relative to educating all students, including those with exceptionalities and from various cultural backgrounds; Standard 3c - *Candidates’ Development and Demonstration of Knowledge, Skills, and Professional Dispositions To Help All Students Learn*, a standard designed that teachers must demonstrate the skills necessary to educate all students within real settings and receive critique to improve those skills from qualified professionals in the field; and Standard 4 – *Diversity*, a standard designed specifically towards higher education programs to design, implement and evaluate curriculum for teacher candidates for them to most effectively gain the appropriate knowledge, skills, and dispositions necessary to educate all students (Appendix A).

The importance of incorporating cultural competence education, specifically diversity and social equity issues, into any program of study is important, and will impact the success of the student once they reach the field (Rice, 2005). Ladson-Billings (2001, 2003) developed a theory-based concept of culturally applicable education in three areas; academic achievement, sociopolitical issues, and cultural competence. The Institute of
Medicine (2002) determined that cross-cultural education, although taught in a variety of ways, can be divided into three conceptual approaches:

1. Focusing on attitudes (cultural sensitivity/ awareness approach),
2. Knowledge (multicultural/ categorical approach), and

The study of teacher candidates’ attitudes, perceptions, skills, and abilities regarding cultural competency, and how their levels of cultural competency (relative to the Cross continuum) might translate into effective, or non-effective, teaching in diverse classrooms, is becoming an area of interest. Bruch, Higbee and Siaka (2007) found that student perceptions of the cultural competence curriculum and educational process depend largely on the way in which the material is presented in the classroom. Chizhik (2003) demonstrates through case study examples of how higher education institutions must account for potential challenges, including resistance from students that may arise while preparing suburban teacher candidates for educating in urban schools. Colvin-Burque (2007) points to the learning environment as the centerpiece to foster sustainable personal growth and increasing cultural competence.

A survey conducted by the American Council on Education and the American Association of University Professors found that 29% of faculty members surveyed indicate that “diverse classrooms caused them to adjust course syllabi to include racial and ethnic issues”; however if there were no visible minorities in the classroom, the professors may not have included any cultural competence training for the majority students (Ling-Lee, 2005, p. 214; Schmidt, 2000). Schuerholz (2007), concludes that many studies have “explored different aspects of faculty experiences, background, and
disciplinary affiliation, and how such variables affect intercultural sensitivity, cultural competence, and world-mindedness among faculty; however, less conclusive evidence is available as to whether and how such traits in faculty translate into classroom practice” (p. 180).

Many theorists and researchers have argued that the most effective way to instruct individuals and increase cultural competence is by experiences that change negative attitudes (Chaiken, 1980; Petty & Cacioppo, 1981; Brewer, 1998; Tromski & Doston, 2003) and behaviors (Fazio & Zanna, 1981; Brewin, 1989; Tromski & Doston, 2003). For example, Tromski & Doston (2003) conducted a study on counseling students using interactive dramas about cultural differences and diversity issues. The authors discovered that students’ awareness, understanding, and skills were positively impacted by the dramas (Tromski & Doston, 2003). In addition, Morell, Sharp & Crandall (2002) used a simulation case with medical students consisting of a Cherokee Indian woman refusing gynecologic medical care from a male, which led students to confront their lack of skill in reading cultural cues, and due to this, students began to question their cultural belief systems and how it may affect patient care.

Studies that have been conducted to examine the implementation and outcomes of cultural competence education in the classroom have come to vastly differing conclusions about what constitutes cultural competence education, how to implement the curriculum, and how the students perceive the intervention. Scholars argue on whether actual classroom instruction is a beneficial learning tool for students to engage in diversity education resulting in an increase in cultural competence, or if actual practical experience is the method by which individuals learn to become culturally competent; and also
whether faculty and staff have the knowledge, skills, and abilities to effectively teach in this area.

The Harrington Diversity Project, a study conducted by Colville-Hall & Liang (2003), was designed to assess the effectiveness of diversity education at The University of Akron amongst undergraduate teacher candidates, including the development of a Teacher Candidate Survey, used to measure disposition of teacher candidates. The study discovered many areas in which teacher candidates significantly improved, regarding disposition, as well as areas that did not improve. Asada, Swank, & Goldey (2003), in a study at a public university comprised of white students of low socioeconomic status, found that students felt that the background of the faculty and staff should be more diverse. The study revealed that students also believed that more information regarding multiculturalism should be available to students, however, only 25% wanted to learn more about cultural diversity, and although the idea of diversity courses were favored, most were not in favor of making them mandatory (similar results from Beckham, 19992).

Cheung, et al. (2002), found in a study of occupational therapy students, that students demonstrated a lack of knowledge and skills about different cultures. Students involved in this study emphasized the need for more education and information regarding different cultures. A study by Kleinman, Frederickson & Lundy (2004), consisted of nursing students at Lehman College and utilized an Eclectic Model derived from Leininger’s comparative cultural caring model and Paterson & Zderad’s (1988)

2 A study of attitudes of U.S. voters regarding diversity and diversity education in higher education based on telephone interviews with 2,011 voters.
humanistic nursing model, which uses lectures, classroom exercises, and clinical experiences to educate students about cultural influences on relationships. The study, as a result of the education and exercises, observed the students learning the importance of cultural differences and cultural cues, as well as understanding these cues or intrinsic implications pertaining to individuals, which in turn, could potentially create meaningful nurse/patient relationships, beneficial outcomes, and increased level of care for all patients.

Sealey, Burnett, & Johnson (2006) conducted a study to assess nursing faculty’s cultural competency to teach undergraduate students. Although the study revealed favorable outcomes of nursing faculty demonstrating an intermediate level of cultural competence, when respondents completed the survey, most seemed to stay somewhat neutral in their responses versus strongly agreeing or disagreeing with the questions.

Bruch, Higbee, & Siaka (2007), found in a study of students’ perceptions of multiculturalism in a first-year research university that the multicultural education provided to students increased students awareness of diversity, social issues, and economic disparities. According to Bruch et al (2007) faculty and instructors should seek more effective methods of understanding how the instruction of multicultural education is perceived by the students.

Ippolito (2007), evaluated the Professional Development and Research model (students work in groups, give an oral presentation and personal analysis of their experience) using post-graduate students (both international and home students, and teaching staff). This study found that students valued their experience, but found
challenges with academic and time pressure, indifference, language differences, and privileged knowledge (Ippolito, 2007).

Guy-Walls (2007) conducted a research project examining the effectiveness of the multicultural curriculum for social work students at two universities and discovered that senior level students were more culturally competent than the entry level students. Overall, the students were not demonstrating the desired readiness in terms of being culturally competent enough for practice (Guy-Walls, 2007).

Other scholars recommend using service-learning to increase student cultural competency levels whereby students recognize that the recipients of their services have assets to share with the providers, learning to view the interaction as collaborative in nature, which educates students and creates culturally competent members of society (Flannery & Ward, 1999; Rosenberger, 2000; Hess, Lanig, & Vaughn 2007). This approach with anecdotal evidence led Hess et al. (2007) to devise the Conceptual Model for Cultural Engagement (CMCE) which “approaches increasing cultural effectiveness from an asset-based perspective that views all participants as capable of making valuable contributions” (p.34). Some theorists and researchers have suggested that simple storytelling or ethnographic inquiry about individual experiences and backgrounds in the classroom is the way in which students can effectively learn about different cultural ideals and, increase cultural competence in the classroom (Mudimbe, 1991; Dance, 2002; Seeley, 2004; Carter-Black, 2007).

Previous research has revealed that learning communities, where education is viewed as a two-way process and promotes social integration, in the first year of college has been successful at increasing overall satisfaction rates of the college experience for
undergraduate students involved, as opposed to the students who were not involved in the learning community (Tinto, 1998; Zhao & Kuh, 2004; James, Bruch & Jehangir, 2006). James et al. (2006), in a study of first generation college students involved in a learning community on campus, found that students and instructors benefited from the experience and throughout the courses students began “constructing their own ways to integrate personal and cultural knowledge with the course content, partners with instructors rather than as passive consumer; [however], since learning and teaching were not always predictable, there was often a heightened sense of vulnerability and uncertainty that was both exhilarating and problematic (James, 2002-03). Working with difficult subject matter and new ways of learning meant that some students initially were resistant to activities. There also were times in which rivalries and disagreements among students became disruptive” (p.15).

Northwest Regional Education Laboratory (2005), after review of cultural competence education literature, found that very few studies exist that involved experimental research and that most were case studies, literature reviews, or synthesis of research. In essence, studies and literature exist regarding cultural competence training, education, or intervention; however, few studies focus on actual outcomes.

It is apparent that much of the cultural competency training or education is implemented despite the lack of any meaningful definitive outcome studies. It should also be noted that research that has attempted to explore the impact of cultural competence training or education, whether it be classroom based or service learning experiences, do suggest a linkage between education and intervention with increased cultural competence, even if the methodological outcomes are subjectively interpreted.
However, it is difficult to conclude whether or not the courses developed from NCATE standards are effective in educating teacher candidates about matters of diversity and in turn, increasing cultural competence.

Overall, what has been demonstrated in the body of cultural competence research and literature is the need for training and education of teacher candidates to be able to effectively educate all students. This includes teachers having the ability to tailor curriculum based on the demographics of the classroom, as well as having the knowledge, skills, and abilities in their cultural competence toolbox to deal with arising issues. The literature also points to adaptability and disposition as two key attributes of cultural competence.

The issue of culturally competent teachers in relation to addressing the disparities that exist in the educational system has and will continue to generate major interest from educators, providers, and policymakers because of the major potential impact outcomes and underlying policy implications. This research will begin to bridge the gap that exists in this area by providing further information and relevant data linking a mandatory course provided to teacher candidates aimed at increasing cultural competence, and actual outcomes.
CHAPTER II

IMPLEMENTATION OF CULTURAL COMPETENCE IN EDUCATION

Legal Foundations of Public Education

Access to a free public school education has not always come easy to many groups of citizens in the United States. In outcome of *Plessy v. Ferguson* (1896), the court ruled to uphold the constitutionality of racial segregation, under the guidelines that races (namely Black and White) be provided the same accommodations, services, etc. but separately; “separate but equal”. However, paving the way for large-scale desegregation was the U.S. Supreme Court case *Brown v. Board of Education of Topeka Kansas* (1954). This landmark case overturned the previous rulings dated back to *Plessy v. Ferguson* (1896), ruling that segregation in public schools is unconstitutional. This case deemed “separate educational facilities are inherently unequal”, and proclaimed that black students were denied education opportunities because of the way in which state laws were established for separate public schooling for Black and White students.

President Johnson, in 1964, signs the Civil Rights Act of 1964, which was the most pivotal civil rights legislation to date. The legislation prohibits discrimination on the basis of race, color, religion, or national origin, and empowers federal government to enforce desegregation. The bill was amended to also include protection for women. The Act had significant impacts on U.S. society by prohibiting discrimination in government,
employment, public facilities, housing, education, etc. Many areas of the country began to evolve through the passing of this legislation, although most of the work was still to come.

Title VI of the Civil Rights Act of 1964 states that, “no person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination” under any federally supported program (Civil Rights Act of 1964). Although weak, the bill was a momentous starting point for the country. President Johnson issues Executive Order 11246 (1965) to supplement the Civil Rights Act of 1964, which implements affirmative action to protect minority employees regarding employment. This gave way to a “three-tier process: equal employment laws, affirmative action laws and programs, and diversification programs” (Klinger & Nalbandian, 1998 & 2003; Berry, 2004) which helped expand employment opportunities to minority candidates.

In 1988, Congress passed the Civil Rights Restoration Act, which expounded upon the non-discrimination laws in the private sector for those institutions receiving federal funds. This bill was also applicable to Title IX of the Educational Amendment of 1972, the 1973 Rehabilitation Act, and Title VI of the Civil Rights Act of 1964. President Bush signed the Civil Rights Act of 1991, which also served to strengthen existing civil rights legislation and afforded discriminated employees the right to trial and potentially awarded damages.

These cases and legislation have set the stage for education in this country which has since evolved into what we know it to be today. However, it is up to the individual states to implement their educational standards and guidelines in a way as to accomplish
this goal. The Tenth Amendment of the United States Constitution holds that powers not granted to the federal government or prohibited to the states are reserved for the states and citizens to oversee (U.S. Bill of Rights, 1791). Individual states in The United States administer and manage public education in their individual respective states. A free public education is currently considered in the United States a fundamental right to all children in the country. The right to receive a free public education has been a state constitutional right since the original Ohio Constitution was developed in the early nineteenth century (Ohio Constitution, 1851).

More specifically, the vision of a public education in the state of Ohio, according to the Ohio Department of Education (2008) (See Figure 1) is for:

“…all Ohio students to graduate from the PK-12 education system with the knowledge, skills and behaviors necessary to successfully continue their education and/or be workforce ready and successfully participate in the global economy as productive citizens. Ultimately, all students will graduate well prepared for success…However, Ohio must forge quickly ahead beyond these successes to achieve this vision by 2018…Achieving the vision requires a commitment to every student” (p. 1).

**Objectives**

To graduate all students well prepared for success, the State Board will focus on the following objectives:
1. Teaching 21st century knowledge and skills for real-world success;
2. Effectively delivering support for a high quality education;
3. Providing sufficient resources which are effectively managed.

*Source: State Board of Education of Ohio Vision (Accepted July 2008)*

Figure 1: State of Ohio Objectives for Public Education
This country has traveled down a long and torturous path towards reshaping values and ethics towards social justice and equality in all aspects of society. However, beliefs, values, thoughts, attitudes, dispositions, etc. are relative to each individual or individual organization. How one individual may view social justice, another may not see it the same way. Keller (2003) describes the consequences of relative values and ethics as a certain formula of human conflict in which a few can terrorize the many because they are so certain of their beliefs and so dismissive of the beliefs of others” (p. 1006). Although we as a nation have come a long way, we unfortunately remain on that path towards social justice and equity in all aspects of society.

What we have learned throughout the past several decades is that because of distinctive cultural differences amongst individuals, that equal treatment of unequal peoples is not always the answer. We must take into consideration an individual’s strengths and weaknesses, as well as their cultural background to discover the best way to provide services. One thing is certain, that being able to effectively make these kinds of determinations would translate into assuring that service providers be culturally competent.

Because this study focuses specifically on teachers, a culturally competent teacher has the ability to identify specific issues within the classroom and be able to identify curriculum or other instructional methods that can be used to effectively teach a diverse classroom. Producing culturally competent teachers entering the field of education provides students, teachers, families, and school systems multiple benefits. Children learn in different ways; therefore, teachers possessing the ability to identify strategies relevant to instruction, communication, and disciplining students are essential to the
learning process. The ability to tailor different strategies based on what a teacher knows (and even does not know) about the students in his/her classroom can make a difference in how successful a student is in that particular educational setting and the students’ future educational process.

This then speaks to higher education institutions in regards to how teachers are being educated and trained to accomplish these goals. Berry (2004) speaks to the efforts of colleges and universities to diversify student, faculty, and staff and the benefits those efforts bring to organizations. Leaders that seek to effectively manage diversity must look towards research findings to determine the most effective way to do this within the context of each individual institution (Judy & D’Amico, 1997; Mor Barak, 2000; Dinwoodie, 2005).

“Organizations are then able to develop workforce diversification programs to focus on several areas and encourage organizational change in its mission, culture, policies, practices and productivity—all of which are vital to long-term organizational survival and effectiveness” (Klinger & Nalbandian, 1998; Berry, 2004).

Johnson and Cox (2004/2005), while examining organizational context of law enforcement specific to police officers, indicate that several subcultures may exist amongst groups within an organization which may impede progress in that the organizational climate produces new officers that are trained to think and act as the overall organization wants them to. The same may hold true for the organizational climate of Colleges of Education where although various subcultures may exist, the dominant departmental climate may not be a culture that is effective at facilitating effective cultural competence training, which may create barriers for change by turning
out new teachers that are not equipped with the knowledge, skills, and abilities to teach in a diverse classroom.

What may be an issue in organizations, including higher education institutions are unrecognized, or hidden, biases. Organizational cultures such as this may be more damaging than those that are more extroverted in displaying their institutional beliefs and values within policy and procedures. Queener & Smith (2008), in an examination of institutional racism in the form of resistance to multiculturalism, stating that, “institutional racism allows the status quo to be maintained, allows administrators to administrate, faculty to teach, and staff to serve in a manner that does not hold them accountable…” (p. 144). Therefore, Colleges of Education must be equipped with effective policies, practices, and attitudes to foster effective diversity education and training of undergraduate teacher candidates to become culturally competent educators.

Cultural Competence Standards in Other Fields

Studying teacher candidates’ attitudes, perceptions, and skills related to cultural competence has become an area of interest in preparing future teachers to effectively instruct in a diverse classroom as well as to prepare children to be culturally competent. However, some fields (e.g., medical field and social work) have placed much higher standards on colleges and universities to produce students that are culturally competent. It is in these fields that cultural competence has not only been recognized as a vital attribute necessary for practice, but has been set into the standards for training and service delivery based on what is known about how cultural competence effects service delivery.
The United States Department of Health and Human Services Office of Minority Health first proposed national standards regarding cultural and linguistic appropriate services (CLAS) in 1999 to address issues related to cultural inequities within the healthcare field (U.S. Department of Health and Human Services, Office of Minority Health, 2001). The development of these fourteen standards by the Office of Minority Health mandates that all recipients of federal funding regarding health care service delivery must recognize that cultural competence is essential to the delivery of health care services. The U.S. Department of Health and Human Services has identified areas dealing with cultural knowledge include: ongoing training and education in culturally and linguistically appropriate service delivery and ongoing organizational self-assessment (U.S. Department of Health and Human Services CLAS Standards, 1999).

Additionally, the National Association of Social Workers (NASW) has developed The Standards for Cultural Competence in Social Work Practice, which is comprised of ten standards to address issues of diversity and cultural competency. The standards require social workers to embrace their ethical obligation as social workers and become culturally competent. Social workers are expected to become proficient in several areas necessary for social work, such as cross-cultural knowledge, cross-cultural skills, language diversity, and cross-cultural leadership (NASW, 2001). Some scholars have developed specific curriculum for social work students aimed specifically at increasing cultural competence (Sowers-Hoag & Sandau-Beckler, 1996).

In addition, standards also exist in the area of law enforcement regarding peace officers. The State of Ohio’s peace officer basic training curriculum consists of 550
hours of education, including twenty-four hours of specific training on Understanding Cultural Differences, (Dorris, 2008).

Although standards have been set for the medical field, according to the U.S. Department of Health and Human Services,’ Office of Minority Health (2001), there are currently no federal mandates requiring professional health care training or curricula to incorporate diversity or cultural competency training and education to staff and employees, however, most states require doctors, and often other healthcare providers, to have cultural competency training in their curriculum. The same holds true for institutions of higher education. Colleges and universities are not required by the federal government to incorporate teacher candidate training or specified curriculum regarding cultural competence training or diversity education. Although Colleges of Education may be guided by other standards and guidelines, no federal mandates exist to enforce cultural competence education for teachers.

