Preparing Culturally Competent Educational Leaders

by

Maysaa Barakat

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Approved by

Ellen Reames, Chair, Associate Professor of Educational Foundations, Leadership and Technology
Fran Kochan, Wayne T. Smith Distinguished Professor of Educational Foundations, Leadership and Technology
Lisa Kensler, Associate Professor of Educational Foundations, Leadership and Technology
Joni Lakin, Assistant Professor of Educational Foundations, Leadership and Technology
Abstract

The demographic profile of the US has been rapidly changing and as a result, the US is becoming more culturally diverse. This change in demographics is reflected in schools, and by 2020 minority students will constitute the majority of the school student population nationwide. These changing demographics make cultural competence a necessity for today’s public school educators. Cultural competence should be envisioned as a subset of the much larger picture of social justice. Research suggests that culturally competent leaders positively affect school environments and foster equitable learning. Educational leaders are expected to champion inclusive practices; however, research indicates that they find themselves unprepared and unaware of cultural influences in the public education arena.

There is a lack of theory which explains the process of preparing culturally competent educational leaders in the educational leadership literature. Much of what is known about developing cultural competence is borrowed from other disciplines. Educational leadership preparation programs are responsible for preparing culturally competent leaders; however, few programs assess their students’ cultural competence.

The purpose of this quantitative cross-sectional study was to examine whether graduates of educational leadership preparation programs had significantly different cultural competence than those beginning their respective program. The study also investigated whether certain individual attributes and experiences correlated with cultural competence.
The findings of this study suggest matriculating through a principal preparation program is positively related to students’ cultural competence, their cultural beliefs and motivation, and cultural knowledge. However, there appeared to be no significant relationship between completing this program and students’ cultural skills. The study’s findings also indicate that cultural competence of educational leaders is affected by personal attributes such as gender and perception of belonging to marginalized groups and it is also positively affected by travel abroad experiences.
I could not have completed this study without the tireless support of my husband and best friend, the inspiration of my beautiful daughters and the sacrifice and encouragement of my father, brother and sister back home. Beyond the support of my family and friends in Egypt, the faculty in the department of educational leadership at Auburn University was a second family to me. Their support was of imperative importance to me as I pursued this research endeavor. The persistent encouragement and support of Dr. Ellen Reames, the chair of my committee, prepared and guided me through every step of this research effort. The mentorship, wisdom and critical reflection of Dr. Kochan, the high academic expectations and scholarship of Dr. Kensler and the insight and invaluable feedback of Dr. Lakin all significantly contributed to my personal and professional growth and the completion of this study.

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Dedication

To my parents Mona Hosni and Yassin Barakat with admiration, gratitude and love.
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<td>ANOVA</td>
<td>Univariate Analysis of Variance</td>
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<tr>
<td>CB</td>
<td>Cultural Belief</td>
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<td>CFA</td>
<td>Confirmatory Factor Analysis</td>
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<td>CK</td>
<td>Cultural Knowledge</td>
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<td>CMB</td>
<td>Cultural Belief and Motivation</td>
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<td>ETS</td>
<td>Educational Testing Service</td>
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<td>ISSLC</td>
<td>Interstate School Leaders Licensure Consortium</td>
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<td>LEA</td>
<td>Local education agencies</td>
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<td>MANOVA</td>
<td>Multivariate Analysis of Variance</td>
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<td>MDCC</td>
<td>Multiple Dimensions of Cultural Competence</td>
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<tr>
<td>NCATE</td>
<td>National Council for Accreditation of Teacher Education</td>
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<td>NCLB</td>
<td>No Child Left Behind Act</td>
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<td>NCPEA</td>
<td>National Council of Professors of Educational Administration</td>
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<td>UCEA</td>
<td>University Council for Educational Administration</td>
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CHAPTER ONE. INTRODUCTION

The demographic profile of the US has been rapidly changing over the last few decades (Aud, et al., 2011). “The US is getting bigger … The US is getting older … The US is becoming more racially and ethnically diverse” (Shrestha, 2006, p. 2). Migration to the United States has occurred for many reasons such as study, economic opportunities and refuge. As a result, communities are becoming more diverse and multicultural (Goddard, 2010; Ogbu, 1993). Marx (2006) concluded that the increase in immigrants’ numbers along with a higher birthrate of minority populations will result in the current minority population soon becoming the majority in the US.

This rapid change in demographics is reflected in schools: “Urban schools in early 21st-century Western nations serve more ethno-culturally diverse populations than ever before” (Goddard, 2010, p. 37). “Students of color will constitute the majority of the school student census nationwide in the USA by the year 2020” (Grothaus, Crum & James, 2010, p. 113). These predicted demographic changes have already occurred in some regions of the US. In the southern United States, minority students presently compose the majority. “In 2008, students of color—primarily African American and Hispanic students—became a majority of the South’s public school enrollment” (Southern Education Foundation [SEF], 2010, p. 15). These changing demographics make cultural competence a necessity for today’s public school educators (Horsford, Grosland & Gunn, 2011).
Being culturally competent is not an easy task since cultures manifest themselves in both visible and hidden ways. Visible elements such as artifacts, clothing, food and art are more obvious and are easier to understand than hidden cultural aspects such as beliefs, norms, values and basic assumptions (Kochan, 2012). Cultural competence is “the ability of professionals to function successfully with people from different cultural backgrounds, including, but not limited to, race, ethnicity, culture, class, gender, sexual orientation, religion, physical or mental ability, age, and national origin” (Kohli et al., 2009, p. 3). Cultural competence includes the knowledge, skills, attitudes, beliefs, behaviors and actions (Boyle & Springer, 2001; Holcomb-McCoy & Meyers, 1999; Krentzman & Townsend, 2008; Lum, 2003; Manoles, 1994; Sue et al., 1996) that are necessary for educators to respond to student and community needs.