Teachers are required by law to be licensed to practice just as social workers, police officers, and medical doctors are licensed to practice in their fields. Therefore, teachers should be held to the same standards that the medical and social work fields are, regarding professionals being culturally competent and having the ability to provide services to a diverse population effectively and appropriately. The aforementioned professions are agents of the state; therefore, there is a compelling interest to have standards regarding cultural competence for teacher candidates similar to standards that exist in the social work and medical fields.
Cultural Competence Standards in Education

Currently, no federal mandates exist concerning teacher preparedness regarding diversity training and cultural competence. However, the Elementary and Secondary Education Act (ESEA) of 1965 is a federal statute which outlines and authorizes funding of primary and secondary education and is reauthorized every five years. The current reauthorization of ESEA is the No Child Left Behind Act of 2001 (U.S. Department of Education, 2004). The No Child Left Behind Act (NCLB) of 2001 was designed to “close the achievement gap with accountability, flexibility, and choice, so that no child is left behind” (p. 1). This act does not mandate a national achievement standard, but is based on the theories of standard-based education reform (NCLB, 2001).

Although the national government has not required all states to comply with a national achievement standard, the individual states are setting higher standards for schools, districts, and the states themselves (NCLB, 2001). In addition, states are able to more effectively measure those goals related to individual students’ educational outcomes and improvements (NCLB, 2001). NCLB (2001) incorporates specific language in an attempt to narrow the educational gap between races by increasing the expectations in educational achievement. The Aspen Commission on No Child Left Behind, an independent bipartisan commission aimed to improve the NCLB Act, has produced a list of goals that attempt to close the achievement gap.

The Aspen Commission's goals are as follows: effective teachers for all students, effective principals for all communities; accelerating progress and closing achievement gaps through improved accountability; moving beyond the status quo to effective school improvement and student options; fair and accurate assessments of student progress; high
standards for every student in every state; ensuring high schools prepare students for
college and the workplace; driving progress through reliable, accurate data (Thompson &

The National Council of Accreditation of Teacher Education (NCATE), the
national accreditation body for the teaching profession, sets the standards for
accreditation for colleges and departments of education based on specific administrative
policies and curriculum requirements. NCATE has also identified cultural competence as
a standard of service delivery and has recognized the importance of integrating education
standards specific to increasing teacher candidate cultural competence in the classroom.

The latest NCATE standards, effective fall 2008, address the areas of diversity
and cultural competence of teacher candidates (Appendix A). The standards that
specifically address issues of diversity and teacher candidate cultural competence are:

- **Standard 1 - Candidate Knowledge, Skills, and Professional Dispositions**: a
  standard designed around preparing teachers to work in diverse settings and
  stresses the importance for them to be able to demonstrate the knowledge,
  skills, and dispositions relative to educating students, including those with
  exceptionalities and from various cultural backgrounds

- **Standard 3c - Candidates’ Development and Demonstration of Knowledge,
  Skills, and Professional Dispositions To Help All Students Learn**: a standard
designed so that teachers must demonstrate the skills necessary to educate all
students within real settings and receive critique to improve those skills from
qualified professionals in the field
• Standard 4 – Diversity: a standard designed specifically towards higher education programs to design, implement and evaluate curriculum for teacher candidates for them to effectively gain the appropriate knowledge, skills, and dispositions necessary to educate students.

Accordingly, states, utilizing the guidelines set by the No Child Left Behind Act of 2001, as well as NCATE standards, develop and implement their own standards for teacher preparedness regarding diversity training and expectations of teacher cultural competence within their state. The State of Ohio has developed diversity awareness expectations for teachers and has created standards for teachers to aim at creating culturally appropriate environments for instructing all students. In the state of Ohio, standards for the teaching profession in the state are outlined in three areas and seven standards (See Figure 2).

Standards 1 and 4 specifically focus on teaching and learning:

• Standard 1 – Students: is centered on teachers understanding, addressing, and respecting diversity issues related to students’ ability to learn and develop.

• Standard 4 – Instruction: emphasizes the teachers’ ability, based on what they know and understand about their students’ abilities, to teach each individual student effectively which leads to advancement of each individual student.

Standard 5 is centered on the conditions for teaching and learning:

• Standard 5 – Learning Environment: addresses the teachers’ ability to plan and create an environment suitable for all students to have an opportunity to learn and advance.
The other standards addressed by the state also focus on teachers’ ability to collaborate and communicate effectively with students, parents, administrators, other teachers, professionals, etc. These standards also challenge teachers to take responsibility for professional growth and performance as a teacher.

<table>
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<tr>
<th>The Focus of Teaching and Learning</th>
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<tbody>
<tr>
<td><strong>Standard #1: Students</strong></td>
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<tr>
<td>Teachers understand student learning and development, and respect the diversity of the students they teach.</td>
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<tr>
<td><strong>Standard #2: Content</strong></td>
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<tr>
<td>Teachers know and understand the content area for which they have instructional responsibility.</td>
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<tr>
<td><strong>Standard #3: Assessment</strong></td>
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<tr>
<td>Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.</td>
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<tr>
<td><strong>Standard #4: Instruction</strong></td>
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<tr>
<td>Teachers plan and deliver effective instruction that advances the learning of each individual student.</td>
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<th>The Conditions for Teaching and Learning</th>
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<tr>
<td><strong>Standard #5: Learning Environment</strong></td>
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<tr>
<td>Teachers create learning environments that promote high levels of learning and achievement for all students.</td>
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<th>Teaching as a Profession</th>
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<tr>
<td><strong>Standard #6: Collaboration and Communication</strong></td>
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<tr>
<td>Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning.</td>
</tr>
<tr>
<td><strong>Standard #7: Professional Responsibility and Growth</strong></td>
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<tr>
<td>Teachers assume responsibility for professional growth, performance, and involvement as individuals and as members of a learning community.</td>
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*Source: Ohio Department of Education Center for the Teaching Profession*

Figure 2: Ohio Standards for the Teaching Profession
In 2006, the Ohio Department of Education developed the Ohio’s Teacher Equity Plan to “ensure high-quality teachers in every Ohio classroom”. This plan, based on research findings in the state, focused on two key strategies to address and correct inequities that exist in the distribution of Ohio’s highly qualified teachers (Ohio Department of Education Center for the Teaching Profession, 2006).

The plan called for “a highly qualified teacher in every classroom for every student – regardless of race or ethnicity, socioeconomic status, gender, disability or English language proficiency” (Ohio Department of Education Center for the Teaching Profession, 2006, p. 5). The two key strategies include:

1. Key Strategy 1: Increase the percentage of highly qualified teachers in Ohio to 100 percent and;

2. Key Strategy 2: Continuously monitor and improve the distribution patterns of Ohio’s teachers to ensure that poor and minority students are not being taught at higher rates than other students by inexperienced, unqualified and out-of-field teachers. (Ohio’s Teacher Equity Plan, 2006, p. 11).

Linking Teaching Standards to Training Qualified Teachers

According to the U.S. Secretary of Education Fifth Annual Report On Teacher Quality, “although the achievement gap has begun to close, too many minority students and those from low-income families continue to underperform and fail to meet state academic standards” (U.S. Department of Education Office of Postsecondary Education, 2006, p. iv). The quality of teachers is directly linked to student learning. The Ohio’s Teacher Equity Plan explains that, “If there is one clear message that has emerged from educational research, it is this: Teachers make a difference in student learning. Teachers matter most, and high quality teachers matter even more” (Ohio Department of Education
The goal in Ohio is to have qualified and experienced teachers accessible to all students, but if this goal exists without keeping in mind the cultural context of the student population in terms of race, ethnicity, etc., there will continue to be a disconnect between students’ ability to achieve academic standards and performance.

The National Center for Accreditation of Teacher Education Programs (NCATE) developed standards in which accredited colleges of education in the United States are required to incorporate diversity and cultural competence education, training, and experiences into the curriculum aimed at increasing the cultural competence of students. Any organization or institution, including those of higher education, incorporating curriculum, training, etc. as an attempt to increase cultural competence, must begin with positive administrative support related to the concept and creation of policies that reflect that support.

Policies that only appear on the surface to support cultural competency within an organization/institution are not enough; and how these policies are implemented will not only affect outcomes, but also shape the future of the organization/institution. “In academic programs across the country, members of the faculty continue to talk about the importance of diversity, especially ethnic diversity. In spite of talking about the importance of diversity, ethnically diverse students continue to complain about academic environments that are devoid of racial sensitivity and lack of cultural competence” (Queener & Smith, 2008).

The federal government continues to urge states to set higher standards for schools and has funded several initiatives designed to implement cultural competence
standards within education. The federal government has also set a national agenda to address diversity in education and encourages culturally and linguistically appropriate collaborations aimed at producing equitable outcomes for students. States are setting higher standards for their school systems and are emphasizing the importance of diversity in the hiring and retaining of qualified teachers. School systems are desperately calling for culturally competent teachers to help them meet standards set by the states. Higher education plays a vital role in producing qualified teachers to effectively instruct in diverse classrooms with the knowledge, skills, and abilities necessary to facilitate an appropriate teaching and learning environment for children.

This research has accepted the current evidence presented in the literature regarding the need for culturally competent teachers in the public school system based on the fact that the population of students within public schools continues to become more diverse. Also, in order for all children to be provided an effective, quality education, teachers must be able to relate to, understand, and be equipped with the tools necessary to meet state standards and address federal guidelines related to providing a quality education for all students. Again, the literature also points to adaptability and disposition as two key attributes of cultural competence.

This study seeks to examine teacher candidate perceptions of adaptability and disposition, as they relate to cultural competence, after a course developed for teacher candidates within the guidelines set forth by National Council for Accreditation of Teacher Education Programs (NCATE). The course was designed to educate teacher candidates on matters of diversity and to increase levels of cultural competence amongst the future educators. This research will determine whether the course had an impact on
teacher candidates’ perceptions of adaptability and disposition and provide a starting point at which important policy implications regarding cultural competence standards in the field of education, PK-12 and higher education, must be addressed.

Specifically, this research will examine undergraduate teacher candidates at The University of Akron through a mandatory course aimed at increasing cultural competence. While this study is centered on a single undergraduate teacher candidate population at a single public university, the study has important potential implications regarding the educational well being of the nation. This research will begin to bridge the gap that exists in what we know and do not know about cultural competence education amongst teacher candidates by providing further information and relevant data linking the course aimed at increasing cultural competence and actual outcomes.
CHAPTER III
RESEARCH QUESTIONS AND METHODOLOGY

Statement of the Problem

The cultural make-up of the United States is ever-changing as the country becomes increasingly diverse. Every racial/ethnic category except White has significantly increased from 1940-2000 (Gibson & Jung, 2002; U.S. Census). Challenges have been presented due to the extreme disparities that exist in various facets of U.S. society, such as healthcare, education, and employment. Consequently, a compelling national interest exists related to effective higher education, and if issues, such as diversity and cultural competence are not addressed, we as a society will marginalized and unable to compete on a global level.

Also, with the increase of globalization, it is vital to systems and agencies to embrace cultural competence and to incorporate the concept into the policies and practices of these systems through implementing appropriate services based on the proposition that when doing so, the increased success of the organization is inevitable. Addressing cultural competence in higher education is imperative in preparing our future educators to be effective educators to all students. According to the U.S. Secretary of Education Fifth Annual Report On Teacher Quality (2006), “although the achievement
gap has begun to close, too many minority students and those from low-income families continue to underperform and fail to meet state academic standards” (p. iv).

Too often, teachers are not culturally competent enough to teach in diverse classrooms. The students that are not part of what could be considered “mainstream society” often fall through the cracks of the country’s educational system. Teachers with good intentions are often not educated enough in the realm of diversity and cultural competence to have the skills necessary to tailor instruction to fit the needs of the classroom, or to have the insight into other cultures as to have the ability to relate to individual students differently. By increasing the cultural competence of our future educators through undergraduate and graduate education, the issues surrounding certain groups not receiving a quality education will begin to decrease.

Overall, what has been demonstrated in the body of research literature is the support and expressed need for training and education of teacher candidates to be able to effectively educate all students; the goal in Ohio is to have qualified and experienced teachers accessible to all students (Ohio Teacher Equity Plan, 2006, p.4). However, if this goal exists without keeping in mind the cultural context of the student population in terms of race, ethnicity, etc., then there will continue to be a disconnect between students’ ability to perform up to academic standards and actual student performance.

Key Definitions

To explicate the main constructs, this section will clearly define each as they are used in this research. Descriptions are included for, cultural competence, teacher candidate, adaptability, disposition, and social desirability.
Cultural Competence

A set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable that system, agency or those professionals to work effectively in cross-cultural situations; A developmental process that occurs along a continuum with six possible positions: cultural destructiveness, cultural incapacity, cultural blindness, cultural pre-competence, cultural competence, and cultural proficiency; and that it is vital for agencies to assess where they fall along the continuum which will help them better understand the culture of their organization and assist with further development (Cross, et. al., 1989).

Teacher Candidate

A student enrolled in a higher education institution majoring in education and preparing for a career as a school teacher. For this research specifically, the teacher candidate is an undergraduate student at The University of Akron in the College of Education that is currently taking courses towards the completion of a 4-year degree in the field of K-12 education.

Adaptability

The ability to effectively overcome challenges associated with cultural differences and to equitably solve problems. The ability to adapt and respond practically to culturally diverse and cross-cultural populations and situations (Kelley & Meyers, 1992). Adaptability relates to when a teacher can identify an obstacle and tailor instruction to accommodate the needs of the student(s) (Jonas 1994).
Disposition

An individual’s moral stance and sense of social justice (McElroy, 2007). In addition, disposition is also a vital element of adaptability (Calarco & Gurvis (2006).

Social Desirability

Social desirability bias tells us that individuals act in ways that are considered socially acceptable or desirable if we think that someone is observing us in some way, or as not to violate social norms (Colman, 2001; Streb; Burrell, Frederick & Genovese, 2006; Heerwig & McCabe, 2008).

Implications of the Study

The issue of culturally competent teachers in relation to addressing the disparities that exist in the educational system has and will continue to generate major interest from educators, providers, and policymakers because of the major potential impact outcomes and underlying policy implications. Overall, what has been demonstrated in the body of cultural competence research and literature is the need for training and education of teacher candidates to be able to effectively educate all students. This includes teachers having the ability to tailor curriculum based on the demographics of the classroom, as well as having the knowledge, skills, and abilities in their cultural competence toolbox to deal with arising issues. The literature also points to adaptability and disposition as two key attributes of cultural competence.
This study will provide a starting point which will begin to inform policy regarding teacher candidate education concerning cultural competence, specifically about courses targeted in this area. According to NCATE (2008), when institutions of higher education have provided quality education and training of teacher candidates, we can expect the following outcome: Candidates can demonstrate and apply proficiencies related to diversity.

This research will be valuable to the field of education, K-12 and higher education, as well as public administration and public policy by determining if courses, such as the course examined in this study, implemented through colleges of education, which incorporate and address NCATE standards of cultural competence, are effective. This study will bridge the gap between public administration as a broad field with public education focused on urban education by providing new information that can be used for training and development.

The research is also unique in that it has drawn from the literature and identified and examined the two key attributes of cultural competence: adaptability and disposition; this research also identified social desirability as a significant control variable based on the literature surrounding this concept related to social desirability bias. Controlling for this bias will greatly enhance the significance of the research.

This research pertains to policy and policymakers (i.e., superintendents, principles, etc.) as well as to individual awareness and organizational awareness (what we know and don’t know). It will contribute to the current literature by increasing what we know about how students’ perceptions of adaptability and
disposition relative to cultural competence are enhanced by targeted courses in the academic setting, and perhaps point out areas that may need more attention.

Cross’ Cultural Proficiency Model

Cross et al. (1989), describe taking cultural competence to the next level towards cultural proficiency by incorporating cultural competence into practice and mastering the cognitive and affective phases of cultural development. The Cross, et al. (1989) model explains that cultural proficiency is fluid; that it moves along a continuum in organizations. There are six points along Cross’ cultural proficiency continuum that indicate unique methods of identifying and responding to difference (See Figure 3).

| Cultural destructiveness: See the difference, stomp it out |
The elimination of other people's cultures |
| Cultural incapacity: See the difference, make it wrong: |
Belief in the superiority of one's culture and behavior that disempowers another's culture |
| Cultural blindness: See the difference, act like you don’t: |
Acting as if the cultural differences you see do not matter or not recognizing that there are differences among and between cultures |
| Cultural pre-competence: See the difference, respond inadequately |
Awareness of the limitations of one's skills or an organization's practices when interacting with other cultural groups |
| Cultural competence: See difference, understand the difference that difference makes |
Interacting with other cultural groups using the five essential elements of cultural proficiency as the standard for individual behavior and organizational practices |
| Cultural proficiency: See differences and respond effectively in various environments |
Esteeming culture; knowing how to learn about individual and organizational culture; interacting effectively in a variety of cultural environments |

Figure 3: Cross’ Cultural Proficiency Continuum
This study will build off of the Cross model by looking at attributes related to cultural competency on an individual level as opposed to an organizational one. This research will determine if the targeted course in diversity examined in this study has an effect on teacher candidates in terms of significant changes in perceptions of adaptability and disposition. These outcomes of the study may aid in determining which attributes of adaptability and disposition may need more attention in the course.

Again, the literature has made clear the influence of concepts such as adaptability, disposition, and social desirability on individuals’ progression towards cultural competence. Therefore, these attributes, as well as several subscales of these constructs will be explored. This research also takes into account other variables that may also affect an individual’s level of cultural competence. Some of these variables include demographic variables such as age, race/ethnicity, education, etc. Other variables of significance to control for include culturally diverse experiences, prior coursework, family and friends, schools, neighborhoods, etc.

This study, like Cross’, suggests that cultural competency is fluid on the individual level and moves along a continuum and an individual’s movement along the continuum, depends on their adaptability and disposition. Therefore, moving towards higher levels of cultural competency requires individuals to demonstrate increases in social constructs that make-up the core attributes of what cultural competence is: adaptability and disposition.

We will explore cultural competency through adaptability (flexibility/openness, emotional resilience, perceptual acuity, and personal autonomy) and disposition
(addressing stereotypes, attitudes, adaptation to diversity, expectations, and understanding) before and after a mandatory, core course on diversity and cultural issues. This research seeks to determine if the course demonstrates significant changes in the perceptions of adaptability and disposition of teacher candidates by comparing them to teacher candidates who have not yet taken the course.