“Scholars in the field of educational leadership have emphasized that effective school leadership is contingent on a thorough understanding of school culture” (Bustamante, Nelson & Onwuegbuzie, 2009, p. 794). This is especially true in the new global order where schools are required to appropriately and effectively respond to the needs of diverse students. Research suggests that culturally competent leaders positively affect school environment, student engagement, learning and achievement (Bustamante, Nelson & Onwuegbuzie, 2009). Cultural competence is a necessity for school leaders if they wish to continue having a direct, positive effect on student learning (Banks & McGee-Banks, 2004; Bustamante, Nelson & Onwuegbuzie, 2009; Johnson, 2003, 2006; Juettner, 2003; Klingner et al., 2005; Ladson-Billings, 1995; Riehl, 2000; Skrla, Scheurich, Garcia, & Nolly, 2006a, 2006b). It is important to understand that cultural competence should be envisioned as a subset of the much larger picture of social justice. Culturally competent school leaders foster the success of students from all cultures which is the
true essence of social justice. As Riehl (2000) stated “Inclusive administrative practice is rooted in values of equity and social justice” (p. 55).

Students from different cultures need to have people who are supportive and spaces which foster and celebrate their diversity in schools. Researchers in educational leadership who focus on social justice have stressed the role school leaders play in promoting the academic achievement of all students, regardless of race, ethnicity, gender, ability, sexual orientation, religion, or socioeconomic status (Brooks, Jean-Marie, Normore, & Hodgins, 2007; Brown, 2004; Bustamante, Nelson & Onwuegbuzie, 2009; Frattura & Capper, 2007; McKenzie et al., 2008; Theoharis, 2007). Equitable learning environments foster the academic achievement of all students. However, social justice within the public education system cannot be achieved in separation from culturally inclusive education (Jennings, 1995).

Although equitable learning may be a goal, it does not seem to be occurring in many schools throughout the country (Condition of Education, 2011). The persistent achievement gap in reading and math between White 4th, 8th and 12th grade students and their Black and Hispanic contemporaries has been documented since the early nineties. A similar gap exists between students in low poverty schools verses those in high poverty schools. Also, a persistent achievement gap in science exists between the same groups and has been recorded since the early nineties (Aud, et al., 2011).

Research has established that all students are capable of high academic achievement when they are provided with the necessary support and resources (Donovan & Cross, 2002; Gandara, 2000; Huber et al., 2012). Accordingly, it is fair to deduce that some of the reasons for the existing achievement gap among students from marginalized groups include the educators’ lack of cultural knowledge and skills (Huber, et al, 2012; Sirin, Rogers-Sirin & Collins, 2010;
Young & Laible, 2000). According to the National Center for Educational Statistics (n.d.), 88% of principals are White. This lack of diversity in school leadership creates a problem (Young & Laible, 2000). Part of that problem is that most White principals have a “lack of understanding of the various manifestations of racism and the consequences of this for the administration of schools” (Evans, 2007, p.164).

School leaders can affect student achievement and school improvement by creating a positive school culture, empowering the individuals whom they serve and forming meaningful partnerships with the community (Leithwood, Patten & Jantzi, 2010; Leithwood, Seashore-Louis, Anderson & Wahlstrom, 2004). For this to happen educational leaders should examine and identify exclusive policies, practices and school structures which exclude and hold students back because of their differences (Bustamante, Nelson & Onwuegbuzie, 2009).

In spite of these necessary and clear expectations from educational leaders to champion these inclusive concepts and practices, they often find themselves unprepared at best and sometimes even unaware of cultural influences in the public education arena (Bustamante, Nelson & Onwuegbuzie, 2009; Marshall, 2004). In other words, educational leaders hold the responsibility of incorporating, promoting and evaluating the development of cultural competence within their schools and the advancement of a multicultural community, yet efforts to incorporate cultural competence into educational leadership preparation, programs which prepare these principals remain limited, unclear and unevaluated (Grestl-Pepin & Aiken, 2012).

Educational leadership preparation programs are responsible for preparing educational leaders who can advocate and foster social justice and inclusive practices (American Association of Colleges for Teacher Education, 1988; Styron & LeMire, 2009). New understandings of the educational leader’s role has influenced the redesign of the knowledge base, course content, and
foundational goals of some educational leadership preparation programs (Cunningham & Sherman, 2008; Murphy, 2002; Reames, 2010). However, few preparation programs have created or assessed their programs to specifically promote and develop cultural competence (Richardson, Imig & Ndoye, 2010). There is a lack of a theory which explains the process of preparing culturally competent educational leaders located in the current educational leadership literature. Much of what we know about developing cultural competence is borrowed from other disciplines.

**Statement of the Problem**

The demographic composition of the US is changing and minority students are becoming the majority in schools (Grothaus, Crumm & James, 2010; Shrestha, 2006). In the new global order, educational leaders are faced with increasing cultural diversity, changing demographics, and complexities such as classism and value tensions (Gerstl-Pepin, Aiken, 2012). Educational leadership programs carry the responsibility for preparing school leaders for future cultural challenges which they will face in their diverse environments (Barakat, Reames & Kensler, 2012; Horsford, Grosland & Gunn, 2011; Ingram & Walters, 2007), and to become agents of social justice who can foster student success (American Association of Colleges for Teacher Education [AACTE], 1988; Furman, 2012, Styron & LeMire, 2009). One measure of their ability to engage in such agency is cultural competence.

Some preparation programs have individually tried to incorporate strategies to promote issues of diversity and cultural competence. However, these efforts remain unmeasured and their effectiveness unknown (Chan, 2006). Educational leadership research remains deficient in regards to preparation program evaluation as well as student assessment. There is a pressing and urgent need for empirical study and assessment of preparation programs and outcomes of
students graduating from these programs (Crow, Young, Murphy & Ogawa (2009). Some researchers suggest that few programs have created strategies to develop cultural competence of educational leaders or to assess its development (Deardorf, 2004; Richardson, Imig & Ndoye, 2012).

**Purpose of the Study**

The purpose of this study was to examine whether graduates of educational leadership preparation programs have significantly different cultural competence than those beginning their respective program. The study also investigated whether certain program elements and individual attributes and experiences correlated with cultural competence. Finally, in order to address the purposes of the study, the researcher sought to develop a valid and reliable instrument (Cultural Competence for Educational Leaders) to measure cultural competence of those preparing for educational leadership roles.

**Grounding the Study in the Field of Educational Leadership**

The general conceptual framework in which this study was grounded (see Figure 1) has two layers. The first is based on Murphy’s (2002) framework, re-culturing the profession of educational leadership, where he suggested that “the central roles of the leader in education … are to act as a: “moral steward,” “educator” and “community builder” (p. 176). According to Murphy (2002) an educational leader must foster and advocate for social justice in his/her school and community, must support all students’ success and achievement by creating a positive learning environment and is also responsible for promoting the concepts of democratic societies. Since cultural competence is an integral factor for achieving all of the above and is at the heart of social justice (Furman, 2012; Frasner & Honneth, 2003), then an educational leader must also be culturally competent to fulfill the mission of creating a school environment which is socially just,
democratic and where all students can achieve academic success (Leithwood, Patten & Jantzi, 2010; Leithwood, Seashore-Louis, Anderson & Wahlstrom, 2004).

Figure 1. The Framework of the Study

The second layer is this researcher’s hypothesis. An extensive review of the literature indicates that the school leader is a product of his/her own personal and professional background. The fashion of leadership which the individual displays is related to his/her beliefs, personal attributes and work history (Evans 2007). It is also affected by the type of formal education or the preparation program in which the individual participated. The conceptual framework (Figure 1) shows a closed cycle where the school leader is influenced by personal attributes and experiences and the preparation program. The leader then affects the school environment. The
leader’s gained experience while interacting with the school environment also influences the leader.

A quantitative, cross-sectional, causal comparative research design was used. Purposeful sampling was used and participating students were from programs with institutional membership in the UCEA. The sample population was graduate students in Master’s degree, certification programs. Institutional membership in UCEA was an indicator of the program’s commitment to social justice and cultural diversity issues, which were perceived to be integral elements of the UCEA’s mission.

**Research Questions**

This study was guided by the following questions.

1. What are the psychometric properties of the Cultural Competence for Educational Leaders (CCEL) instrument?

2. Using the CCEL to measure cultural competence, is there a difference in (a) cultural knowledge, (b) cultural attitudes and beliefs, (c) cultural skills, and (d) cultural motivation between students beginning an educational leadership master’s program and those students graduating?

3. Do certain personal attributes and experiences have an effect on cultural competence of students in educational leadership preparation programs?

**Significance of Study**

The study may result in the development and validation of an instrument which is specifically designed to measure cultural competence of educational leaders. Since cultural competence is such a necessary leadership skill in today’s diverse educational environment, such an instrument was needed in the educational leadership discipline. The
results will confirm the conceptual framework or lead to the development of a different framework from the hypothesized one. The study assisted in identifying the elements which positively influence Cultural Competence of Educational Leaders at the individual and program levels and contributed to the body of research on student and program evaluation in regards to cultural competence. It should be of value to those who prepare educational leaders, to those who are functioning in this role, and to researchers interested in the topic.

**Assumptions**

- Developing cultural competence involves formal training along with personal experiences.
- Key work of educational leadership preparation programs, that are members of UCEA, is to prepare school leaders to become culturally competent.
- Similarity could be assumed between successive cohorts of the same program.
- People taking the survey will answer honestly and will not give socially desirable answers.

**Limitations of Study**

- The use of a cross-sectional design verses a longitudinal one was a limitation of the study; however, a strong argument for the similarity between the two cohorts [demographics and experiences] was established.
- The use of purposeful sampling excluded from the study programs with no institutional membership in UCEA, programs which graduated many school leaders.
- The use of survey method posed the risk of eliciting socially desirable answers.
Definitions of Key Terms

Achievement gap: Achievement gap refers to the disparities between different demographic groups of students in academic performance in school as measured by standardized test scores.

Color-blind: Color-blind refers to maintaining racial disparity within the society by using race-neutral language.

Cultural competence: Cultural competence is “the ability of professionals to function successfully with people from different cultural backgrounds, including, but not limited to, race, ethnicity, culture, class, gender, sexual orientation, religion, physical or mental ability, age, and national origin” (Kohli et al., 2010, p. 3).

Cultural intelligence: Cultural intelligence is an individual’s capability to function and manage effectively in culturally diverse settings.