Research Questions

According to the State of Ohio Department of Education Center for the Teaching Profession (2008) in the state of Ohio, teachers should be able to meet the following standards related to diversity and cultural competence:

- Teachers will understand, address, and respect diversity issues related to students’ ability to learn and develop
- Teachers will adapt to teach each individual student effectively leading to advancement of each individual student
- Teachers will plan and create an environment suitable for all students to have an opportunity to learn and advance

In order for teachers to be able to meet these standards, teachers need to be exposed to the appropriate curriculum and experiences associated with learning about diversity and cultural competence. We know that education research demonstrates that teachers are most often White (83.7%), female (75.2%), and come from middle-class backgrounds (National Center for Education Statistics, 2006; National Education Association. 2003). This may be a significant problem, in that these teachers may not be equipped with the necessary knowledge, skills, and abilities to do the job effectively.
The main purpose of this research is to explore the change in perceptions of disposition and adaptability related to cultural competence amongst teacher candidates that complete a mandatory course on diversity and cultural competence. Specifically, this research focuses on examining the learning outcomes of students at The University of Akron who are enrolled in a targeted course aimed at increasing cultural competence of teacher candidates by examining changes in students’ perceptions of disposition and adaptability as these attributes relate to cultural competence.

To examine the effectiveness of the course to students, the researcher will explore two key questions and nine sub-questions:

1. Do students that took the Equity & Excellence in Education course score higher on disposition measures from pre to post test? Specifically:
   a. Do students that took the course score higher on addressing stereotypes measures from pre to post test?
   b. Do students that took the course score higher on adaptation to diversity measures from pre to post test?
   c. Do students that took the course score higher on attitudes measures from pre to post test?
   d. Do students that took the course score higher on expectations measures from pre to post test?
   e. Do students that took the course score higher on understanding measures from pre to post test?

2. Do students that took the Equity & Excellence in Education course score higher on adaptability measures from pre to post test? Specifically:
a. Do students that took the course score higher on emotional resilience measures from pre to post test?

b. Do students that took the course score higher on flexibility/openness measures from pre to post test?

c. Do students that took the course score higher on perceptual acuity measures from pre to post test?

d. Do students that took the course score higher on personal autonomy measures from pre to post test?

Research Design

The data utilized in this research project was the result of a previous study conducted by the researcher and faculty member, where the researcher collected and entered all data associated with the project. The data were collected in The University of Akron’s College of Education from undergraduate teacher candidates enrolled in specific courses during the Fall 2008 semester.

Equity & Excellence in Education

The University of Akron’s, College of Education requires that all Education (Curricular & Instructional Studies) undergraduate teacher candidates complete a mandatory core course, *Equity & Excellence in Education* during the third phase of their program. The course, according to the course syllabus, “adopts an interdisciplinary approach to engage teacher candidates in inquiry-based seminars and service learning that facilitate their developing pedagogical competence in defining,
conceptualizing, and implementing equity and excellence in education in a culturally pluralistic society”.

Therefore, the course is specifically designed to incorporate the NCATE standards necessary for accreditation. The course is also specifically designed to educate teacher candidates on matters of diversity, with the goal of the course being to increase cultural competence amongst the students.

The course is comprised of second semester sophomore and first semester junior undergraduate students. *Equity & Excellence in Education* is taken just before the final phase of the Education program and just before the student teaching assignments. In Fall 2008, the course was offered through six sections, each course expected enrollment of approximately twenty-five students.

All six sections of the course were taught using a standard syllabus which outlined specific course objectives developed for the course. The objectives for the course included incorporating all program requirements necessary to meet the diversity standards identified by the National Council for Accreditation of Teacher Education (NCATE)

Because random assignment into groups to create an experimental design was not possible, teacher candidates considered to be part of the following cohort of students that were enrolled in the Introductory course, were identified as a comparison group. This course was also taught in six sections with expectant enrollment of approximately twenty-five students per section.

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1 All NCATE accredited teacher education programs are required to meet the diversity standards outlined by the accrediting body; however, how they are organized in program, or course format, can vary by university.
The study consisted of a quasi-experimental, comparison group, pretest-posttest design (See Figure 4) (Campbell & Stanley, 1963, 1966). Therefore, the research substitutes statistical controls for the absence of the control that would otherwise be had by an experimental design. The quasi-experimental design is the same as the classic controlled experimental design, besides the fact that the study participants are not randomly assigned to either the experimental or the control group.

In essence, the teacher candidates involved in the study do not have the same probability of being in one of the two groups (Engel & Schutt, 2009). Although the quasi-experimental design may not be as powerful in regards to controlling for threats to the internal and external validity of the research as would be of a true controlled experimental design, it is the next best thing.

Figure 4: Quasi-Experimental, Comparison Group, Pretest-Posttest Design

The two groups consisted of a treatment and comparison group described as:

- **Treatment:** Consisted of approximately 135 undergraduate teacher candidates at The University of Akron enrolled in the mandatory Equity & Excellence in Education course over Fall 2008.
• **Comparison:** Consisted of approximately 135 undergraduate teacher candidates at The University of Akron considered part of the preceding cohort of Group 1 which were not enrolled in the Equity & Excellence in Education course in Fall 2008, but were expected to take the course over Spring 2009.

This research also utilized a survey research approach including multiple quantitative assessment instruments to assess the changes in perceptions of disposition and adaptability (the two key attributes of cultural competence) between the two groups. Based on the literature, social desirability bias may play a role in how students respond to the assessments, especially regarding sensitive issues such as their personal attitudes, beliefs, and behaviors associated with constructs like gender, race, religion, sexual orientation, etc. The literature surrounding social desirability bias explains that individuals act in ways that are considered socially acceptable or desirable if we think that someone is observing us in some way, or as not to violate social norms (Colman, 2001; Streb; Burrell, Frederick & Genovese, 2006; Heerwig & McCabe, 2008).

To control for these types of social desirability biases, an assessment tool was integrated into the research to measure approval dependence and defensiveness, in essence, what scholars determine to be the major attributes of social desirability. This allows the research to control for any social desirability displayed by teacher candidates involved in the study.

**Assessment Instruments**

The research incorporates multiple quantitative assessment instruments that have been examined and identified to measure the two key attributes of cultural competence:
adaptability and disposition. Because adaptability and disposition are somewhat broad concepts, these two key attributes of cultural competence were examined across several subscales designed to measure various attributes related to each construct.

In addition, basic demographic information was collected on the variables of age, gender, race, cultural experiences (includes cultural exposure and extent of diversity exposure), and past coursework taken (Appendix B) for each teacher candidate in the study. The research controls for these demographic variables, as well as social desirability since these variables are thought to potentially affect an individual’s level of cultural competence as well as their ability to move adeptly along the cultural proficiency continuum.

Cross-Cultural Adaptability Inventory (CCAI)

The Cross-Cultural Adaptability Inventory (CCAI) developed and revised by Kelley & Meyers (1992) is a self-assessment instrument utilized in this study to measure adaptability (Appendix C). The instrument contains 50 items specifically designed to measure cross-cultural adaptability and encompasses four subscales related to adaptability.

According to the developers of this assessment tool, it is used frequently to assess readiness in interacting with members of another cultural make-up or adapt to life in another culture; assess an individual’s effectiveness in cross-cultural interaction and communication; and used to measure effectiveness of cultural training (Kelley & Meyers, 1992). Because this research is focused on assessing changes in teacher candidates’
adaptability after completion of the course, the CCAI would be appropriate to measure the effectiveness of that cultural education in regards to adaptability.

The CCAI measures cross-cultural adaptability across four (4) variables: emotional resilience, flexibility & openness, perceptual acuity, and personal autonomy. Each of these four variables may be good indicators of how teacher candidates will conduct themselves in the field, as well as their ability to learn and grow to be more culturally competent educators.

Survey participants were asked to respond to each of the 50 items using a scale from 1 (definitely true) to 6 (definitely not true). Nine of the 50 items have been reverse coded to compute the four subscale scores (a high score on a certain subscale means a high level of that attribute). The CCAI assessment takes approximately 20 minutes to complete, depending on the individual. This assessment instrument was tested for reliability and validity and yielded an alpha of .90.

The first attribute, emotional resilience, consists of an 18-item subscale. “When individuals find themselves in a new culture they often experience negative emotional reactions to their situation. Therefore, an important component to being able to adapt to a new environment is the ability to deal with these emotions and still maintain a positive outlook on one’s own situation, in other words, to have emotional resilience” (Davis & Finney, 2003, p5). This subscale measures emotional resilience with statements such as, “I have ways to deal with the stresses of new situations”.

The second attribute, Flexibility & Openness, consists of a 15-item subscale. According to Davis & Finney (2003), this attribute is “an individual’s capability to possess a non-judgmental attitude and to have an open mind when considering the
thoughts and beliefs of others…[the] ability to be broad-minded and open towards others” (p.5). This subscale measures flexibility and openness with statements such as, “I can enjoy relating to all kinds of people”.

The third attribute, Perceptual Acuity, consisting of a 10-item subscale created to gauge “an individual’s cultural empathy, or ‘the skill to understand the logic and coherence of other cultures and the restraint to avoid negative attributions based on perceived difference based on one’s own and others’ behavior’” (Dinges, 1983; Kelly & Meyers, 1995, Davis & Finney, 2003, p.5). This subscale measures perceptual acuity with statements such as, “I try to understand peoples' thoughts and feelings when I talk to them."

The fourth attribute, personal autonomy, consists of a 7-item subscale. This attribute refers to “an individual’s ability to possess a strong personal identity as well as maintain this identity when placed in a new culture and not feel like they must abandon their personal beliefs to fit in” (Davis & Finney, 2003 p.5). This subscale measures personal autonomy with statements such as, "I feel free to maintain my personal values, even among those who do not share them."
sexual orientation, exceptionality, self-identity, and gender, and was tested for reliability and validity with an alpha of .85 (Colville-Hall & Liang, 2003).

The Teacher Candidate Survey includes questions related to dispositions amongst a wide range of topics, including race, gender, disabilities, etc. The assessment includes questions such as, “Teachers need to adapt their instructional strategies and materials to meet the needs of culturally diverse students”, “I realize that I can’t expect high achievement in students from low socio-economic backgrounds”, and “Low achievement among female students in science can be related to low teacher expectations”.

Marlowe-Crowne Social Desirability Scale (X1)

The third assessment incorporated into this study is the Marlowe-Crowne Social Desirability Scale (Appendix E), a 10-item scale derived by Strahan & Gerbasi (1972) as a shorter version of the original 33-item scale. The Short Form XI (Strahan & Gerbasi, 1972) has shown to have high internal consistency and be high correlated to the original 33-item scale. The Marlowe-Crowne Social Desirability Scale (XI) asks questions such as,” I always try to practice what I preach”, “I like to gossip at times”, and “At times I have really insisted on having things my own way”.

Based on what we know about social desirability bias, this assessment is utilized in the research to determine if students are answering the assessment items proficiently or socially desirable. If teacher candidates are answering in a way that is deemed socially desirable on the Marlowe-Crowne Social Desirability Scale (XI), it can be assumed that they are also answering socially desirable to the other assessment tools in the study. Therefore, controlling for social desirability is an important feature of this research.
Data Collection

The University of Akron Institutional Review Board (IRB) application was submitted to conduct this research with human subjects (Appendix F). After IRB approval, the three (3) quantitative assessment instruments (CCAI, TCS, and MCSDS-XI), along with a demographics questionnaire and consent form, were merged into a packet for each individual student.

All teacher candidates participating in the study were given a consent form to participate in the study. The consent form included information pertaining to the research, their role in the study, and informed that their participation in the study is both confidential and voluntary and were asked to sign the consent before beginning the assessments (Appendix G).

Assessment packets were given to both groups of students—the students in the Equity & Excellence in Education course, as well as the comparison group in the Introductory course. The pre-test was administered during the first two weeks of the Fall 2008 semester. The total assessment time during pre-test was approximately 30-60 minutes depending on the individual student. The post-test was administered during the final two weeks of the Fall 2008 semester. The total assessment time during post-test was approximately 15-45 minutes depending on the student.

Each student was asked to provide the last four digits of their social security number and name on a small sheet included in their assessment packet. This was done merely for purposes of linking individual pre-test scores to individual post-test scores. After each data collection completed in each individual class, the identifying information (name and identification number) were immediately taken from the assessment packets,
entered into a central database on a locked and secure computer belonging to the researcher. The database served only as a reference in the possible occurrence that a student did not remember the identification number that he chose during the pre-test (as a few students used a four-digit number other than the last four digits of their social security number). This information (hard copies) was discarded immediately after being entered into the central database. These procedures, to maintain the integrity of the research and ensure teacher candidates’ confidentiality, were carried out after the pre-test as well as the post-test data collection. The actual data were also entered into a computer software package, Statistical Package for Social Sciences (SPSS 16.0) immediately after data collection. The assessment packets were then stored in a secure locked cabinet only accessible to the researcher and faculty member involved in the research study.

Measures

The study will include seven control variables including prior coursework, social desirability, race, gender, age, and cultural experiences (includes diversity exposure and extent of diversity exposure). The dependent variables adaptability (flexibility/openness, emotional resilience, perceptual acuity, and personal autonomy) and disposition (addressing stereotypes, attitude, adaptation to diversity, expectations, and understanding) will also be explored. Table 2 includes each variable, definition, operationalization, coding scheme, and variable type.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Operationalization</th>
<th>Coding Scheme</th>
<th>Variable Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposition</td>
<td>Individual’s moral stance and sense of social justice</td>
<td>25-item scale examining “addressing stereotypes” (7-items), “attitude” (5-items), “adaptation to diversity” (6-items), “expectations” (3-items), and “understanding” (4-items)</td>
<td>7=Strongly Disagree, 6=Disagree, 5=Somewhat Disagree, 4=Neither Agree Nor Disagree, 3=Somewhat Agree, 2=Agree, 1=Strongly Agree. Scale ranges from a minimum of 25 (Strongly Agree) to a maximum of 175 (Strongly Disagree)</td>
<td>Dependent</td>
</tr>
<tr>
<td>Adaptability</td>
<td>Individual’s ability to effectively overcome challenges associated with cultural differences and equitably solve problems.</td>
<td>50-item scale examining cultural awareness of teacher candidates through, “flexibility/openness” (15-items), “emotional resilience” (18-items), “perceptual acuity” (10-items), and “personal autonomy (7-items)”</td>
<td>6=Definitely Not True, 5=Not True, 4=Tends to be Not True, 3=Tends to be True, 2=True, 1=Definitely True. Scale ranges from a minimum of 50 (Definitely not true) to a maximum of 300 (Definitely True)</td>
<td>Dependent</td>
</tr>
<tr>
<td>Intervention</td>
<td>Mandatory cultural competence education, in the form of an academic course, occurring between two periods or points in time</td>
<td>The University of Akron’s College of Education – Equity &amp; Excellence in Education course</td>
<td>0=No Course, 1=Course</td>
<td>Independent</td>
</tr>
<tr>
<td>Prior Coursework</td>
<td>Previous coursework taken related to Diversity Studies</td>
<td>1-item question to determine previous coursework related to diversity education</td>
<td>0=No Prior Courses Taken, 1=Prior Courses Taken</td>
<td>Control</td>
</tr>
<tr>
<td>Variable</td>
<td>Definition</td>
<td>Operationalization</td>
<td>Coding Scheme</td>
<td>Variable Type</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>Acting in a way that is considered socially acceptable or desirable if thinking that they’re being observed in some way, or as not to violate social norms.</td>
<td>10-item scale to determine if teacher candidates are answering proficiently or socially desirable</td>
<td>0=False, 1=True. Scale ranges from a minimum of 0 (False) to a maximum of 10 (True)</td>
<td>Control</td>
</tr>
<tr>
<td>Race</td>
<td>Whether an individual is considered White or Minority (non-white)</td>
<td>1-item question to determine race/ethnicity</td>
<td>0=Non-White, 1=Racial Minority</td>
<td>Control</td>
</tr>
<tr>
<td>Gender</td>
<td>The behavioral, cultural, and psychological traits typically associated with one sex</td>
<td>1-item question to determine gender</td>
<td>0=Male, 1=Female</td>
<td>Control</td>
</tr>
<tr>
<td>Age</td>
<td>The length of time an individual has been alive</td>
<td>1-item question to determine age</td>
<td>0=26+ yrs., 1=18-25 yrs.</td>
<td>Control</td>
</tr>
</tbody>
</table>
| Cultural Experience       | Exposure to different cultures other than their own                        | 8-item scale examining the depth of previous cultural experience through “diversity exposure” (5-items), and “extent of diversity exposure” (3-items) | 5=All of the Time, 4=Frequently, 3=Occasionally, 2=Rarely, 1=Almost Never. Scale ranges from a minimum of 8 (almost never) to a maximum of 40 (all the time) | Control       | 2 Control Variables

1. Diversity Exposure
2. Extent of Diversity Exposure
Dependent Variables

The research seeks to determine if there is a change in teacher candidate cultural competence by examining changes in perceptions of disposition and adaptability (key attributes of cultural competence). Disposition includes five subscales; adaptability is comprised of four subscales; therefore, a total of nine dependent variables are included in the study.

Disposition

Overall Disposition was measured using a 42 item Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The authors of this scale, using these 42 items, produced eight subscales (culture, race, class, language, religion, sexual orientation, exceptionality, self-identity, and gender); and through item analysis and exploratory factor analysis indicated the reliability alpha of the overall scale to be .85 with no item contributing negatively to the composite score (they did not report reliability and validity for each subscale identified). However, factor analysis of the 42-item scale in my sample produced a five factor solution; I have conceptualized these five factors as: 1) “addressing stereotypes”; 2) “adaptation to diversity”; 3) “attitude”; 4) “expectations”; and 5) “understanding”.

Addressing Stereotypes was measured by 7 items, including statements such as, “Teachers must address stereotypes of…”, “I need to challenge and address stereotypes of…”, and “I will challenge my students’ negative perceptions of…” All factors loading for these 7 items were greater than .40 with an overall alpha of .84. The composite score
for addressing stereotypes was constructed using the mean of the 7 items (mean=19.29; SD=6.81).

*Adaptation to Diversity* was measured by 6 items, including statements such as, “Teachers need to adapt their instructional strategies and materials to meet the needs of…”, and “I must adapt my instructional strategies…” All factors loading for these 6 items were greater than .40 with an overall alpha of .78. The composite for adapting to diversity was constructed using the mean of the 6 items (mean=15.21; SD=6.11).

*Attitude* was measured by 5 items, including statements such as, “My attitude towards…” All factors loading for these 5 items were greater than .40 with an overall alpha of .75. The composite for attitudes was constructed using the mean of the 5 items (mean=16.15; SD=6.04).

*Expectations* was measured by 3 items, including statements such as, “…can be related to low teacher expectations”. All factors loading for these 3 items were greater than .40 with an overall alpha of .70. The composite for expectations was constructed using the mean of the 3 items (mean=10.28; SD=3.66).

*Understanding* was measured by 4 items, including statements such as, “…need to be included into…”, and “understanding others…” All factors loading for these 4 items were greater than .40 with an overall alpha of .69. The composite for understanding was constructed using the mean of the 4 items (mean=7.99; SD=3.29).

**Adaptability**

Adaptability was measured using a 50 item Likert scale ranging from 1 (definitely not true) to 6 (definitely true). The adaptability construct is composed of 4 subscales
examining “emotional resilience”, “flexibility/openness”, “perceptual acuity”, and “personal autonomy” (Kelly & Meyers, 1995).

*Emotional Resilience* was measured by 18 items, including statements such as, “I can accept…”, and “I can live with…” The 18-item sub-scale for emotional resilience produced an overall alpha of .74. The composite score for emotional resilience was constructed using the mean of the 18-item subscale (mean=80.38; SD=7.89).

*Perceptual Acuity* was measured by 10 items, including statements such as, “I try to understand…”, and “I pay attention to…”. The 10-item sub-scale for perceptual acuity produced an overall alpha of .70. The composite score for perceptual acuity was constructed using the mean of the 10-item subscale (mean=47.03; SD=4.81).

*Personal Autonomy* was measured by 7 items, including statements such as, “I believe that…”. The 7-item sub-scale for personal autonomy produced an overall alpha of .54. The composite score for personal autonomy was constructed using the mean of the 7-item subscale (mean=34.13; SD=3.33).

*Flexibility/Openness* was measured by 15 items, including statements such as, “When I meet people that are different than me…”. The 15-item sub-scale for flexibility/openness produced an overall alpha of .41. The composite score for flexibility/openness was constructed using the mean of the 15-item subscale (mean=58.73; SD=5.48).

**Independent Variable**

This study is interested in assessing changes in teacher candidate perceptions of disposition and adaptability related to cultural competence by comparing pre-test and
post-test scores before and after a course on cultural competence. Therefore, there is only one independent variable included in the study-the cultural competence course.

**Intervention**

Intervention was measured as Course = 1 (those who were a part of the Equity & Excellence course on cultural competence), and No Course = 0 (those who were not a part of the Equity & Excellence course, but instead, were in the Introductory course).

**Control Variables**

For this study, several control variables were included. The research is not interested in the effect of these variables being changed throughout the study, but is interested in keeping specific variables constant to minimize their effects on the outcome. Control variables were selected based on literature and rationality as to which variables may affect an individual’s ability to become more culturally competent through cultural competence education and/or training.

**Race, Gender, Age, Prior Coursework**

Race was measured as Non-Minority = 0, and Racial Minority = 1. Gender was measured as Male = 0, and Female = 1. Age was measured as, 26+ years old = 0, and 18-25 years old = 1. Prior coursework was measured as No Prior Courses Taken = 0, and Prior Courses Taken = 1
Culturally Diverse Experience

Cultural Experience was measured using a 10-item Likert scale ranging from 1 (almost never) to 5 (all the time). Factor analysis of the 10-item scale in my sample produced a two factor solution; I have conceptualized these two factors of cultural experience as: 1) “diversity exposure”; 2) “extent of diversity exposure”.

Diversity Exposure was measured by 5 items, including statements such as, “My interaction with people that are…”, and “As a K-12 student, my schooling was with people who were…” All factors loading for these 5 items were greater than .40 with an overall alpha of .82. The composite score for diversity exposure was constructed using the mean of the 5 items (mean=15.34; SD=4.16).

Extent of Diversity Exposure was measured by 3 items, including statements such as, “The amount of time I have spent…” All factors loading for these 3 items were greater than .40 with an overall alpha of .86. The composite score for extent of diversity exposure was constructed using the mean of the 3 items (mean=8.52; SD=2.57).

Social Desirability

The Social Desirability construct examines whether survey respondents are answering socially desirable or proficiently. This construct was measured using a 10-item “true” or “false” scale. Items were coded so that, “true” = 1 (socially desirable response), while “false” = 0 (not sensitive to social desirability) (Shrahan & Gerbasi, 1972). The ten items were summed to create a scale score ranging from zero indicating no socially desirable responses to 10 meaning all responses were answered socially desirable (alpha .66; mean=4.74,SD=2.16).
The collected data were entered into Statistical Package for Social Sciences (SPSS 16.0) for statistical analysis. All preliminary analyses were run in the SPSS 16.0 program. Final regression models were run in the Mplus 5.1 statistical program. Like other studies, this program was used for the final models to control for the bias in standard errors that could result from nested data (Sloboda, Stephens, Stephens, et al., 2009). That is, our students are nested within classrooms (Bryk and Raudenbush, 1992). The bias in standard errors increases the probably of making a Type I error, therefore, some adjustment should be made for this complex sampling design.

Mplus provides this adjustment by using sandwich standard errors which are unbiased. Additionally, Mplus provides the full information likelihood (FIML) approach to missing data. The FIML approach is a direct model method of handling missing data which provides efficient, non-biased estimates and standard errors (Olinsky, Chen, Harlow, 2002).

Basic descriptive analysis (frequencies and histograms) were run on each of the variables of interest to test basic assumptions (i.e., normality, linearity, outliers). Outliers were truncated to be within 3 standard deviations of the distribution while still maintaining the rank ordering of cases within the distribution. For the categorical control variables (social desirability, diversity exposure, and extent of diversity exposure), no outliers were identified. However, the pre-test dependent variables, including addressing stereotypes, adaptation to diversity, attitude, and understanding, had identified outliers and each variable was truncated to be within three standard deviations of the mean while maintaining the numerical ordering of the cases. The post-test dependent variables,
including addressing stereotypes, adaptation to diversity, attitude, expectations, understanding, flexibility/openness, and emotional resilience, had identified outliers and were also truncated to be within three standard deviations of the mean while maintaining the numerical ordering of the cases.

In addition, and to prepare for multiple regressions, the assumptions of normality, linearity, and reliability were tested to minimize the possibility of biased estimates or standard errors. Multiple regression models controlling for T1 scores and other predictors of the dependent variables of interest (race, gender, age, cultural experience, prior coursework, social desirability) were run for each of the nine dependent variables yielding nine regression models for the study.
CHAPTER IV

MAJOR FINDINGS AND DISCUSSION OF DATA

Description of the Study Participants

As with any survey research project it is imperative to make certain that the research will yield suitable response rates that will enhance the validity of the study. For this study, because the researcher targeted the entire population of teacher candidates enrolled in specific courses, almost all students that were enrolled in those courses participated in the study.

There were a total of 270 students registered for either the Introductory course or the Equity course. Four (4) students did not consent to participate in the study and therefore, did not complete the pre-test questionnaire packet, yielding a participation rate of 99%.

Of those students involved in the study (266), 50% (134) were part of the treatment group who were enrolled in the Equity & Education course, and 50% (132) were part of the comparison group, who were enrolled in the Intro class during Fall 2008. Follow-up rates for the study were 88%, where 33 students did not complete the post-test (24 were either absent or dropped the course, and 9 students elected not to complete the post-test).
Preliminary Analysis

An attrition analysis was conducted in order to determine if attrition of teacher candidates will impact the findings of the study. First, attritors were compared with non-attritors.

Attrition Analysis

Table 3 lists all variables used in this study comparing the study participant totals for each variable overall, as well as comparing the attrition group and the non-attrition group for baseline pre-test scores.

Chi-Square analysis was conducted on the variables of race, gender, age, and prior coursework. Independent t-test analysis was conducted on all nine dependent variables, as well as culturally diverse experiences (diversity exposure and extent of diversity exposure) and social desirability. The results of the preliminary attrition analysis indicated that the attrition group and non-attrition group differ in age and prior coursework.

The attrition group had significantly older participants than the non-attrition group ($\chi^2=9.940; p=.002; df=1$). The non-attrition group had significantly more prior coursework than the attrition group ($\chi^2=8.950; p=.003; df=1$). Therefore, the attrition group was older and had less prior coursework compared to the non-attrition group.

Next, the attrition group was examined by group. Table 4 lists all variables used in this study for the attrition group comparing the treatment and comparison group baseline pre-test scores. Chi-Square analysis was conducted on the variables of race, gender, age, and prior coursework. Independent t-test analysis was conducted on all nine
dependent variables, as well as culturally diverse experiences (diversity exposure and extent of diversity exposure) and social desirability. The results of the preliminary attrition analysis indicated that, for the attritors, the treatment and comparison group differ on extent of diversity exposure only. The comparison group mean score for extent of diversity exposure ($\bar{x}=2.59$) was significantly different from that of the treatment group ($\bar{x}=3.42$) for attritors ($p=.001; \text{df}=31$). Therefore, amongst attritors, the comparison group has had less extensive diversity exposure than the treatment group.

As a result of the overall attrition analysis, there were only two variables (age, prior coursework) in which the attrition group and non-attrition group differ, both were control variables. The groups did not differ on any dependent variables.
Table 3: Attritors vs. Non-Attritors

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Attritors</th>
<th>Non-Attritors</th>
<th>Total</th>
<th>df</th>
<th>p*</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>93.9%</td>
<td>91.8%</td>
<td>92.1%</td>
<td>1</td>
<td></td>
<td>.676</td>
</tr>
<tr>
<td>Racial Minority</td>
<td>6.1%</td>
<td>8.2%</td>
<td>7.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>57.6%</td>
<td>68.2%</td>
<td>66.9%</td>
<td>1</td>
<td></td>
<td>.223</td>
</tr>
<tr>
<td>Male</td>
<td>42.4%</td>
<td>31.8%</td>
<td>33.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>60.6%</td>
<td>83.7%</td>
<td>80.8%</td>
<td>1</td>
<td></td>
<td>.002*</td>
</tr>
<tr>
<td>26+</td>
<td>39.4%</td>
<td>16.3%</td>
<td>19.2%</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Attritors</th>
<th>Non-Attritors</th>
<th>Total</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposition</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Addressing Stereotype</td>
<td>2.92</td>
<td>1.048</td>
<td>2.70</td>
<td>.880</td>
</tr>
<tr>
<td>Adapt to Diversity</td>
<td>2.51</td>
<td>1.120</td>
<td>2.50</td>
<td>.906</td>
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<tr>
<td>Attitude</td>
<td>3.24</td>
<td>1.208</td>
<td>3.25</td>
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<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>p*</th>
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Table 4: Attritors – Treatment vs. Comparison Groups

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<td></td>
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<td>Age</td>
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<th>p*</th>
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</tr>
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<td>.151</td>
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<thead>
<tr>
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<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>p*</th>
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<td>2.180</td>
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<th>Treatment</th>
<th>Total</th>
<th>t-test</th>
<th>df</th>
<th>p*</th>
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<td>.535</td>
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<td>.873</td>
<td>3.42</td>
<td>.450</td>
<td>2.87</td>
<td>.850</td>
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Analytical Sample

Table 5 illustrates the variables involved in this study, including the demographic variables race, gender, and age; the dependent variables, disposition (and subscales) and adaptability (and subscales); and control variables, prior coursework, social desirability, and culturally diverse experiences (diversity exposure and extent of diversity exposure) for the study population, treatment group, and comparison group.

Chi-Square analysis was conducted for race, gender, age, and prior coursework. Independent t-test analysis was conducted on all nine dependent variables, as well as for culturally diverse experiences (diversity exposure and extent of diversity exposure) and social desirability to determine if the treatment and comparison group differ on baseline measures.

As a result of the preliminary analysis of the analytical sample, the comparison and treatment groups differ on four out of five of the disposition variables (addressing stereotypes, adaptation to diversity, attitude, and understanding). The groups also differ on prior coursework, and extent of diversity exposure.

Baseline Differences in Treatment & Comparison Groups

The comparison group ($\bar{x}=2.57$) had significantly lower scores than the treatment group ($\bar{x}=2.88$) for addressing stereotypes ($p=.005; df=263$). The comparison group ($\bar{x}=2.28$) had significantly lower scores than the treatment group ($\bar{x}=2.72$) for adaptation to diversity ($p=.000; df=258$). The comparison group ($\bar{x}=3.08$) had significantly lower scores than the treatment group ($\bar{x}=3.41$) for attitude ($p=.024; df=262$).
The comparison group (\(\bar{x}=1.87\)) had significantly lower scores than the treatment group (\(\bar{x}=2.06\)) for understanding (p=.039; df=263). The comparison group had significantly less prior coursework than the treatment group (\(\chi^2=9.819; p=.002; df=1\)). The comparison group (\(\bar{x}=2.73\)) had significantly lower scores than the treatment group (\(\bar{x}=2.94\)) for extent of diversity exposure (p=.807; df=42).

As a result of the overall preliminary analysis of the analytic sample, the comparison group scored lower on four out of five disposition variables in the pre-test scores. In addition, the comparison group had less prior coursework, as well as less extensive diversity exposure compared to the treatment group. A correlation matrix was also developed (Appendix H), which indicates the strength and direction of relationships between all variables included in the study.
Table 5: Description of Study Participants

<table>
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<th>Demographic Variables</th>
<th>Comparison</th>
<th>Treatment</th>
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<th>df</th>
<th>p*</th>
<th>(\chi^2)</th>
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<td>%</td>
<td>%</td>
<td>%</td>
<td>df</td>
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<td>%</td>
<td>%</td>
<td>%</td>
<td>df</td>
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<td></td>
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<tr>
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<td>%</td>
<td>%</td>
<td>%</td>
<td>df</td>
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<th></th>
<th>p*</th>
<th>(\chi^2)</th>
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<td>2.72 (.84)</td>
<td>2.50 (.933)</td>
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<td>.000*</td>
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<td>Expectations</td>
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<td>1.97 (.726)</td>
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<td>.039*</td>
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<td>3.92 (.35)</td>
<td>3.90 (.387)</td>
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<td>.459</td>
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<td>%</td>
<td>%</td>
<td>df</td>
<td>p* (\chi^2)</td>
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<td>.002*</td>
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<td>76.2%</td>
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<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>df</td>
<td>p*</td>
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<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>df</td>
<td>p*</td>
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<td>.858</td>
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Multiple Regression

Assumptions for multiple regression were tested in the SPSS program prior to running the models in Mplus. The assumptions tested included: 1) data are interval/ratio level data; 2) measures are normally distributed; and 3) a linear relationship exists among independent and dependent variables. Additionally, assumptions regarding the residuals were tested: 1) normally distributed; 2) uncorrelated with the independent variables; and 3) homoskedasticity and independence of the residuals (errors). These assumptions held for each of the nine models. Tolerance and VIF testing for multicollinearity revealed no multicollinearity issue (VIF<4.0). Partial regression leverage plots were used to assess outliers and assess linearity and no issues of leverage or nonlinearity were apparent.

Final multiple regression models were run in Mplus 5.1 utilizing maximum likelihood estimates. The regression models provide an estimate of the effect of the core course on perceptions of disposition and adaptability compared to the comparison group (no course) controlling for pretest scores and other possible confounding variables including race, gender, age, prior coursework, diversity exposure, extent of diversity exposure, and social desirability. There are nine dependent variables in the study related to disposition (addressing stereotypes, adaptation to diversity, attitude, expectations, and understanding) and adaptability (flexibility/openness, personal autonomy, perceptual acuity, and emotional resilience). Therefore, nine multiple regression models were created--one for each dependent variable. The general linear formula for each regression model is shown below:

\[ \hat{y} = a + b_1 \text{ (pretest)} + b_2 \text{ (race)} + b_3 \text{ (gender)} + b_4 \text{ (age)} + b_5 \text{ (prior coursework)} + b_6 \text{ (diversity exposure)} + b_7 \text{ (extent of diversity exposure)} + b_8 \text{ (social desirability)} + b_9 \text{ (group)} + e \]
Root mean squared error approximation (RMSEA) is a standardized, absolute fit indice which measures the fit of the model to the data. Hu and Bentler (1999) recommend a RMSEA cutoff value of .06 before concluding there is a good fit between the proposed model and data. All nine regression models revealed a significant RMSEA (p=.000), that is, all nine models revealed that a good fit exists between the model and the data.

Regression Model #1: Addressing Stereotypes

Table 6 includes the regression model summary for addressing stereotypes. The intercept for the final model is 1.429 (p=.012), indicating that the mean for the control group, when all other measures are equal to zero is 1.429. This value is significantly greater than zero (p=.000). However, as the final model in Table 6 shows, the slope for the treatment group variable (b=-.080; p=.271) is not significantly different than zero. That is, the cultural competence course had no significant effect on addressing stereotypes-the treatment group mean is not significantly different from the mean for the comparison group.

However, social desirability demonstrated significance (p=.012) and a negative coefficient. Therefore, students with higher social desirability scores that are concentrating on answering “correctly” tend to score lower on addressing stereotypes. This is a primary example of why the variable of social desirability was used as a control variable. This was the only model in the study that demonstrated significance for social desirability.
Table 6: Addressing Stereotypes

<table>
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<tr>
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</table>

RMSEA = .000
Model R-Square = .312

Regression Model #2: Adaptation to Diversity

Table 7 includes the regression model summary for adaptation to diversity. The intercept for the final model is 1.421 (p=.000), indicating that the mean for the control group, when all other measures are equal to zero is 1.421. This value is significantly greater than zero (p=.000). The final model in Table 7 shows, the slope for the treatment group variable (b=-.098; p=.064) is not significantly different than zero. That is, the cultural competence course had no significant effect on adaptation to diversity-the treatment group mean is not significantly different from the mean for the comparison group. Gender demonstrated significance (p=.011) and a negative coefficient; therefore, females were less likely to report that they are adaptable to diversity.
Table 7: Adaptation to Diversity

<table>
<thead>
<tr>
<th>Outcome: Adaptation to Diversity</th>
<th>Unstandardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Intercept</td>
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</tr>
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<td>Pre-Test Score</td>
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</tr>
<tr>
<td>Prior Coursework</td>
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</tr>
<tr>
<td>Social Desirability</td>
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</tr>
<tr>
<td>Diversity Exposure</td>
<td>.123</td>
</tr>
<tr>
<td>Extent of Diversity Exposure</td>
<td>-.173</td>
</tr>
<tr>
<td>18-25 yrs. old</td>
<td>-.007</td>
</tr>
<tr>
<td>Racial Minority</td>
<td>.167</td>
</tr>
<tr>
<td>Female</td>
<td>-.180</td>
</tr>
<tr>
<td>Treatment</td>
<td>-.098</td>
</tr>
</tbody>
</table>

RMSEA = .000
Model R-Square = .335

Regression Model #3: Attitude

Table 8 includes the regression model summary for attitude. The intercept for the final model is 1.416 (p=.000), indicating that the mean for the control group, when all other measures are equal to zero is 1.416. This value is significantly greater than zero (p=.000). However, as the final model in Table 8 shows, the slope for the treatment group variable (b=-.168; p=.176) is not significantly different than zero. That is, the cultural competence course had no significant effect on attitude-the treatment group mean is not significantly different from the mean for the comparison group.
### Table 8: Attitude

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Unstandardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.416</td>
</tr>
<tr>
<td>Pre-Test Score</td>
<td>.509</td>
</tr>
<tr>
<td>Prior Coursework</td>
<td>-0.074</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>0.028</td>
</tr>
<tr>
<td>Diversity Exposure</td>
<td>0.024</td>
</tr>
<tr>
<td>Extent of Diversity Exposure</td>
<td>-0.074</td>
</tr>
<tr>
<td>18-25 yrs. old</td>
<td>0.083</td>
</tr>
<tr>
<td>Racial Minority</td>
<td>0.017</td>
</tr>
<tr>
<td>Female</td>
<td>-0.186</td>
</tr>
<tr>
<td>Treatment</td>
<td>-0.168</td>
</tr>
</tbody>
</table>