Culture: Culture is “the way in which variables like ethnicity, gender, sexual orientation, class, religion, political affiliation, physical and mental abilities, and geographic location, intermingle to influence the values, beliefs, attitudes, and practices of people” (Kohli et al., 2010, p. 3).

Educational leader: An educational leader is a moral steward, educator and a community builder (Murphy, 2002).

Minority population: For the sake of this study the term refers to non-White populations including, but not limited to, African Americans, Native Americans, Asians and Hispanic populations, women, and also immigrants who are racially, religiously, ethnically, and/or linguistically different from the dominant White population.
**Praxis:** Praxis in the Freireian sense involves both reflection and action. Accordingly, when knowledge and reflection are not followed by action they become worthless; mere verbalism. The opposite is also true, when action does not stem from knowledge and reflection it also becomes worthless; mere uninformed activism. True praxis is a process which involves the ongoing interaction and integration between reflection and action (Furman, 2012).

**Summary**

Culture is a core element in everyday living within the United States. The variety of races, traditions, languages, and religious beliefs contribute to a cultural combination that is rich and strengthens the bonds of the American society. However, within school systems, cultural differences, seen through the eyes of prejudice and stereotyping, can deter student achievement and teaching efforts. Incorporating cultural competencies within educational leadership preparation programs can serve to provide educational leaders who are focused on social justice, multicultural diversity, and equitable education and are capable of challenging policies and practices which continue to place culturally diverse students at a disadvantage. Assessing students of preparation programs’ cultural competence and examining which personal attributes and experiences paired with program elements could affect the cultural competence of future school leaders seems to be a necessary and initial step.

This chapter presented and overview of the study. Chapter II includes a review of related literature concerning transformational leadership instructional coaching and cultural competence. Chapter III reports the procedures used in this study including the population and sample, instrumentation, the data collection, and the data analysis. Chapter IV presents the findings of the study. Chapter V includes a summary of the study, conclusions, implications and recommendations for further practice and research.
CHAPTER TWO. LITERATURE REVIEW

The rich cultural diversity of students and families represented in today’s U.S. public school system requires school leaders who possess not only the knowledge, skills, and dispositions to effectively educate and advocate for diverse communities, but also the will to use them. (Horsford, Grosland & Gunn, 2011, p. 599)

Introduction

This chapter reviews the literature relevant to this study. It begins with an overview of the roles and responsibilities of educational leaders, the relationship between educational leadership and student achievement, and the role of educational leaders in the promotion of social justice. This is followed by an examination of the literature on preparation programs with a focus on standards, accreditation, policies and program evaluation. The relationship between social justice and cultural competence is then discussed. The chapter concludes with a summary of the research on cultural competence, the importance of having culturally competent educators and the evaluation and measurement of cultural competence.

Effective learning should incorporate a foundation of cultural competence, especially since the majority of students in the United States will soon be from culturally diverse families. Students of color are projected to be half of all school-aged children by the year 2020 (Gollnick & Chinn, 2009). The racial and ethnic groups have changed drastically over the past several decades. The White population has declined from 80 percent in 1980 to 66 percent in 2008. The Hispanic population has increased from 6 percent to 15 percent; the Black population has
remained relatively constant at 12 percent; the Asian population increased from less than 2 percent to 4 percent; and American Indians continue to constitute about 1 percent of the population (Aud, Fox, & KewalRamani, 2010).

Predicted demographic changes in public schools where minority students become the new majority has already happened in some regions of the US. According to the Southern Education Foundation (SES, 2010) minority students’ demographic body which comprises mainly Black and Hispanic students, currently represents the majority of enrolled students within southern states’ public schools in the US. The impact of changing demographics in US schools requires educational leaders to become culturally responsive (Brown, 2004; Bustamante, Nelson & Onwuegbuzie, 2009; Frattura & Capper, 2007; Horsford, Grosland & Gunn, 2011; McKenzie et al., 2008; Theoharis, 2007).

New demographic changes in student population in public schools are not mirrored in the demographic composition of school educators. Educators’ demographic composition remains dominated by White teachers and administrators. An overwhelming 83% percent of full-time teachers are White (DeJaeghere & Cao, 2009) and 88% of school principals are also White. These educators need to effectively serve students and communities that are culturally different from them (Brown, 2004; Bustamante, Nelson & Onwuegbuzie, 2009; Frattura & Capper, 2007; Horsford, Grosland & Gunn, 2011; Horsford, Grosland & Gunn, 2011; McKenzie et al., 2008; Theoharis & Haddix 2011).

They also need to tackle problems resulting from demographic differences (cultural mismatch) between them, the students and the students’ families. The most challenging problem is the achievement gaps between White and non-White students. The achievement gap is a result of multiple complex historical and systemic reasons. Also, some research suggests cultural
mismatch could be one of the reasons for its existence and persistence (Huber, et al., 2012; Sirin, Rogers-Sirin & Collins, 2010; Young & Laible, 2000).

Changing demographics within school systems and the persistent existing gaps in student achievement bring to the center the vital role served through educators and their preparation programs. School leaders must become prepared to advocate for social justice and cultural diversity, they must set high expectations for all students and support student success. Developing cultural competence has become a reality within global educational efforts and educators need to be able to respond appropriately to diverse groups in school and school communities. However, there is no clear process for developing school leaders’ cultural competence also; cultural competencies needed by educational leaders are not clearly defined.

**Educational Leadership**

**The Role and Responsibility of the Educational Leader**

Scholars criticized the hierarchical views of leadership which dominated the educational leadership discipline, practice and preparation thus giving the more critical and value explicit conceptions of leadership a chance to emerge (Black & Murtadha, 2007; Donmoyer, Imber, & Scheurich, 1995; Foster, 1986; Marshall & Oliva, 2006; Murphy, 2002). Scholars have also criticized educational leadership models which ignored the effect and importance of context (Grogan, 2002) and only focused on the importance of leadership traits thus portraying the educational leader as a charismatic hero who could be successful in any environment (Bennett & Anderson, 2003; Grogan, 2002).

Critical theorists argue that the traditional model of hierarchical leadership is biased by nature, promotes inequity and maintains the status quo. The above mentioned disparities include unequal learning opportunities for students, varying teacher and leadership capabilities, uneven
distribution of resources and supplies as well as socioeconomic segregation and inequality in school performance (Lipman, 2004). As a result, more educational leadership preparation programs started moving towards preparing their students to become advocates of equity and emerge as culturally competent and socially just leaders (Black & Murtadha, 2007; Cambron-McCabe & McCarthy, 2005; Marshall & Oliva, 2006; Marshall & Ward, 2004).

A fundamental principal of democratic practice entails providing every student with the prospect of a solid education and an opportunity for a successful, productive and rewarding life (Barakat, Reames & Kensler, 2012; Ingram & Walters, 2007). Therefore it is important that all educators subscribe to the belief that all students can achieve academic success once placed in an environment that fosters and encourages their education (Donovan & Cross, 2002; Gandara, 2000; Huber et al., 2012). Ingram and Walters (2007) stated that “Today’s student population creates a demographic imperative for teachers and administrators to acquire the knowledge, skills, and dispositions that are necessary to respond to diversity and social justice” (p. 24).

Under No Child Left Behind (No Child Left Behind [NCLB], 2002) school administrators have become under additional scrutiny, the new accountability measures added to the many responsibilities which were already placed on school administrator’s shoulders (Bottoms & O’Neil, 2001). “Now leaders are increasingly being held accountable for actual performance of those under their charge” (Firestone & Riehl 2005, p. 2).

**Correlation between Educational Leadership, Student Achievement and School Improvement**

There is empirical evidence to suggest that school leadership is related to student achievement and school improvement (Leithwood, Patten & Jantzi, 2010). Leithwood, Seashore-Louis, Anderson, and Wahlstrom (2004), state “Leadership is second only to classroom
instruction among all school-related factors that contribute to what students learn at school” (p. 70). Additionally, these researchers and others found that the impact of school leadership is especially important in schools where students were achieving above expectations and in those which were underperforming and needed a total change of direction (Leithwood, Patten & Jantzi, 2010; Murphy, 2009).

Leithwood et al. (2004) also concluded that successful leaders indirectly contribute to student learning by: positively impacting their educational institution, bringing stakeholders together to identify the school’s mission and goals, creating a positive school culture, empowering teachers and forming meaningful partnerships with parents and community, positively affect student learning since all of the above mentioned aspects are “powerful determinants of student learning” (p. 13).

Leithwood, Patten and Jantzi (2010) suggested that leadership influences students’ learning experiences along the following four paths: rational, emotions, organizational, and family paths. Accordingly, Leithwood, Patten and Jantzi (2010) argued that although improving instruction (instructional leadership) is an important factor, it is not the only factor affecting student achievement. He also proposed that a future focus on leadership that engages parents meaningfully could very well render faster and more substantial effect on student achievement, more than the current continuous focus on developing instructional leadership which could already be satisfactory.

**Educational Leaders for Social Justice**

Bruner (2008) states, “school leaders are expected to serve broader social justice goals that urge a focus on diversity” (p. 484), hence they need to receive sufficient preparation that is based on recent research and best practices so that their awareness, knowledge and skills develop
enough to affect change in their schools and communities to improve their students’ performance. Leadership programs are affected by societal, cultural and demographic change (Parker & Shapiro, 1993) where school, society and leadership programs interact in a dynamic and organic ongoing process. This prospect has helped to foster a new understanding of the educational leader’s role as an ethical advocate, “moral steward,” instructional leader, “educator” and agent of change,” “community builder” for his/her community (Murphy, 2002, p. 176). This could be achieved through nesting social justice concepts and democratic school practices within the general and comprehensive goal of school improvement.

When social justice is nested within total school improvement it becomes more achievable, educators becomes focused and driven to support all students success (Murphy, 2002) and the conversation becomes “depersonalized, more objective and more focused on school improvement” (Barakat, Reames & Kensler, 2012). Some empirical studies support the previous claim (Kensler, Reames, Murray & Patrick, 2011; Reames, 2010; Rivera, 2005; Shields, & Mohan, 2008). McKenzie et al. (2008) proposed that educational leaders must foster student achievement, create an equitable and inclusive school culture and act as agents of change through advocacy endeavors to better their school community.

**Evaluation of Educational Leaders**

“Existing research on the effectiveness of different means of school leader development suffers tremendously from problems of defining and measuring outcomes” (Smylie, Bennett, Konkol & Fendt, 2005, p. 153). Future research must move towards directly measuring different school leadership capacities and applications which impact and develop practice rather than self-reports and perceptions (Smylie, Bennett, Konkol & Fendt, 2005). Researchers and policy makers have tried to develop methods to enhance the quality of principal leadership using five
main points of influence which were (1) standards, (2) licensure, (3) accreditation, (4)
professional development, and (5) leadership evaluation (Porter, et al., 2010).