RMSEA = .000
Model R-Square = .308

**Regression Model #4: Expectations**

Table 9 includes the regression model summary for expectations. The intercept for the final model is 2.008 (p=.000), indicating that the mean for the control group, when all other measures are equal to zero is 2.008. This value is significantly greater than zero (p=.000). As the final model in Table 9 shows, the slope for the treatment group variable (b=-.039; p=.816) is not significantly different than zero. That is, the cultural competence course had no significant effect on expectations-the treatment group mean is not significantly different from the mean for the comparison group. Age demonstrated significance (p=.029) and a negative coefficient; therefore, younger students are more likely to report higher scores on expectations than students 26+ years old.
Table 9: Expectations

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Unstandardized Coefficients</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>Std. Error</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>Intercept</td>
<td>2.008</td>
<td>.538</td>
<td>3.730</td>
<td>.000</td>
</tr>
<tr>
<td>Pre-Test Score</td>
<td>.410</td>
<td>.075</td>
<td>5.498</td>
<td>.000</td>
</tr>
<tr>
<td>Prior Coursework</td>
<td>-.156</td>
<td>.081</td>
<td>-1.926</td>
<td>.054</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>-.048</td>
<td>.029</td>
<td>-1.686</td>
<td>.092</td>
</tr>
<tr>
<td>Diversity Exposure</td>
<td>-.106</td>
<td>.103</td>
<td>-1.024</td>
<td>.306</td>
</tr>
<tr>
<td>Extent of Diversity Exposure</td>
<td>.006</td>
<td>.104</td>
<td>.056</td>
<td>.955</td>
</tr>
<tr>
<td>18-25 yrs. old</td>
<td>.271</td>
<td>.124</td>
<td>2.182</td>
<td>.029</td>
</tr>
<tr>
<td>Racial Minority</td>
<td>.169</td>
<td>.224</td>
<td>.754</td>
<td>.451</td>
</tr>
<tr>
<td>Female</td>
<td>-.164</td>
<td>.159</td>
<td>-1.033</td>
<td>.301</td>
</tr>
<tr>
<td>Treatment</td>
<td>-.039</td>
<td>.167</td>
<td>-.233</td>
<td>.816</td>
</tr>
</tbody>
</table>

RMSEA = .000
Model R-Square = .244

Regression Model #5: Understanding

Table 10 includes the regression model summary for understanding. The intercept for the final model is 1.868 (p=.000), indicating that the mean for the control group, when all other measures are equal to zero is 1.868. This value is significantly greater than zero (p=.000). However, as the final model in Table 10 shows, the slope for the treatment group variable (b=-.134; p=.120) is not significantly different than zero. That is, the cultural competence course had no significant effect on understanding-the treatment group mean is not significantly different from the mean for the comparison group. Gender demonstrated significance (p=.014) and a negative coefficient; therefore, females are less likely to report higher scores for understanding than males.
Table 10: Understanding

<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Unstandardized Coefficients</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>b</td>
<td>Std. Error</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.868</td>
<td>.343</td>
<td>5.452</td>
<td>.000</td>
</tr>
<tr>
<td>Pre-Test Score</td>
<td>.490</td>
<td>.047</td>
<td>10.364</td>
<td>.000</td>
</tr>
<tr>
<td>Prior Coursework</td>
<td>-.093</td>
<td>.070</td>
<td>-1.327</td>
<td>.184</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>-.017</td>
<td>.012</td>
<td>-1.350</td>
<td>.177</td>
</tr>
<tr>
<td>Diversity Exposure</td>
<td>.000</td>
<td>.083</td>
<td>.001</td>
<td>.999</td>
</tr>
<tr>
<td>Extent of Diversity Exposure</td>
<td>-.104</td>
<td>.075</td>
<td>-1.383</td>
<td>.167</td>
</tr>
<tr>
<td>18-25 yrs. old</td>
<td>-.222</td>
<td>.130</td>
<td>-1.704</td>
<td>.088</td>
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<td>Racial Minority</td>
<td>-.066</td>
<td>.193</td>
<td>-.0344</td>
<td>.731</td>
</tr>
<tr>
<td>Female</td>
<td>-.194</td>
<td>.079</td>
<td>-2.465</td>
<td>.014</td>
</tr>
<tr>
<td>Treatment</td>
<td>-.134</td>
<td>.086</td>
<td>-1.557</td>
<td>.120</td>
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</table>

RMSEA = .000
Model R-Square = .286

Regression Model #6: Flexibility/Openness

Table 11 includes the regression model summary for flexibility/openness. The intercept for the final model is 1.884 (p=.000), indicating that the mean for the control group, when all other measures are equal to zero is 1.884. This value is significantly greater than zero (p=.000). However, as the final model in Table 11 shows, the slope for the treatment group variable (b=-.025; p=.616) is not significantly different than zero. That is, the cultural competence course had no significant effect on flexibility/openness—the treatment group mean is not significantly different from the mean for the comparison group.
Table 11: Flexibility/Openness

<table>
<thead>
<tr>
<th>Outcome: Flexibility/Openness</th>
<th>Unstandardized Coefficients</th>
<th>b</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>1.884</td>
<td>.342</td>
<td>5.502</td>
<td>.000</td>
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<tr>
<td>Pre-Test Score</td>
<td></td>
<td>.589</td>
<td>.058</td>
<td>10.215</td>
<td>.000</td>
</tr>
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<td>Prior Coursework</td>
<td></td>
<td>-.026</td>
<td>.037</td>
<td>-.695</td>
<td>.487</td>
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<td>Social Desirability</td>
<td></td>
<td>-.003</td>
<td>.008</td>
<td>-.404</td>
<td>.686</td>
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<tr>
<td>Diversity Exposure</td>
<td></td>
<td>-.017</td>
<td>.016</td>
<td>-1.037</td>
<td>.300</td>
</tr>
<tr>
<td>Extent of Diversity Exposure</td>
<td></td>
<td>-.020</td>
<td>.024</td>
<td>-.840</td>
<td>.401</td>
</tr>
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<td>18-25 yrs. old</td>
<td></td>
<td>.004</td>
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<td>.945</td>
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<td>-.047</td>
<td>.103</td>
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<tr>
<td>Female</td>
<td></td>
<td>-.069</td>
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<td>.137</td>
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<tr>
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<td>-.502</td>
<td>.616</td>
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</table>

RMSEA = .000
Model R-Square = .339

Regression Model #7: Personal Autonomy

Table 12 includes the regression model summary for personal autonomy. The intercept for the final model is 2.810 (p=.000), indicating that the mean for the control group, when all other measures are equal to zero is 2.810. This value is significantly greater than zero (p=.000). However, as the final model in Table 12 shows, the slope for the treatment group variable (b=-.039; p=.570) is not significantly different than zero. That is, the cultural competence course had no significant effect on personal autonomy; the treatment group mean is not significantly different from the mean for the comparison group.
Table 12: Personal Autonomy

<table>
<thead>
<tr>
<th>Outcome</th>
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</thead>
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<td>Intercept</td>
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<td>Pre-Test Score</td>
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<tr>
<td>Prior Coursework</td>
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<td>Social Desirability</td>
<td>-.009</td>
</tr>
<tr>
<td>Diversity Exposure</td>
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<tr>
<td>Extent of Diversity Exposure</td>
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<td>18-25 yrs. old</td>
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</tr>
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<td>Racial Minority</td>
<td>-.133</td>
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<td>Female</td>
<td>-.008</td>
</tr>
<tr>
<td>Treatment</td>
<td>-.039</td>
</tr>
</tbody>
</table>

RMSEA = .000
Model R-Square = .291

Regression Model #8: Perceptual Acuity

Table 13 includes the regression model summary for perceptual acuity. The intercept for the final model is 1.427 (p=.005), indicating that the mean for the control group, when all other measures are equal to zero is 1.427. This value is significantly greater than zero (p=.000). As the final model in Table 13 shows, the slope for the treatment group variable (b=-.015; p=.805) is not significantly different than zero. That is, the course had no significant effect on perceptual acuity-the treatment group mean is not significantly different from the mean for the comparison group. Prior coursework demonstrated significance (p=.000) and a negative coefficient; therefore, students with more prior coursework tend to score lower on addressing stereotypes.
Table 13: Perceptual Acuity

<table>
<thead>
<tr>
<th>Outcome: Perceptual Acuity</th>
<th>Unstandardized Coefficients</th>
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<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
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<tr>
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<td>.005</td>
</tr>
<tr>
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<td>.000</td>
</tr>
<tr>
<td>Prior Coursework</td>
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<td>.035</td>
<td>-3.511</td>
<td>.000</td>
</tr>
<tr>
<td>Social Desirability</td>
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<td>.009</td>
<td>1.331</td>
<td>.183</td>
</tr>
<tr>
<td>Diversity Exposure</td>
<td></td>
<td>.029</td>
<td>.041</td>
<td>.710</td>
<td>.478</td>
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<tr>
<td>Extent of Diversity Exposure</td>
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<td>-.003</td>
<td>.034</td>
<td>-0.089</td>
<td>.929</td>
</tr>
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<td>18-25 yrs. old</td>
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<td>.167</td>
<td>.090</td>
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<td>.081</td>
<td>.936</td>
</tr>
<tr>
<td>Female</td>
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<td>.008</td>
<td>.080</td>
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<td>.247</td>
<td>.805</td>
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</table>

RMSEA = .000
Model R-Square = .417

Regression Model #9: Emotional Resilience

Table 14 includes the regression model summary for emotional resilience. The intercept for the final model is 1.383 (p=.001), indicating that the mean for the control group, when all other measures are equal to zero is 1.383. This value is significantly greater than zero (p=.000). However, as the final model in Table 14 shows, the slope for the treatment group variable (b=-.031; p=.459) is not significantly different than zero. That is, the cultural competence course had no significant effect on emotional resilience-the treatment group mean is not significantly different from the mean for the comparison group.
Table 14: Emotional Resilience

<table>
<thead>
<tr>
<th>Outcome: Emotional Resilience</th>
<th>Unstandardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
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<td>Intercept</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Prior Coursework</td>
<td>-.085</td>
</tr>
<tr>
<td>Social Desirability</td>
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</tr>
<tr>
<td>Diversity Exposure</td>
<td>.001</td>
</tr>
<tr>
<td>Extent of Diversity Exposure</td>
<td>.000</td>
</tr>
<tr>
<td>18-25 yrs. old</td>
<td>.013</td>
</tr>
<tr>
<td>Racial Minority</td>
<td>-.048</td>
</tr>
<tr>
<td>Female</td>
<td>-.004</td>
</tr>
<tr>
<td>Treatment</td>
<td>-.031</td>
</tr>
</tbody>
</table>

RMSEA = .000  
Model R-Square = .538

Analysis of Research Questions

In order to answer the main research questions, “Do students that took the course score higher on disposition measures?” and “Do students that took the course score higher on adaptability measures?” nine sub-research questions were asked. Specifically, the sub-research questions ask whether students that took the course score higher on: addressing stereotypes, adaptation to diversity, attitude, expectations, and understanding (the five subscales of disposition); and emotional resilience, flexibility/openness, perceptual acuity, and personal autonomy (the five subscales of adaptability) in order to answer the main research questions. Multiple regression analysis was conducted for each of the nine dependent variable in Mplus to determine if there were significant differences.
between the treatment and comparison group while controlling for pretest score and other possible confounding variables including race, gender, age, prior coursework, diversity exposure, extent of diversity exposure and social desirability.

Disposition

The first research question asks, “Do students that took the Equity & Excellence in Education course score higher on disposition measures?” The sub-research questions ask whether students that took the course changed their perceptions on: addressing stereotypes, adaptation to diversity, attitude, expectations, and understanding.

For the first attribute of disposition, addressing stereotypes, the cultural competence course had no significant effect on addressing stereotypes-the treatment group mean is not significantly different from the mean for the comparison group (p=.271). For the second attribute of disposition, adaptation to diversity, the cultural competence course had no significant effect on adaptation to diversity-the treatment group mean is not significantly different from the mean for the comparison group (p=.064). For the third attribute of disposition, attitude, the cultural competence course had no significant effect on attitude-the treatment group mean is not significantly different from the mean for the comparison group (p=.176). For the fourth attribute of disposition, expectations, the cultural competence course had no significant effect on expectations-the treatment group mean is not significantly different from the mean for the comparison group (p=.816). For the fifth attribute of disposition, understanding, the cultural competence course had no significant effect on
understanding-the treatment group mean is not significantly different from the mean for the comparison group (p=.120).

Overall, the cultural competence course had no significant effect on any of the five subscales of disposition. Therefore, the course had no significant effect on teacher candidates’ perceptions of disposition.

Adaptability

The second research question asks, “Do students that took the Equity & Excellence course score higher on adaptability measures?” The sub-research questions ask whether students that took the course changed their perceptions on: flexibility/openness, personal autonomy, perceptual acuity, and emotional resilience.

For the first attribute of adaptability, flexibility/openness, the cultural competence course had no significant effect on flexibility/openness-the treatment group mean is not significantly different from the mean for the comparison group. (p=.616). For the second attribute of adaptability, personal autonomy, the cultural competence course had no significant effect on personal autonomy-the treatment group mean is not significantly different from the mean for the comparison group (p=.570). For the third attribute of adaptability, perceptual acuity, the cultural competence course had no significant effect on perceptual acuity-the treatment group mean is not significantly different from the mean for the comparison group (p=.805). The fourth attribute of adaptability, emotional resilience, the cultural competence course had no significant effect on emotional resilience-the treatment group mean is not significantly different from the mean for the comparison group (p=.459).
The cultural competence course had no significant effect on any of the four subscales of adaptability. Therefore, the course had no significant effect on teacher candidate perceptions of adaptability.

Limitations of the Study

The major limitation of this design was not having the ability to control for biases that would otherwise be controlled for with randomization. Because the design lacks random assignment of individuals into the two groups, an assumption that the groups are equivalent cannot be made. The researcher discovered that the two groups differ on the pre-test measure. Therefore, pretest measures and covariates were included in models to statistically control for other causes of the dependent variables.

A threat to internal validity was mortality (i.e., student drop-outs), which was minimal considering the findings of the attrition study. Because the study is an exploratory case study examining a single public University, the results from this study cannot be generalized. Other limitations may include unintentional omitting of relevant variables from the regression analysis, which could potentially make the betas of the included variables unreliable.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Summary of the Study

Overall, the research study was designed to explore the change in perceptions of
disposition and adaptability related to cultural competence amongst teacher candidates
that completed a mandatory course on diversity and cultural competence. Specifically,
this research focuses on examining the learning outcomes of students at The University
of Akron who are enrolled in a targeted course aimed at increasing cultural competence
of teacher candidates by examining changes in students’ perceptions of disposition and
adaptability.

The data utilized in this study was data collected during a previous study
conducted by the researcher, which includes data collected from teacher candidates in
The University of Akron’s College of Education who were enrolled in either the Equity &
Excellence in Education course, a required core course included in the curriculum of
teacher candidates, or an Introductory course (the cohort subsequent to the students
enrolled in the Equity course). According to the standard course syllabus, the course
“adopts an interdisciplinary approach to engage teacher candidates in inquiry-based
seminars and service learning that facilitate their developing pedagogical competence in
defining,
conceptualizing, and implementing equity and excellence in education in a culturally pluralistic society.”

The course is comprised of second semester sophomore and first semester junior undergraduate students and is taken just before the final phase of the Education program. In Fall 2008, the course was offered through six sections, each course expected enrollment of approximately twenty-five students. All six sections of the course were taught using a standard syllabus which outlines specific course objectives developed for the course, incorporating all program requirements necessary to meet the diversity standards identified by the National Council for Accreditation of Teacher Education (NCATE).  

The study consisted of a quasi-experimental comparison group pre-test-post-test design (Campbell & Stanley, 1963, 1966). The survey research approach in this study utilizes multiple quantitative assessment instruments to assess the differences between the two groups, thereby determining if the course had an effect on teacher candidates’ perceptions of disposition and adaptability.

The treatment group consisted of approximately 135 undergraduate teacher candidates at The University of Akron who were enrolled in the mandatory Equity & Excellence in Education course over Fall 2008. The comparison group consisted of approximately 135 undergraduate teacher candidates at The University of Akron considered part of the preceding cohort of Group 1 which were not enrolled in the Equity

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1 All NCATE accredited teacher education programs are required to meet the diversity standards outlined by the accrediting body; however, how they are organized in program, or course format, can vary by university.
& Excellence in Education course in Fall 2008, but were expected to take the course over Spring 2009.

The study incorporated multiple quantitative assessment instruments used to measure adaptability and disposition, and also examined social desirability amongst teacher candidates. The Cross-Cultural Adaptability Inventory (CCAI) developed and revised by Kelley & Meyers (1992) is a 50-item assessment designed to assess teacher candidates’ cross-cultural adaptability, by examining emotional resilience, flexibility & openness, perceptual acuity, and personal autonomy, as they relate to adaptability.

Because the literature suggests that adaptability is a key attribute of cultural competence, this assessment instrument was utilized in the study. According to the developers of this assessment tool, it is used frequently to assess readiness in interacting with members of another cultural make-up or to adapt to life in another culture, assess an individual’s effectiveness in cross-cultural interaction and communication, and to measure effectiveness of cultural training (Kelley & Meyers, 1992).

The CCAI measures cross-cultural adaptability across four (4) variables: emotional resilience, flexibility & openness, perceptual acuity, and personal autonomy. The aforementioned variables may be good indicators of how teacher candidates will conduct themselves in the field. The first attribute, emotional resilience, consists of an 18-item subscale. The second attribute, flexibility & openness, consists of a 15-item subscale. The third attribute, perceptual acuity, consists of a 10-item subscale. The fourth attribute, personal autonomy, consists of a 7-item subscale. Survey participants were asked to respond to each of the 50 items using a scale from 1 (definitely true) to 6
(definitely not true). This assessment instrument was tested for reliability and validity and yielded an Alpha of .90.

The Teacher Candidate Survey, developed by Colville-Hall & Liang (2003), was utilized to assess teacher candidates’ disposition, by examining the attributes of, addressing stereotypes, adaptation to diversity, attitude, expectations, and understanding, as they relate to disposition (See Appendix C). This assessment was originally designed to measure disposition as it relates to cultural competence, looking at subscales of disposition of teacher candidates. The instrument, according to the authors, contains eight (8) subscales; culture, race, class, language, religion, sexual orientation, exceptionality, self-identity, and gender, and was tested for reliability and validity with an Alpha of .85 (Colville-Hall & Liang, 2003).