The first four points of influence witnessed substantial progress and development.
Advancement of standards has been obvious in the development, revision and adoption of
standards for educational leadership by the Interstate School Leaders Licensure Consortium
(ISSLC). National licensure examination has been promoted through the School Leaders
Licensure Assessment by Educational Testing Service (ETS). The third point of influence —
accreditation — has been developed and fostered through the National Council for Accreditation
of Teacher Education (NCATE). Professional development programs advancement has been
linked to educational leadership standards (Murphy, Elliott, Goldring, & Porter, 2007; Porter et
al., 2010). A mention of a diversity component could be found in the standards, licensure,
accreditation and professional development points of interest.

Evaluation of educational leadership on the other hand remains stagnant with little
change or development. The field of educational leadership evaluation lacks theoretically as
well as psychometrically rigorous work (Ginsberg & Berry, 1990; Porter et al., 2010). Even
though most school districts require different types of school principal assessments, a recent
study which reviewed 65 different school principal evaluation instruments, currently utilized by
different districts and states, found out that all these previously mentioned instruments had no
conceptual frameworks linked to the effective school leadership literature. Only two of the 65
instruments included information about their psychometric properties (Goldring, Cravens, et al.,
2009). In other words, there is an absence of reliable and valid school principal assessments
methods which implies absence of reliable assessment of principals’ performance in regards to
issues of diversity, social justice and cultural competence issues.
Preparation Programs

The Current Status of Preparation Programs in Regards to Fostering Social Justice

The imperative role of preparing school leaders to become capable of promoting social justice, equity and inclusion in schools and communities depends on educational leadership preparation programs (American Association of Colleges for Teacher Education, 1988; Styron & LeMire, 2009). Current research on educational leadership and best practices in the field recommended that leadership preparation programs advocate for cultural diversity, and become institutions of resistance of any forms of exclusion or discrimination (Oplatka, 2009).

Young and Brewer (2008) stated that educational leadership preparation programs in the United States covered a wide range of expertise, varying from Master’s in Education (M.Ed.), Education Specialist (Ed.S.), Doctor of Education (Ed.D.) and Doctor of Philosophy in Education (Ph.D.). A total of approximately 500 educational leadership programs, the majority of which offer master’s and doctoral degrees, while approximately a third offer Education Specialist degree. Since the end of the 19th century, college and university educational leadership programs have been the primary preparation route; “currently most school administrators attain their administrative credentials from university-based leadership preparation programs” (Young, 2011, p. ix).

Educational leadership preparation programs have been criticized for two main issues, the first is disconnect with their environment and the lack of relevant context that is applicable in real life settings. The second criticism is the absence of linkage between instructional leadership preparation and student achievement in K–12 settings (Cunningham & Sherman, 2008). Preparation programs have been under a lot of pressure to stay relevant and offer rigorous and updated curricula appropriate for the twenty first century and the global order. This makes it
necessary for preparation programs to pay attention to the implementation of standards regarding social justice and cultural competence and to assess the outcomes of implementation (Barakat, Reames & Kensler, 2012; Culbertson, 1990). Recent education research and best practice studies proposed that leadership preparation programs should advocate for inclusive practices, and actively opposed any and all forms of exclusion, oppression or discrimination (Oplatka, 2009). There is a need to transform educational leadership preparation programs in a manner that can impact school leaders and help them develop competence in issues of diversity and social justice so that they can foster equitable learning environments where all students can achieve and become successful. This need has become critical due to changing student demographics in the public education system (Barakat, Reames & Kensler, 2012; Oplatka, 2009).

Standard based reforms together with accreditation processes have placed university-based principal preparation programs under the magnifying glass during the last two decades. Many stakeholders, like district administrators, policy makers and some private organizations, have shown increased interest in thoroughly examining the current status of university-based principal preparation programs (Black, 2011; Glasman, Cibulka, & Ashby, 2002; LaMagdeleine, Maxcy, Pounder, & Reid, 2009; Murphy, 2006; Sanders & Simpson, 2005; Seashore Louis, Leithwood, Wahlstrom, & Anderson, 2010; Young & Brewer, 2008). States have passed new policies which permit alternative institutions to prepare school principals for certification, thus resulting in the emergence of other non-university based principal preparation (Black, 2011; Harrington & Wills, 2005; Smith, 2008). By supporting these emergent alternative principal preparation routes, districts and supporting foundations have placed traditional university-based preparation programs in a competitive position where comparisons between traditional and
alternative preparation programs have become inevitable (Black, 2011; Militello, Gajda, & Bowers, 2009; Teitel, 2006).

New alternative principal preparation institutions have become substantial producers of aspiring new principals at the same time as the number of university-based principal preparation programs has increased (Black, 2011; Baker, Orr, & Young, 2007). Six alternative models other than university-based educational leadership preparation programs have been identified in the literature: alternative university, professional, school district, entrepreneurial, private and experiential (Murphy et al., 2009; Hackmann & McCarthy, 2011). In 2008, sixty-nine percent of all students enrolled in educational leadership programs were classified as licensure master’s students; approximately twenty percent of degree-seeking students were enrolled in UCEA programs (Hackmann & McCarthy, 2011). Alternative programs are fairly new and little is known about their effectiveness or their support of diversity. Whether alternative programs support the development of leaders who can advocate for diverse populations of students and teachers still needs to be examined.

Standards, Accreditation and Licensure

“No one licenses leadership. Leadership emerges after organizations make substantial investments in their training” (Adams & Copland, 2005, p. 2). Stressing the importance, complexity and critical nature of principal leadership, researchers, as well as policy makers, have attempted to set in place methods by which to improve and ensure the quality of leadership. This was achieved through the creation, ongoing revision and adoption of standards for school leadership established by the Interstate School Leaders Licensure Consortium (ISSLC). The accreditation process was developed through the National Council for Accreditation of Teacher Education (NCATE). National licensure examination was developed through the School Leaders
Licensure Assessment by Educational Testing Service (ETS) (Murphy, Elliott, Goldring, Porter, 2007; Porter, et al., 2010).

The American Association of School Administrators’ (2007) belief statement asserted that, “school leaders have a responsibility to create school cultures that recognize and value diversity.” State departments of educations, accreditation agencies and leadership preparation programs, as institutions responsible for granting educational leadership licensure, carry the responsibility of ensuring the clear definition, alignment and evaluation of social justice and diversity standards into the licensure processes. Departments of education in many states are laying new licensure standards for educational leaders that include diversity and cultural competence to address the growing cultural diversity in public education (Sanders & Kearney 2008). One example is in the work of the National Board for Professional Teaching Standards (NBPTS, 2011) which established core propositions for accomplished educational leaders. Another example is creating new standards for licensing educators that incorporates cultural competence. Such as standards for administrative licensure that emerged as a result of the state-wide cultural competence summit which was held in the state of Oregon in 2004 (Gregory, 2009).

In addition to state departments of education, some accrediting agencies ensure that educational leadership preparation programs operate while keeping social justice and diversity at the heart of their programs (Barakat, Reames & Kensler, 2012; Marshall & Gerstle-Pepin, 2005), organizations like NCATE has standards and policies set in place. NCATE is comprised of more than 30 national associations representing the education profession at large. The associations that comprise NCATE appoint representatives to NCATE’s boards, which develop NCATE standards, policies, and procedures. Membership on policy boards includes representatives from
organizations of teacher educators, teachers, state and local policymakers, and professional specialists in P-12 schools. The U.S. Department of Education recognizes NCATE as the primary professional accrediting body for colleges and universities that prepare teachers and other professional personnel for work in elementary and secondary schools. One of the NCATE member agencies, ISLLC, and its six leadership standards, are considered the primary national policy agency for educational leadership. As a matter of fact, NCATE used the six ISLLC standards to inform development of their own. NCATE’s Standard 4 about diversity states that:

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. (http://www.ncate.org/Standards/NCATEUnitStandards/UnitStandardsinEffect2008/tabid/476/Default.aspx#stnd4)

The ISLLC standards claim to provide, “high-level guidance and insight about the traits, functions of work, and responsibilities expected of school and district leaders” (Council of Chief State School Officers, 2008, p. 5). The ISLLC standards have been adopted by 35 states as the appropriate model to inform leadership preparation. Standard 4 of ISLLC states that “A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources” (ISLLC, 2010). In spite of the fact that Standard 4 of ISLLC mentions diversity, there is no specific mention of race, ethnicity or cultural competence
in the standards; further-more, social justice is only mentioned once in Standard 5 functions.

“The absence of explicit consideration of race is the norm for leadership standards nationwide” (Davis, 2012, Para, 6). The lack of specific mention of race, ethnicity, or cultural competence in the ISLLC standards leads to questions about the effectiveness of that set of leadership standards in providing direction, guidance and insight, especially within the current context of public education with its demographic nature and the condition of the existing and persistent achievement gap (Davis, 2012). Even with this vague set of standards which touches on diversity and social justice research suggests that preparation programs have not yet reached goals of implementation and evaluation of these standards in practice (Marshall & Gerstl-Pepin, 2005).

Another trend is to base state assessments on state standards so there are clear curriculum standards at all school levels. Scheurich and Skrla (2003) stipulated that U.S. educational systems that have loosely defined and unmonitored curriculum standards will negatively affect children of color and children from low-income families. School systems with unclear rules for student success will tend to favor advantaged students within the system.

In contrast, for every child to have a good and positive chance at success, it is very important that the criteria for success (proficiency in reading, writing, mathematics, science, history, the arts, etc.) be spelled out in advance, clearly and specifically, so that everyone (children, parents, teachers, administrators, and community members) can understand what the criteria are. This is what high quality standards can do, when carefully and consistently applied. (Scheurich & Skrla, 2003, p. 30)

Aldine Independent School District in Texas, a large, diverse and urban school district, was an example of a highly successful school district. There was notable academic achievement
by children of color and children from low-income families. This school district aligned their entire curriculum with state standards and with state assessment targets (Scheurich & Skrla, 2003). Scheurich and Skrla (2003) indicated that the key is to create an entire educational system where key stakeholders know what they need to do in order for all students to be successful. Clear curriculum standards are critical for equitable and high performing schools. Schools and districts that are successful maintain clear curriculum standards that are identifiable and used by all of the teachers in the school.

Scheurich and Skrla (2003) stressed that standards for mastery of academic content will continue to be ever present within school systems. The general public supports and understands the use of standards, and instead of school personnel opposing them, they could learn how to use standards appropriately and in a positive way to serve all children well. This does not mean accepting all curriculum standards since there is always room for improvement in any system. It is challenging to find the best representative standard because of the various levels of quality and use of state standards. Since some of the state standards have been rated excellent, adequate, and/or poor, school districts would benefit from finding out about the quality of their own standards. Databases and ratings about state standards are available through organizations such as Achieve, Inc., the American Federation of Teachers, Mid-continent Research for Education and Learning, and Education Week (Scheurich & Skrla, 2003).