Similar to other studies focused on measuring attitudes (a key element of disposition) factor analysis was conducted to determine which factors were loading under this construct (Stephens, et al., 2009). However, through exploratory factor analysis, the 42-item scale ranging from 1 (strongly disagree) to 5 (strongly agree), produced a five factor solution. I conceptualized these five factors as: 1) “addressing stereotypes”, 2) “adaptation to diversity”, 3) “attitude”, 4) “expectations”, and 5) “understanding”. Addressing stereotypes was measured by 7 items; adapting to diversity was measured by 6 items; attitude was measured by 5 items; expectations was measured by 3 items; and understanding was measured by 4 items. Therefore, a disposition index was created using 25 of the original 42-items.

The Marlowe-Crowne Social Desirability Scale (X1), a 10-item scale developed by Strahan & Gerbasi (1972), was developed as a shorter version of the original 33-item
scale. The Short Form XI (Strahan & Gerbasi, 1972) has high internal consistency and is highly correlated to the original 33-item scale. It was utilized in this study to measure and control for social desirability amongst teacher candidates (See Appendix D).

The literature surrounding cultural competence also indicates that cultural experiences, including neighborhoods, schools, friends, etc. can have an impact on an individual’s cultural competence and/or his/her ability to move more proficiently along the cultural competence continuum. Therefore, this study also incorporated a 10-item scale ranging from 1 (almost never) to 5 (all the time) to measure cultural experiences of teacher candidates.

Through factor analysis of the scale, a two factor solution was produced. I conceptualized these two factors of cultural experience as: 1) “diversity exposure”, and 2) “extent of diversity exposure”. Diversity exposure was measured by 5 items, and extent of diversity exposure was measured by 3 items. Therefore, a disposition index was created using 8 of the original 10-items.

Summary of the Proceedings

Before the study was conducted, an extensive review of cultural competence literature in general, and in higher education, was conducted. The literature suggests that there is very limited research that exists related to outcomes of cultural competence education and training amongst teacher candidates.

The University of Akron Institutional Review Board (IRB) application was submitted to conduct this research with human subjects (Appendix E) and upon approval, the three (3) quantitative assessment instruments, the demographics questionnaire, and
consent form, were merged into a packet to be administered to individual students. The assessment packet was given to both, the students in the Equity & Excellence in Education course, as well as the comparison group enrolled in the Introductory course, during the first two weeks of the Fall 2008 semester and again during the last two weeks of the Fall 2008 semester.

Each student was asked to provide their last four digits of their social security number and name for purposes of linking the pre-test and post-test. This information was immediately taken from the assessment packets, entered into a central database on a locked and secure computer belonging to the researcher and kept in a secure, locked cabinet separated from the assessment materials. This was done during both pre-test and post-test data collection.

The total assessment time during pre-test was approximately 30-60 minutes depending on the student; the total assessment time during post-test was approximately 15-45 minutes depending on the student. The data were entered immediately after pre- & post-test data collection into the computer software package, Statistical Package for Social Sciences (SPSS 16.0).

All preliminary analyses were run in the SPSS 16.0 program; however, final regression models were run in the Mplus 5.1 statistical program. This program was used for the final models to control for the bias in standard errors that could result from nested data (Bryk and Raudenbush, 1992).

Basic descriptive analysis (frequencies and histograms) were run on each of the variables of interest to test basic assumptions (i.e., normality, linearity, outliers). Outliers
were truncated to be within 3 standard deviations of the distribution while still maintaining the rank ordering of cases within the distribution.

For the categorical control variables (social desirability, diversity exposure, and extent of diversity exposure), no outliers were identified. However, the pre-test dependent variables, including addressing stereotypes, adaptation to diversity, attitude, and understanding, had identified outliers and each variable was truncated to be within three standard deviations of the mean while maintaining the numerical ordering of the cases. The post-test dependent variables, including addressing stereotypes, adaptation to diversity, attitude, expectations, understanding, flexibility/openness, and emotional resilience, had identified outliers and were also truncated to be within three standard deviations of the mean while maintaining the numerical ordering of the cases.

In addition, and to prepare for multiple regressions, the assumptions of normality, linearity, and reliability were tested to minimize the possibility of biased estimates or standard errors. Multiple regression models controlling for pre-test scores and other predictors of the dependent variables of interest (race, gender, age, cultural experience, prior coursework, and social desirability) were run for each of the nine dependent variables yielding nine regression models for the study.

Summary of Findings

The study yielded a participation rate of 99%; therefore, a total of 266 students participated in the pre-test assessment. Of those students, 50% (134) were part of the treatment group enrolled in the Equity & Excellence course, and 50% (132) were part of the comparison group enrolled in the Introductory course. Follow-up rates for the study
were 88%, where 233 of the 266 students participated in the post-test. Attrition analysis was conducted and indicated that the attrition group and non-attrition group differ on only two control variables, age and prior coursework, and did not differ on any dependent variables.

All preliminary analyses were run in the SPSS 16.0 program. The overall preliminary analysis of the analytic sample indicated that the comparison group scored lower on four out of five disposition variables in the pre-test scores than did the treatment group. In addition, the comparison group had less prior coursework, as well as less extensive diversity exposure compared to the treatment group. Because groups differ on the pre-test measure, the pre-test measures and covariates were included in models to statistically control for other causes of the dependent variables.

Assumptions were tested for multiple regression and the residuals; assumptions held for all nine models. Final regression models were run in the Mplus 5.1 statistical program using maximum likelihood estimation (MLE), which is a tool that recognizes parameters of the data model and is used for fitting a statistical model to the data. Multiple regression models controlling for pre-test scores and other predictors of the dependent variables of interest (race, gender, age, cultural experience, prior coursework, and social desirability) were run for each of the nine dependent variables yielding nine regression models for the study.

Multiple regression analysis was utilized to determine if the mandatory core course on cultural competence (Equity & Excellence in Education) is effective by examining the perceptions of disposition and adaptability (key attributes of cultural competence) of teacher candidates. There are nine dependent variables in the study.
related to disposition (addressing stereotypes, adaptation to diversity, attitude, expectations, and understanding) and adaptability (flexibility/openness, personal autonomy, perceptual acuity, and emotional resilience). Therefore, nine multiple regression models were created, one for each dependent variable.

The main purpose of this research was to explore the change in perceptions of disposition and adaptability related to cultural competence amongst teacher candidates that completed a mandatory course on diversity and cultural competence. Because cultural competence is such a complex construct, the literature suggests two attributes: adaptability and disposition as key in examining the construct of cultural competence. Therefore, these two areas were examined in order to determine if teacher candidates’ adaptability and disposition changed from pre-test to post-test.

Specifically, this research focuses on examining the learning outcomes of students at The University of Akron who are enrolled in a targeted course aimed at increasing cultural competence of teacher candidates by examining changes in students’ perceptions of disposition and adaptability. To examine the effectiveness of the course to students, the researcher asked two key questions and nine sub-questions: (1) Do teacher candidates that took the Equity & Excellence in Education course score higher on disposition measures from pre-test to post-test? Specifically, do student perceptions change on addressing stereotypes, adaptation to diversity, attitudes, expectations, and understanding after completing the mandatory course?; and (2) Do students that took the Equity & Excellence in Education course score higher on adaptability measures from pre-test to post-test? Specifically, do student perceptions change on emotional resilience,
flexibility/openness, perceptual acuity, and personal autonomy after completing the mandatory course?

In order to answer these questions, multiple regression analysis was conducted on each of the nine dependent variables in Mplus to see if there were significant differences between the treatment and comparison group while controlling for pre-test score and other possible confounding variables including race, gender, age, prior coursework, diversity exposure, extent of diversity exposure and social desirability.

Research Question #1

The first research question on students’ disposition towards cultural competence asks whether the mandatory course changed the perceptions of teacher candidates. Disposition encompasses five attributes, or subscales: addressing stereotypes, adaptation to diversity, attitude, expectations, and understanding.

For the first attribute of disposition, addressing stereotypes, the cultural competence course had no significant effect on addressing stereotypes—the treatment group mean is not significantly different from the mean for the comparison group (p=.271). For the second attribute of disposition, adaptation to diversity, the cultural competence course had no significant effect on adaptation to diversity—the treatment group mean is not significantly different from the mean for the comparison group (p=.064). For the third attribute of disposition, attitude, the cultural competence course had no significant effect on attitude—the treatment group mean is not significantly different from the mean for the comparison group (p=.176). For the fourth attribute of disposition, expectations, the cultural competence course had no significant
effect on expectations—the treatment group mean is not significantly different from the mean for the comparison group (p=.816). For the fifth attribute of disposition, understanding, the cultural competence course had no significant effect on understanding—the treatment group mean is not significantly different from the mean for the comparison group (p=.120). Overall, the cultural competence course had no significant effect on any of the five subscales of disposition. Therefore, this research suggests that the mandatory Equity & Excellence in Education course had no effect on teacher candidates’ perceptions of disposition.

Research Question #2

The second research question on students’ adaptability toward cultural competence asks whether the mandatory course changed the perceptions of teacher candidates. Adaptability encompasses four attributes, or subscales: flexibility/openness, personal autonomy, perceptual acuity, and emotional resilience.

For the first attribute of adaptability, flexibility/openness, the cultural competence course had no significant effect on flexibility/openness—the treatment group mean is not significantly different from the mean for the comparison group (p=.616). For the second attribute of adaptability, personal autonomy, the cultural competence course had no significant effect on personal autonomy—the treatment group mean is not significantly different from the mean for the comparison group (p=.570). For the third attribute of adaptability, perceptual acuity, the cultural competence course had no significant effect on perceptual acuity—the treatment group mean is not significantly different from the mean for the comparison group (p=.805). The fourth attribute of adaptability, emotional resilience...
resilience, the cultural competence course had no significant effect on emotional resilience-the treatment group mean is not significantly different from the mean for the comparison group (p=.459). Overall, the cultural competence course had no significant effect on any of the four subscales of adaptability. Therefore, this research suggests that the mandatory Equity & Excellence in Education course had no effect on teacher candidates’ perceptions of adaptability.

The mandatory cultural competence course (Equity & Excellence in Education) at The University of Akron had no significant effect on the perceptions of teacher candidates regarding the nine subscales of disposition and adaptability as they relate to cultural competence.

Conclusion

The journey towards cultural proficiency may often be complicated by students’ perceptions of disposition and adaptability toward cultural competence. As disparities continue to exist for public school children (specifically for minority students and students from lower socio-economic backgrounds), higher education institutions have an obligation to produce effective teachers who can help States respond to the educational challenges ahead and achieve equitable learning outcomes for all students. In the journey toward cultural proficiency, teacher candidates must first conduct a self-assessment of their own cultural competence. Doing so enables teacher candidates to assess their perceptions of cultural competence, specifically their disposition toward understanding the dimensions of diversity and their willingness to adapt to new and diverse students, environments, and educational challenges.
Scholars have emphasized the importance of linguistic and cross-cultural competence for students and educators in light of demographic, economic, and social changes in society, as well as the necessity for teachers in inner-city schools to become culturally proficient in educating all children (Genesse, 1998; Guerra, 2007). Previous studies examining the implementation and outcomes of cultural competence education in the classroom have led scholars to vastly differing conclusions about what constitutes cultural competence education, how to implement the curriculum, and how the students perceive the intervention. Overall, what has been demonstrated in the body of cultural competence research and literature is the need for training and education of teacher candidates to be able to effectively educate all students.

This research accepted the current evidence presented in the literature regarding the need for culturally competent teachers in the public school system, especially based on the fact that the population of students within public schools continues to become more diverse. This study aimed to provide further understanding surrounding the issue of culturally competent teachers by examining undergraduate teacher candidates at The University of Akron through a mandatory course aimed at increasing cultural competence through two key attributes of cultural competence: disposition and adaptability.

As mentioned, a major social construct examined in this study related to cultural competence was disposition; the moral stance and sense of social justice (McElroy, 2007). Calarco & Gurvis (2006) also identify disposition as a vital element of adaptability. Teachers’ dispositions translate into how effectively they teach students, in terms of how they act and react to situations and circumstances in the classroom.
The National Council for Accreditation of Teacher Education (NCATE) has pushed for States to evaluate teachers on their dispositions. Teachers are evaluated on their stance and sense, or perceptions, of social justice, diversity, and other major social constructs. Teacher candidates with high cultural dispositions possess aspects of self-directed learning, transformative learning, critical thinking, reflection, and awareness of their own biases and assumptions, and generate an increased ability for an individual to become more effective at understanding and communicating with others.

In this study, teacher candidates at The University of Akron that completed the mandatory core course on diversity and cultural competence (Equity & Excellence in Education) did not change their perception on any of the five disposition measures (addressing stereotypes, adaptation to diversity, attitudes, expectations, and understanding). Therefore, the results suggest that the course did not have a significant effect on the teacher candidates’ perceptions of disposition as it relates to cultural competence.

According to Jung (2009), disposition related to cultural competence can be attained and cultivated through the teacher candidate curriculum and experiences. This social construct of disposition is a vital component to cultural competence and without higher dispositions of teacher candidates, cultural competence does not exist. However, in The University of Akron case study, the curriculum implemented for the students involved in this study did not seem to cultivate teacher candidate disposition beyond what already existed.

The other major social construct examined in this study related to cultural competence was adaptability; the ability to adapt and respond practically to culturally
diverse and cross-cultural populations and situations (Kelley & Meyers, 1992). Calarco & Gurvis (2006) describe adaptability as a necessary skill in order to respond effectively to change, which first requires an understanding of what adaptability is, and also the elements of adaptability; cognitive flexibility, emotional flexibility, and dispositional flexibility.

Kelley & Meyers (1992) provide insights into how one’s individual level of adaptability translates into situations, including interacting and communicating with others, maintaining sense of self in new/different surroundings, as well as teaching diverse groups. Therefore, as adaptability increases, the individual will be better able to effectively overcome challenges associated with cultural differences and to equitably solve problems.

In this study, teacher candidates at The University of Akron that completed the mandatory core course on diversity and cultural competence (Equity & Excellence in Education) did not change their perceptions on any of the four adaptability measures (emotional resilience, flexibility/openness, perceptual acuity, and personal autonomy). Therefore, the results suggest that the course did not significantly effect teacher candidates’ perceptions of adaptability as it relates to cultural competence.

Previously Collville-Hall & Liang (2003), from The University of Akron College of Education, conducted The Harrington Study with teacher candidates at The University of Akron. The researchers sought to measure the effectiveness of the diversity component of the curriculum by examining the disposition of teacher candidates and by using the Teacher Candidate Survey. This study, although slightly different, replicated some of what had been done in The Harrington Study. The Harrington Study reported
several factors loading in the disposition assessment tool (Teacher Candidate Survey). The instrument, according to the authors, contained eight (8) subscales measuring culture, race, class, language, religion, sexual orientation, exceptionality, self-identity, and gender, and was tested for reliability and validity with an Alpha of .85. As for the findings, the study discovered several areas in which the teacher candidates improved, as well as areas in which no improvements were found.

However, factor analysis of the 42-item scale in this study produced a five factor solution. I conceptualized these five factors as: 1) “addressing stereotypes”, 2) “adaptation to diversity”, 3) “attitude”, 4) “expectations”, and 5) “understanding”. In addition, this study found that teacher candidates did not improve in any of the areas of disposition examined. Therefore, this study determined that the Teacher Candidate Survey did not measure, with this population, what the authors were able to measure previously.

The latest NCATE standards, effective fall 2008, address the areas of diversity and cultural competence of teacher candidates and set the standards for accreditation for colleges and departments of education based on specific administrative policies and curriculum requirements. NCATE has also identified cultural competence as a standard of service delivery and has recognized the importance of integrating education standards specific to increasing teacher candidate cultural competence in the classroom.

The University of Akron College of Education has identified these NCATE standards and has implemented a specialized course (Equity & Excellence in Education), specifically targeted to educate teacher candidates on matters of diversity and increase cultural competence. The course, according to the course syllabus, “adopts an
interdisciplinary approach to engage teacher candidates in inquiry-based seminars and
service learning that facilitate their developing pedagogical competence in defining,
conceptualizing, and implementing equity and excellence in education in a culturally
pluralistic society.” Overall, the cultural competence course did not demonstrate a
significant effect on student perceptions in any of the five attributes of disposition, or the
four attributes of adaptability, related to cultural competence.

Limitations and Implications

The major limitation of this design was not having the ability to control for biases
that would otherwise be controlled for with randomization. Because the design lacks
random assignment of individuals into the two groups, an assumption that the groups are
equivalent cannot be made. The researcher discovered that the two groups differ on the
pre-test measure. Therefore, pre-test measures and covariates were included in models to
statistically control for other causes of the dependent variables.

One threat to internal validity was mortality (i.e., student drop-outs), which was
minimal determined by the findings of the attrition study. Because the study is an
exploratory case study examining a single public University, the results from this study
cannot be generalized. Other limitations may include unintentional omitting of relevant
variables from the regression analysis (e.g., knowledge about diverse groups, etc.), which
could potentially make the betas of the included variables unreliable. Additionally, while
this study is centered on a single undergraduate teacher candidate population at a single
public university, the study has important potential implications regarding the educational
well being of the nation.
This research may begin to bridge that gap regarding what we know and do not know about cultural competence education amongst teacher candidates by providing further information linking the course aimed at increasing cultural competence and actual outcomes. This area is an issue which has, and will continue to, generate major interest from educators, providers, and policymakers because of the major potential impact outcomes and underlying policy implications. This study is only a starting point and may begin to inform policy regarding teacher candidate education concerning cultural competence, specifically about courses targeted in this area.

This research will be valuable to the field of education, K-12 and higher education, as well as public administration and public policy by determining if courses, such as the course examined in this study, implemented through colleges of education which incorporate and address NCATE standards of cultural competence, are effective. This study will bridge the gap between public administration as a broad field with public education focused on urban education by providing new information that can be used for training and development.

It pertains to policy and policymakers (i.e., superintendents, principles, etc.) as well as to individual awareness and organizational awareness (what we know and don’t know). It will contribute to the current literature by increasing what we know about how students’ perceptions of disposition and adaptability are enhanced by targeted courses in the academic setting, and perhaps point out areas that may need more attention. Finally, this research will begin to bridge that gap by providing further information and relevant data linking the mandatory courses provided at colleges and universities aimed at increasing cultural competence and actual outcomes.
Recommendations

Colleges and universities throughout the nation should closely examine curriculum mandates to change student perceptions along the cultural competence continuum. The literature on cultural competence discussed in this research emphasizes the importance of organizational culture that fosters and promotes diversity and cultural competence and how lacking in this area can damage the outputs of the organization. Self-assessment in regards to cultural competence is a vital component to any successful program or organization (Dengler, 1995; Ladson-Billings & Tate, 2006). Institutions of higher education and specifically colleges of education should move quickly to implement mandatory cultural competency curriculum which supports individual assessment, organizational assessment, and improvement in teacher preparation.

The National Center for Culturally Responsive Educational Systems (NCCRES) developed a culturally responsive model, *Equity in Special Education Placement: A School Self-Assessment Guide for Culturally Responsive Practice* (2005) designed to “(a) increase the use of prevention and early intervention strategies, (b) create contexts conducive to educational systems improvement, and (c) enhance the teaching and learning of practitioners and students alike” (p.3). Utilizing self-assessment instruments like this to assess whether educational systems have the capacity to promote cross-cultural dialogue, develop cross cultural curriculum and attain cross cultural outcomes.

In addition, a closer examination needs to take place regarding Colleges of Education teacher candidate curriculum, including what is being taught, how it is being taught, and who is teaching the courses. Colleges of Education need to dedicate significant resources to determine if their courses, which are designed to educate students
on matters of diversity and increase teacher candidates’ cultural competence, are effective.

Federal and State governments must also take a closer look at how higher education institutions are educating teachers and how teacher candidate curriculum is implemented. Federal and State governments need to develop standards surrounding the cultural competence of teachers and require that all institutions with Colleges of Education demonstrate meaningful outcomes regarding the effectiveness of their curriculum in producing quality teacher candidates that are culturally competent. In this regard, creation of a Federal and/or State model, which outlines specific standards regarding cultural competence education, evaluation of curriculum, etc. would be a relevant starting point.

Cultural competence should be a factor when teacher candidates are being assessed to obtain their teaching license. Just as professionals in other fields are expected to demonstrate cultural competence in order to provide culturally competent services, States should require that all teachers entering the field be culturally competent as well.

NCATE must also look more closely into the requirements for accreditation of Colleges of Education, specifically the standards involving diversity and cultural competence education for teacher candidates and determine if the standards currently in place are being implemented appropriately across institutions of higher education. NCATE must also place stricter requirements on accredited Colleges of Education to provide meaningful outcomes regarding the curriculum aimed at increasing cultural competence of teacher candidates.
The results of this study suggest that the Equity & Excellence in Education course was not effective in increasing teacher candidates’ perceptions of disposition (addressing stereotypes, adaptation to diversity, attitude, expectations, and understanding) and adaptability (flexibility/openness, personal autonomy, perceptual acuity, and emotional resilience) at The University of Akron. The University of Akron may need to examine the Equity & Excellence course and determine why the course is not demonstrating significant changes in teacher candidate perceptions of disposition and adaptability.

Recommendations for Future Studies

Several recommendations for future research could add depth to this study. Specifically, studying whether the course is being offered at an appropriate time would add great depth to the research. For example, implementing the course after the student teaching experience as a capstone course may produce more significant outcomes. This would provide more knowledge into how course-based instruction on diversity issues and cultural competence affects student knowledge and perceptions. Perhaps students only understand or absorb the materials after they have gone through some of the real-world teaching experiences.

An important recommendation for future research is to conduct a longitudinal study examining students’ perceptions of disposition and adaptability over time. Although this study did not produce significant findings in the mandatory core course designed to change teacher candidates’ perceptions of disposition and adaptability, examining student outcomes over time may provide additional insight into the effect of curriculum and experiences on student knowledge, skills, and abilities used to effectively
teach all students within a diverse classroom. Examining students’ perceptions of
disposition and adaptability again after the last phase of the program (i.e., after
completion of their student teaching assignments) and again after working in the field for
a year, will be an important assessment of curricular supports along the cultural
proficiency journey.

Future research may include examining the data used in this study more in-depth
to determine exactly where teacher candidates are in terms their perceptions of
disposition and adaptability based on standardized assessment instruments. Being able to
assess exactly where students are, perhaps even where they may fall along the Cross
continuum, in terms of their level of cultural competence may be vital in influencing how
much more education and experiences are needed for teacher candidates to achieve at
least some intermediate level of cultural competence. Courses of this nature should
provide students with a platform to enter the course and begin to question their own
perceptions and beliefs regarding cultural issues, which eventually lead to a change in
attitudes and behaviors.

The theoretical underpinnings regarding the Cross continuum suggest that cultural
proficiency is fluid, moving along the continuum and in order to move closer towards
cultural proficiency self-assessment and self-awareness of the organizational culture
come into play. This study began that process by starting to assess whether the course is
having a significant effect on teacher candidates’ perceptions of disposition and
adaptability. Future research should begin to focus on assessing organizational culture in
terms of when these courses are offered and to whom (i.e., the majority of students are
white, middle-class, female students). Also, another area to research related to this topic
is to assess the cultural competence of the professors and instructors teaching these specific courses. The research could examine if this is a significant contributing factor regarding how these courses are implemented, and in essence, determine if the teacher candidates receive the appropriate cultural competence education based on the cultural competence of the instructors.

In addition, a more in-depth look at this data is needed to determine exactly which independent variables used in this study are predictors of disposition and adaptability. Also examining this data in regards to the nesting of the data to determine whether some classes scored higher on the post-test for adaptability and disposition as opposed to others classes. If some courses are found to have a more profound effect on teacher candidates’ levels of disposition and adaptability from the course than others, it would be an opportunity to provide insight into which instructors are able to implement the courses more effectively than others. This may be a significant indicator pointing to the need for college professors and instructors to be culturally competent themselves in order to provide quality instruction that enlightens teacher candidates on issues of diversity.

Quantitative data in this study gave the researcher the ability to determine if there was a statistically significant difference between the treatment and comparison group after the students completed the courses. Qualitative data may add depth to the study in various ways. Having access to course evaluations, student grades, etc. may help to determine the course impact on student perceptions, may help examine the instructor approach to teaching the mandatory course, and assess student performance in the course.

Expanding this study by collecting the same type of data with students at other NCATE accredited higher education institutions, examining core courses designed to
educate teacher candidates on issues regarding diversity and overall, to increase cultural competence in order to prepare teachers to effectively teach all children, thereby reducing educational disparities and provide improved learning outcomes. This research will yield much more statistical power in determining if courses, such as the one examined in this study, are effective across the board.

Because teachers are not required to demonstrate their ability to be culturally competent in order to teach, examining cultural competence of teachers in the field would be multifaceted. Being able to determine how culturally competent these teachers are would have huge policy implications. Looking at variables such as, the kind of school the teacher teaches in, age, years in the field, etc. would be variables of interest to examine how these variables affect teachers’ levels of cultural competence. In addition, studies with mixed method approaches to assess teacher cultural competence should include qualitative data by conducting focus groups, or interviews, with teachers to determine not only their own perceptions of their cultural competence, but what they know about cultural differences; and also, how they feel about cultural competency training as a continuing education requirement.

In summary, the results of this study suggest that the mandatory core course at The University of Akron (Equity & Excellence in Education) did not have a significant effect on teacher candidate perceptions of disposition and adaptability. However, further probing research must be done to determine why this study did not demonstrate any significant findings. Perhaps the NCATE standards need to be implemented differently in order to achieve outcomes from the course; or perhaps NCATE must require Colleges of Education to demonstrate more concrete outcomes. On the other hand, perhaps the
students do not have the time throughout this single course to process the culturally specific information that they are confronted with; they may need more time to reflect and process past the time frame of the course itself. This reinforces the need for a longitudinal study.

We do know that a core course on cultural competence is only one small piece to a much larger puzzle. Again, according to Jung (2009) cultural competence can be attained and cultivated through the teacher candidate curriculum and experiences. This course was only one piece of the curriculum and students have yet to have the opportunity to complete their student teaching experiences. After the entire curriculum and all of the experiences throughout the academic program have been complete, teacher candidates may then demonstrate a significant change in disposition and adaptability from their pre-test scores. Again, this reinforces the need for longitudinal studies in this area.

This study sought to examine teacher candidate perceptions of adaptability and disposition, as they relate to cultural competence, after completing a mandatory course developed for teacher candidates within the guidelines set forth by National Council for Accreditation of Teacher Education Programs (NCATE). The course was designed to educate teacher candidates on matters of diversity and to increase levels of cultural competence for future educators. This research suggests that the mandatory course did not have a significant effect on teacher candidate perceptions of adaptability and disposition and provides a starting point at which the field of education, PK-12 and higher education, can assess learning outcomes around cultural competence standards.
Nonetheless, this study provides a reasonable start at examining the perceptions of teacher candidates towards their journey to be effective teachers in a classroom of diverse students. This research begins to bridge the gap between what we know and do not know about cultural competence education by linking the mandatory course aimed at increasing cultural competence and learning outcomes. As a starting point, this study has the potential to generate compelling interest from educators, providers, and policy makers because it connects cultural competence curriculum to changes in perceptions and attitudes of teacher candidates.
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APPENDICES
APPENDIX A
NCATE STANDARDS

National Council for Accreditation of Teacher Education (NCATE) standards presented here are only those standards presented in the research relevant to diversity & cultural competence\(^1\).

Standard 1: Candidate Knowledge, Skills, and Professional Dispositions

Candidates preparing to work in schools as teachers or other school professionals know and demonstrate the content knowledge, pedagogical content knowledge and skills, pedagogical and professional knowledge and skills, and professional dispositions necessary to help all students learn. Assessments indicate that candidates meet professional, state, and institutional standards.

1b. Pedagogical Content Knowledge and Skills for Teacher Candidates

Target: Teacher candidates reflect a thorough understanding of the relationship of content and content-specific pedagogy delineated in professional, state, and institutional standards. They have in-depth understanding of the content that they plan to teach and are

\(^1\) Source: 2008 NCATE Professional Standards for the Accreditation of Teacher Preparation Institutions
able to provide multiple explanations and instructional strategies so that all students learn. They present the content to students in challenging, clear, and compelling ways, using real-world contexts and integrating technology appropriately. Candidates in advanced programs for teachers have expertise in pedagogical content knowledge and share their expertise through leadership and mentoring roles in their schools and communities. They understand and address student preconceptions that hinder learning. They are able to critique research and theories related to pedagogy and learning. They are able to select and develop instructional strategies and technologies, based on research and experience that help all students learn.

1c. Professional and Pedagogical Knowledge and Skills for Teacher Candidates

Teacher candidates reflect a thorough understanding of professional and pedagogical knowledge and skills delineated in professional, state, and institutional standards. They develop meaningful learning experiences to facilitate learning for all students. They reflect on their practice and make necessary adjustments to enhance student learning. They know how students learn and how to make ideas accessible to them. They consider school, family, and community contexts in connecting concepts to students’ prior experience and applying the ideas to real-world issues. Candidates in advanced programs for teachers develop expertise in certain aspects of professional and pedagogical knowledge and contribute to the dialogue based on their research and experiences. They take on leadership roles in the professional community and collaborate with colleagues to contribute to school improvement and renewal.
1d. Student Learning for Teacher Candidates

Teacher candidates focus on student learning and study the effects of their work. They assess and analyze student learning, make appropriate adjustments to instruction, monitor student learning, and have a positive effect on learning for all students. Candidates in advanced programs for teachers have a thorough understanding of assessment. They analyze student, classroom, and school performance data and make data-driven decisions about strategies for teaching and learning so that all students learn. They collaborate with other professionals to identify and design strategies and interventions that support student learning.

1g. Professional Dispositions for All Candidates

Candidates work with students, families, colleagues, and communities in ways that reflect the professional dispositions expected of professional educators as delineated in professional, state, and institutional standards. Candidates demonstrate classroom behaviors that create caring and supportive learning environments and encourage self-directed learning by all students. Candidates recognize when their own professional dispositions may need to be adjusted and are able to develop plans to do so.

Standard 3c. Candidates’ Development and Demonstration of Knowledge, Skills, and Professional Dispositions To Help All Students Learn

Candidates work collaboratively with other candidates and clinical faculty to critique and reflect on each others’ practice and their effects on student learning with the goal of improving practice. Field experiences and clinical practice facilitate candidates’ exploration of their knowledge, skills, and professional dispositions related to all
students. Candidates develop and demonstrate proficiencies that support learning by all students as shown in their work with students with exceptionalities and those from diverse ethnic/racial, linguistic, gender, and socioeconomic groups in classrooms and schools.

Standard 4: Diversity

The unit designs, implements, and evaluates curriculum and provides experiences for candidates to acquire and demonstrate the knowledge, skills, and professional dispositions necessary to help all students learn. Assessments indicate that candidates can demonstrate and apply proficiencies related to diversity. Experiences provided for candidates include working with diverse populations, including higher education and P–12 school faculty, candidates, and students in P–12 schools.

4a. Design, Implementation, and Evaluation of Curriculum and Experiences

Curriculum, field experiences, and clinical practice promote candidates’ development of knowledge, skills, and professional dispositions related to diversity identified in the unit’s conceptual framework. They are based on well developed knowledge bases for, and conceptualizations of, diversity and inclusion so that candidates can apply them effectively in schools. Candidates learn to contextualize teaching and draw effectively on representations from the students’ own experiences and cultures. They challenge students toward cognitive complexity and engage all students, including English language learners and students with exceptionalities, through instructional conversation. Candidates and faculty regularly review candidate assessment data on
candidates’ ability to work with all students and develop a plan for improving their practice and the institution’s programs.

4b. Experiences Working with Diverse Faculty

Candidates in conventional and distance learning programs interact with professional education faculty, faculty in other units, and school faculty from a broad range of diverse groups. Higher education and school faculty with whom candidates work throughout their preparation program are knowledgeable about and sensitive to preparing candidates to work with diverse students, including students with exceptionalities.

4c. Experiences Working with Diverse Candidates

Candidates engage in professional education experiences in conventional and distance learning programs with candidates from the broad range of diverse groups. The active participation of candidates from diverse cultures and with different experiences is solicited, valued, and promoted in classes, field experiences, and clinical practice. Candidates reflect on and analyze these experiences in ways that enhance their development and growth as professionals.

4d. Experiences Working with Diverse Students in P–12 Schools

Extensive and substantive field experiences and clinical practices for both conventional and distance learning programs are designed to encourage candidates to interact with exceptional students and students from a broad range of diverse groups. The experiences help candidates confront issues of diversity that affect teaching and student learning and develop strategies for improving student learning and candidates’ effectiveness as teachers.
Thank you for taking the time to complete this assessment. Your responses will be confidential so feel free to express yourself freely. Please try to answer ALL of your questions to the best of your ability because your responses are important to this study.

For each of the following questions, please check the box that corresponds with the best answer that pertains to you. Please answer EVERY question. Thank You!

1. What is your gender?
   □ Female   □ Male

2. What is your age?
   □ 18-21   □ 35-44
   □ 22-25   □ 45-54
   □ 26-34   □ 55+

3. What is your race/ethnicity? (Check ALL that apply)
   □ Caucasian/White American   □ African American/Black
   □ Hispanic/Latino   □ Asian American
   □ Native American/Alaskan   □ Native Hawaiian/Other Pacific Islander
   □ Other (please specify): ______________________

4. What is your country of origin? ________________________________

5. What is your religion (If no religion, say “N/A”)? __________________

6. What is your marital status?
   □ Single (Never Married)   □ Married
   □ Living with Partner   □ Separated/Divorced/Widowed

7. Are you currently employed?
   □ Yes   □ No

8. What is your total annual HOUSEHOLD income? ______________________

9. I speak __________________________ __ as my first language
10. Do you speak any additional languages?
   □ Yes   □ No

YOUR NEIGHBORHOOD/COMMUNITY
11. The community/neighborhood(s) that you lived in throughout high school were
   PRIMARILY comprised of individuals that would be considered from what
   racial/ethnic background?
   □ Caucasian/White American   □ African American/Black
   □ Hispanic/Latino           □ Asian American
   □ Native American/Alaskan   □ Native Hawaiian/Other Pacific Islander
   □ Mixed/Integrated
   □ Other (specify): ___________________________

12. The community/neighborhood(s) that you lived in throughout high school were
   PRIMARILY comprised of individuals from what socio-economic status?
   □ Low Socio-Economic Status   □ Low-to-Mid Socio-Economic/Working Class
   □ Middle Socio-Economic Status □ Mid-to-Upper Socio-Economic Status
   □ Other (specify): ___________________________

RACIAL/ETHNIC COMPOSITION OF STUDENTS IN YOUR LAST SCHOOL
13. The last school that I attended before college, consisted PRIMARILY of students
   who would be considered from what racial/ethnic background?
   □ Caucasian/White American   □ African American/Black
   □ Hispanic/Latino           □ Asian American
   □ Native American/Alaskan   □ Native Hawaiian/Other Pacific Islander
   □ Mixed/Integrated
   □ Other (specify): ___________________________

14. The last school that I attended before college, consisted PRIMARILY of students
   who would were from what socio-economic status?
   □ Low Socio-Economic Status   □ Low-to-Mid Socio-Economic/Working Class
   □ Middle Socio-Economic Status □ Mid-to-Upper Socio-Economic Status
   □ Other (specify): ___________________________

YOUR FRIENDS
15. The majority of my friends right now are from what racial/ethnic background?
   □ Caucasian/White American   □ African American/Black
   □ Hispanic/Latino           □ Asian American
   □ Native American/Alaskan   □ Native Hawaiian/Other Pacific Islander
   □ I have friends from various racial/ethnic background
   □ Other (specify): ___________________________
YOUR FAMILY – Please circle the number that corresponds to your response

16. How supportive would your parents/family be if your BEST FRIEND was from a different racial/ethnic background

1----------------------------------------2----------------------------------------3----------------------------------------4

VERY SUPPORTIVE NOT UNSURE

SUPPORTIVE SUPPORTIVE

17. How supportive would your parents/family be if your SPOUSE was from a different racial/ethnic background?

1----------------------------------------2----------------------------------------3----------------------------------------4

VERY SUPPORTIVE NOT UNSURE

SUPPORTIVE SUPPORTIVE

18. How supportive would your parents/family be if your CHILDREN were from a different racial/ethnic background?

1----------------------------------------2----------------------------------------3----------------------------------------4

VERY SUPPORTIVE NOT UNSURE

SUPPORTIVE SUPPORTIVE

YOUR COURSEWORK

19. Have you taken any General Education Area Studies & Cultural Diversity Courses During your Undergraduate Studies Yet (See Table below)?

☐ Yes ☐ No

Place a CHECK under “YES” or “NO” whether you have taken these courses yet

<table>
<thead>
<tr>
<th>COURSE</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Black Experience: 1619-1877</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Black Experience: 1877-1954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Black Experience: 1954-Present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversity in American Society</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Women’s Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intro: Pan-African Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geography of Cultural Diversity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese Culture through Film</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Civilizations – China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Civilizations – Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Civilizations – Southeast Asia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Civilizations – India</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Civilizations – Africa</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
20. Have you ever had a negative experience with an individual (or group of individuals) that you would consider “different” from yourself?

☐ Yes ☐ No

21. Will you be taking any additional courses related to cultural diversity during your undergraduate studies?

1-5

WITHOUT                1                2                3                4                5

A DOUBT              VERY                PROBABLY                POSSIBLY                NO

PROBABLY

Thank You - PLEASE CONTINUE TO THE NEXT ASSESSMENT
APPENDIX C

CROSS CULTURAL ADAPTABILITY INVENTORY (CCAI)

Please circle the number that best represents your level of agreement with the following statements
6=Definitely True, 5=True, 4=Tends to Be True, 3=Tends to Be Not True, 2=Not True, 1=Definitely Not True

<table>
<thead>
<tr>
<th>Statement</th>
<th>Definitely True</th>
<th>True</th>
<th>Tends to Be True</th>
<th>Tends to Be Not True</th>
<th>Not True</th>
<th>Definitely Not True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have ways to deal with the stresses of new situations</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. I believe that I could live a fulfilling life in another culture.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. I try to understand people's thoughts and feelings when I talk to them.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. I feel confident in my ability to cope with life, no matter where I am.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. I can enjoy relating to all kinds of people.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. I believe that I can accomplish what I set out to do, even in unfamiliar settings.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. I can laugh at myself when I make a cultural faux pas (mistake).</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. I like being with all kinds of people.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. I have a realistic perception of how others see me.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10. When I am working with people of a different cultural background, it is important to me to receive their approval.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11. I like a number of people who don't share my particular interests.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12. I believe that all people, of whatever race, are equally valuable.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13. I like to try new things.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14. If I had to adapt to a slower pace of life, I would become impatient.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15. I am the kind of person who gives people who are different from me the benefit of the doubt.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>16. If I had to hire several job candidates from a background different from my own, I feel confident that I could make a good judgment.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
17. If my ideas conflicted with those of others who are different from me, I would follow my ideas rather than theirs. | 6 | 5 | 4 | 3 | 2 | 1 |
18. I could live anywhere and enjoy life. | 6 | 5 | 4 | 3 | 2 | 1 |
19. Impressing people different from me is more important than being myself with them. | 6 | 5 | 4 | 3 | 2 | 1 |
20. I can perceive how people are feeling, even if they are different from me. | 6 | 5 | 4 | 3 | 2 | 1 |
21. I make friends easily. | 6 | 5 | 4 | 3 | 2 | 1 |
22. When I am around people who are different from me, I feel lonely. | 6 | 5 | 4 | 3 | 2 | 1 |
23. I don't enjoy trying new foods. | 6 | 5 | 4 | 3 | 2 | 1 |
24. I believe that all cultures have something worthwhile to offer. | 6 | 5 | 4 | 3 | 2 | 1 |
25. I feel free to maintain my personal values, even among those who do not share them. | 6 | 5 | 4 | 3 | 2 | 1 |
26. Even if I failed in a new living situation, I could still like myself. | 6 | 5 | 4 | 3 | 2 | 1 |
27. I am not good at understanding people when they are different from me. | 6 | 5 | 4 | 3 | 2 | 1 |
28. I pay attention to how people's cultural differences affect their perceptions of me. | 6 | 5 | 4 | 3 | 2 | 1 |
29. I like new experiences. | 6 | 5 | 4 | 3 | 2 | 1 |
30. I enjoy spending time alone, even in unfamiliar surroundings. | 6 | 5 | 4 | 3 | 2 | 1 |
31. I rarely get discouraged, even when I work with people who are very different from me. | 6 | 5 | 4 | 3 | 2 | 1 |
32. People who know me would describe me as a person who is intolerant of others' differences. | 6 | 5 | 4 | 3 | 2 | 1 |
33. I consider the impact my actions have on others. | 6 | 5 | 4 | 3 | 2 | 1 |
34. It is difficult for me to approach unfamiliar situations with a positive attitude. | 6 | 5 | 4 | 3 | 2 | 1 |
35. I prefer to decide from my own values, even when those around me have different values. | 6 | 5 | 4 | 3 | 2 | 1 |
36. I can cope well with whatever difficult feelings I might experience in a new culture. | 6 | 5 | 4 | 3 | 2 | 1 |
37. When I meet people who are different from me, I tend to feel judgmental about their differences. | 6 | 5 | 4 | 3 | 2 | 1 |
38. When I am with people who are different from me, I interpret their behavior in the context of their culture. | 6 | 5 | 4 | 3 | 2 | 1 |
39. I can function in situations where things are not clear. | 6 | 5 | 4 | 3 | 2 | 1 |
40. When I meet people who are different from me, I am interested in learning more about them. | 6 | 5 | 4 | 3 | 2 | 1 |
41. My personal value system is based on my own beliefs, not on conformity to other people's standards | 6 | 5 | 4 | 3 | 2 | 1 |
42. I trust my ability to communicate accurately in new situations. | 6 | 5 | 4 | 3 | 2 | 1 |
<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>I enjoy talking with people who think differently than I think.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>44</td>
<td>When I am in a new or strange environment, I keep an open mind.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>45</td>
<td>I can accept my imperfections, regardless of how others view them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>46</td>
<td>I am the kind of person who gives people who are different from me the benefit of the doubt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>47</td>
<td>I expect that others will respect me, regardless of their cultural background.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>48</td>
<td>I can live with the stress of encountering new circumstances or people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>49</td>
<td>When I meet people who are different from me, I expect to like them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>50</td>
<td>In talking with people from other cultures, I pay attention to body language.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>
Thank you for taking the time to complete this assessment. Your responses will be confidential so feel free to express yourself freely. Please try to answer ALL of your questions to the best of your ability because your responses are important to this study. For each of the following questions, please check the box that corresponds with the best answer that pertains to you. Please answer EVERY question. Thank You!

Using the scale below, please specify how frequently you were in contact with the following situations:

<table>
<thead>
<tr>
<th>Please circle the number that best represents your level of agreement with the following statements</th>
<th>All the Time</th>
<th>Frequently</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Almost Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. As a K-12 student, my schooling with people who were racially different than me was</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. As a K-12 student, my schooling with people who were ethnically different than me was</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. As a K-12 student, my schooling with people who were of a different class or socio-economic status (SES) than me was</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. The amount of time I have spent in communities that are racially different from me is</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. The amount of time I have spent in communities that are ethnically different from me is</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. The amount of time I have spent in communities that are socio-economically different from me is</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. My interaction with people that are not of my race has been</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. My interaction with people that are not of my ethnicity has been</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. My interaction with people that are not of my religion (Christian, Jewish, Buddhist, Muslim, etc.) has been</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10. I have traveled outside the U.S.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
A. RATING SCALE ITEMS

Please indicate on the 7-point scale, whether or not you agree or disagree with each of the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I believe that adapting instruction and making accommodations for children with differences (race, ethnicity, language, class, etc.) will lower standards for all children.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. Teachers need to adapt their instructional strategies and materials to meet the needs of culturally diverse students.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. People with disabilities need to be included in mainstream society.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. I must examine my own cultural beliefs and attitudes to determine how they might impact my interactions with students.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. Understanding other cultures besides my own will help me become a more effective teacher regardless of the area (suburban, urban, or rural).</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. The school curriculum should incorporate the history and contributions of culturally diverse groups.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. I realize that I can’t expect high achievement in students from low socio-economic backgrounds.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. Low achievement among minority students can be linked to the teacher’s low academic expectations of these students.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. The United States is a class-less society where each individual is able to rise to the level of her/his own innate ability.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10. Low achievement among female students in science can be related to low teacher expectations.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11. It is necessary for me to challenge and address stereotypes of racially diverse people when they occur in instructional materials and school settings.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>12. A teacher’s role is to help students find a balance between pride and identity in their own culture and appreciation of cultures that are different from their own.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13. My attitude towards linguistically diverse students will impact the learning outcomes of these students.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
<td>14. Good teachers create a classroom climate where issues of race are not ignored and students feel comfortable discussing them.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
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<td>2</td>
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</tr>
<tr>
<td>15. I must adapt my instructional strategies and materials to meet the needs of racially diverse students.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<tr>
<td>16. U.S. public schools provide an equitable education to all students regardless of their economic level.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
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<tr>
<td>17. It is the schools’ responsibility to address gender stereotypes and gender type “put-downs”.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
<td>18. Teachers need to adapt their instructional strategies and materials to meet the needs of socio-economically diverse students.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
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<tr>
<td>19. Schools need to accommodate non-Christian groups if they follow the set rules and regulations in the schools.</td>
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<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<tr>
<td>20. I need to include instructional materials on the contributions of women in my subject area (or other academic fields) to fill the gap in the curriculum.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
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</tr>
<tr>
<td>21. I need to challenge and address stereotypes of people from different socio-economic levels when they occur in educational settings.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<tr>
<td>22. Teachers need to make a conscious effort to give equal attention and constructive feedback to both male and female students.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<tr>
<td>23. First languages other than English need to be included in school, not just at home.</td>
<td>7</td>
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<td>5</td>
<td>4</td>
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<tr>
<td>24. I will address stereotypes of males and females when they occur in instructional materials or educational settings.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
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<tr>
<td>25. My attitude towards both male and female students’ ability can impact differently the learning opportunities of these students.</td>
<td>7</td>
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<td>26. Teachers need to model standard English without devaluing the language that children bring to the classroom.</td>
<td>7</td>
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</tr>
<tr>
<td>27. It is the school’s responsibility to address sexual orientation stereotypes and put-downs (gay, lesbian, bisexual, etc.).</td>
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<td>5</td>
<td>4</td>
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<tr>
<td>28. I will challenge my students’ negative perceptions of children who do not speak standard English.</td>
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<td>6</td>
<td>5</td>
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<tr>
<td>29. I need to adapt my instructional strategies and materials to meet the needs of linguistically diverse students.</td>
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<td>6</td>
<td>5</td>
<td>4</td>
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<tr>
<td>30. It is important for teachers to teach Christian values as part of the school curriculum.</td>
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<td>6</td>
<td>5</td>
<td>4</td>
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<tr>
<td>31. Students will not be permitted to use “uneducated” or non-standard English to communicate in my classroom.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
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<tr>
<td>32. My lack of knowledge of students whose religious background is different from mine may negatively impact their learning experience.</td>
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<td>6</td>
<td>5</td>
<td>4</td>
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<tr>
<td>33. I know I will treat all children equally, despite their race, culture, and language difference.</td>
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<td>6</td>
<td>5</td>
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<tr>
<td>34. I don’t need to learn about diversity because I will treat all people the same.</td>
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<td>5</td>
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<tr>
<td>35. Religious differences should be acknowledged at school, not just at home.</td>
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<td>5</td>
<td>4</td>
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<tr>
<td>36. Achievement among students with disabilities can be linked to the teacher’s academic expectations of these students.</td>
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<td>5</td>
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<tr>
<td>37. I feel prepared to teach in a classroom where some students (whose native language is not English) are just learning to speak English.</td>
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<td>6</td>
<td>5</td>
<td>4</td>
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<tr>
<td>38. Teachers must address stereotypes of diverse religious backgrounds and beliefs when they occur in educational settings.</td>
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<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
<td>39. My attitude towards gay and lesbians can impact the learning opportunities of students with different sexual orientations.</td>
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<td>6</td>
<td>5</td>
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<tr>
<td>40. Students with mild disabilities need to be integrated into classrooms with typical students.</td>
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<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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</tr>
<tr>
<td>41. I feel comfortable that my cultural background is represented in the curriculum I will teach.</td>
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<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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</tr>
<tr>
<td>42. Teachers must address students’ exclusionary practices toward children with exceptionalities when they happen in the educational setting.</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
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</tr>
</tbody>
</table>
B. MULTIPLE CHOICE ITEMS – Check ALL that apply for each of the following 5 statements

1. I would feel comfortable teaching in a classroom of students where: (check ALL that apply)
   ____ 95% are of my race
   ____ 75% are of my race
   ____ 50% are of my race
   ____ 25% are of my race
   ____ 5% are of my race

2. I feel prepared to teach in a classroom of students where: (check ALL that apply)
   ____ 95% are of my race
   ____ 75% are of my race
   ____ 50% are of my race
   ____ 25% are of my race
   ____ 5% are of my race

3. I would feel comfortable teaching in a classroom of students where: (check ALL that apply)
   ____ most are above my socio-economic status
   ____ most are of the same socio-economic status as I am
   ____ 50% are below my socio-economic status
   ____ 75% or more are below my socio-economic status

4. I feel prepared to teach in a classroom of students where: (check ALL that apply)
   ____ most are above my socio-economic status
   ____ most are of the same socio-economic status as I am
   ____ 50% are below my socio-economic status
   ____ 75% or more are below my socio-economic status

5. I would feel comfortable teaching in a(n): (check ALL that apply)
   ____ Rural area
   ____ Private school
   ____ Small town
   ____ Parochial school (religious affiliation)
   ____ Suburban area
   ____ Public school
   ____ Urban area

C. OPEN-ENDED QUESTION

1. Do you consider diversity an important issue in our schools today? Why or Why Not?
APPENDIX E

MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE-XI

Please answer the following 10 questions by reading each of the statements one at a time, in its entirety, and respond by circling either “T” or “F”:

- Answer “T” (True) if you agree with the statement as it pertains to you, OR
- Answer “F” (False) if you do not agree with the statement as it pertains to you

<table>
<thead>
<tr>
<th>Statement</th>
<th>T</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am always willing to admit it when I make a mistake</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>2. I always try to practice what I preach</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>3. I never resent being asked to return a favor</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>4. I have never been irked when people expressed ideas very different from my own</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>5. I have never deliberately said something that hurt someone’s feelings</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>6. I like to gossip at times</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>7. There have been occasions when I took advantage of someone</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>8. I sometimes try to get even rather than forgive and forget</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>9. At times I have really insisted on having things my own way</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>10. There have been occasions when I felt like smashing things</td>
<td>T</td>
<td>F</td>
</tr>
</tbody>
</table>

- Marlowe-Crowne Social Desirability Scale X1 (Strahan & Gerbasi, 1972)
APPENDIX F

IRB APPROVAL

The IRB approval letter allowed the research to be conducted on teacher candidates at The University of Akron College of Education through the Fall 2008 semester.
NOTICE OF APPROVAL

August 18, 2008

To: Nichole M. Bunner
   1178 Dayton Street
   Akron, Ohio 44310

From: Sharon McWhorter, IRB Administrator

Re: IRB Number 20080808
   “The Elizabeth Project-Cultural Competence: How Are We Educating our Future Educators?”

Thank you for submitting your Exemption Request for the referenced study. Your request was approved on August 18, 2008. The protocol represents minimal risk to subjects and matches the following federal category for exemption:

☒ Exemption 1 - Research conducted in established or commonly accepted educational settings, involving normal educational practices.

☐ Exemption 2 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior.

☐ Exemption 3 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior not exempt under category 2, but subjects are elected or appointed public officials or candidates for public office.

☐ Exemption 4 - Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens.

☐ Exemption 5 - Research and demonstration projects conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine public programs or benefits.

☐ Exemption 6 - Taste and food quality evaluation and consumer acceptance studies.

Annual continuation applications are not required for exempt projects. If you make changes to the study's design or procedures that increase the risk to subjects or include activities that do not fall within the approved exemption category, please contact me to discuss whether or not a new application must be submitted. Any such changes or modifications must be reviewed and approved by the IRB prior to implementation.

Please retain this letter for your files. If the research is being conducted for a master's thesis or doctoral dissertation, the student must file a copy of this letter with the thesis or dissertation.

☒ Approved consent form/s enclosed

Cc: Rajade Berry - Advisor
    Rosalie Hall - IRB Chair

Office of Research Services and Sponsored Programs
Akron, OH 44325-2102
330-972-7866 • 330-972-6281 Fax

The University of Akron is an Equal Education and Employment Institution.
You have been invited to participate in a research study at The University of Akron in the Department of Curricular & Instructional Studies regarding teacher candidates and specific courses in the curriculum. The process through which you learn about the research project and make your decision to participate is called informed consent. A copy of this consent form will be given to you, and the original will be placed in your research records. At this time we would like to take this opportunity to explain the research study project to you. During the explanation of this project, feel free to ask any question that you might have before you make your decision to participate.

What is the Project?
This research project seeks to better understand issues of cultural competence amongst teacher candidate students at The University of Akron. It also seeks to provide administrators and policy makers with the opportunity to reflect on their own understandings of cultural competence and to strengthen this institution in this aspect.

Participation, Assessments and Follow-up Interviews
Should you agree to participate, you will be given an assessment packet including a demographic questionnaire, and three (3) additional assessments for you to complete. The packet will take approximately 30-45 minutes to complete. You will also be asked to complete the same assessment packet at the end of the semester (Fall 2008) during the final weeks of classes. Your responses to these assessment questions in the packet will be treated confidentially and will only be viewed by the research team.

Use of the Information Collected
All of the research, which will be released or published, will use only data groups of individuals. In no cases will data on an individual be used or any person’s name disclosed, therefore, you will never be personally identified. Furthermore, any written research reports will focus on findings specific to specific groups or the overall “average” and will not report on specific individuals.
Your Participation is Voluntary
You are completely free to decline to participate in this study now. If you do decline participation, it will have no effect on your course grade, or any other aspect on your academic program. If you agree now, you can withdraw at any time. Even if you agree now, you are also free to refuse to answer any individual question that we ask you. If you decided to drop out of the study, you may do so without penalty.

Confidentiality
Confidentiality of all information will be assured to the fullest extent of the law. You will be assigned an ID number in order to identify you for the follow-up assessment at the conclusion of the semester (last 4 digits of your social security number). This information will be kept separate from your assessment answers and will be accessible by the research team only. Otherwise, all of the information collected during the course of this study will remain completely confidential, your answers will not be shared with anyone outside the research team, and all data will be marked with your ID number rather than your name and stored in a locked, secure research office.

Benefits and Risks of Your Participation
Your participation in the study poses no more than minimal risk to subjects involved in this research project, however may provide the benefits of knowing that your participation in the study will be used to add to the knowledge and literature regarding teacher candidates’ educational experiences and may be used to make improvements in the field. If we continue to learn to enrich the educational experiences of teacher candidates in terms of increasing cultural competency, then this research project will benefit our future educators, students, and the community.

Questions or Concerns
Any questions about The University of Akron Elizabeth Project – Teacher Candidate Research Study can be directed to Nichole Bunner, Principle Investigator, at The University of Akron, Department of Public Administration & Urban Studies at 330-475-5500 or nmb1@uakron.edu. Any questions about your rights as a participant can be directed to the Office of Research Services and Sponsored Programs, The University of Akron, Akron, Ohio, 44325-2102, (330) 972-7666.

Agreement to Participate
I understand the scope of this research study and my role in it. I have been allowed the opportunity ask question concerning any and all aspects of the project and procedures involved. I am aware that I may withdraw from this study at any time without penalty. I understand that the investigator will set up procedures to protect the confidentiality of information related to my involvement in this study. I understand that this study is voluntary and that I am under no obligation to participate and I am free to withdraw my consent at any time without penalty.

Adult Participation:  By signing below, I hereby agree_____ / do not agree _____ (check one) to participate in the above described evaluation project.
Name: __________________________ __________________________ _/___/____
Print        Signature            Date

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## APPENDIX H

### CORRELATION MATRIX – ALL VARIABLES

Table 7: Correlation Matrix

<table>
<thead>
<tr>
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<th>1</th>
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<td>1-addressing stereotypes</td>
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<td>4-expectations of diversity</td>
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** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).