A significant issue regarding standards is that they may be cultural biased which may ultimately negatively affect some students. “We would agree that standards are culturally biased. In fact, we would suggest that it is impossible for humans to produce any social product that is not culturally biased” (Scheurich & Skrla, 2003, p. 33). During the 2007–2008 school year, in both elementary and secondary levels, approximately 83 percent of full-time teachers
were White, 7 percent were Black, 7 percent were Hispanic, and 1 percent were Asian (U.S. Department of Education, 2012). Any opportunity to revise or critique standards and make them multicultural would be a start. Even though students need to understand the ways of the dominant culture, which is currently a White middle-class culture, we can also value other cultures that students bring to the classroom and to use these various cultures positively in teaching standards (Scheurich & Skrla, 2003).

**Evolution of Preparation Programs**

A more contemporary perception of educational leader’s responsibilities entails being a community leader and an advocate for students, and community, in addition to being an instructional leader who fosters the academic achievement of all students. This new understanding of the role of educational leader has informed the redesign of conceptual framework, curricula, and objectives of educational leadership preparation programs (Cunningham & Sherman, 2008; Murphy, 2002; Reames, 2010).

Grogan and Andrews (2002) indicated that most university-based administrator preparation programs are designed for a top-down manager. Topics normally covered included planning, organizing, financing, supervising, budgeting, and scheduling. However, over the past couple of decades, the curriculum has been changing to meet the need for all students to achieve new, higher levels of learning.

The literature concerning promoting the concepts of diversity, social justice and cultural competence in educational leadership preparation programs, has emerged and become more rigorous (Cambron-McCabe & McCarthy, 2005; Reames, 2010; Theoharis, 2007). If educators are to meaningfully and positively impact student academic achievement, learning and success they must be adequately prepared to face the cultural challenges presented in diverse public
schools setting via strong, rigorous and relevant preparation programs (Barakat, Reames & Kensler, 2012; Ingram & Walters, 2007).

Some might argue that putting a diversity plan in place at schools could solve social justice and inclusion problems. However, Young, Madsen and Young (2010) disagree and argue, based on a study they conducted regarding institutionalizing school diversity plans, that establishing the plan is not enough. It cannot ensure a change in principal’s behavior, school culture or student success, it has to be paired with proper and adequate preparation and training. They further state that “training for leaders cannot focus solely on ‘awareness’; we should prepare leaders to feel comfortable in responding to diversity-related conflicts” (p. 20).

Successful principal preparation programs aspire to increase leaders’ self-efficacy not only their consciousness of issues of diversity and equity (Young, Madsen & Young, 2010).

It is the responsibility of instructors and faculty members of educational leadership programs to invoke students’ thoughts, promote reflection and to challenge long standing mental models and stereo-types (Barakat, Reames & Kensler, 2012; Williams, Matthews & Baugh, 2004). Change is never easy nor sudden; research on change process confirms the need for long-term consistent effort towards the development of diversity, cultural competence and social justice. Change in professional behavior requires effort, recourses, time and on-going personal and professional development (Blake-Beard, 2009; Blake-Beard, Murrell & Thomas, 2007; Brown-Ferrigno & Muth, 2006; Williams, Matthews & Baugh, 2004). Preparing culturally competent and socially just educational leaders necessitates buy-in from relevant individuals; they must understand, embrace and become involved in the change process. Some elements of preparation programs such as internship component in diverse setting might be a good start however real and substantial change needed for diversity, cultural competence and social justice
demand sustained deep rooted practices (Brown, 2004; Brown-Ferrigno & Muth, 2006; Hernandez & McKenzie, 2010; Marzano, Waters & McNulty, 2005; McKenzie et al., 2008; Waters, Marzano & McNulty, 2003).

**Policies Affecting Educational Leader Preparation Programs**

Educational leadership preparation programs represent one of the necessary pillars for promoting diversity, cultural competence and social justice to ensure all students’ learning, achievement and success (Nettles & Herrington, 2007; Pounder, 2011; Styron & LeMire, 2009). However, no preparation program, regardless of its quality, rigor and relevance, can achieve cultural competence and social justice in isolation. Preparation programs need the support of partner local education agencies (LEAs) (Sharp, 2003) as well as the support of public policy makers since they also play an important role (Marshall & Gerstl-Pepin, 2005; Murphy, 2003).

“No Child Left Behind (NCLB) might appear progressive and supportive of multicultural education with its promising title; however…the law presents challenges to the advancement of multicultural education” (Gardiner, Davis & Anderson, 2009, p. 143). Challenges like equitable distribution of resources, as Marshall and Gerstl-Pepin (2005) stated, “Until you can show that every child has equal opportunity to all the things that help students do well in schools, it is unreasonable to hold children, teachers, schools and districts accountable for standardized tests” (p. 98). Districts with high poverty levels lack profound support, which districts with low poverty levels benefit from; support manifested in high achieving schools, well prepared quality educators as well as effective leaders (Sirin, 2005; Young, Reimer & Young, 2010).

Achievement gap refers to the disparities between different demographic groups of students in academic performance in school as measured by standardized test scores (Ladson-
“One of the most common phrases in today’s education literature is ‘the achievement gap.’ The term produces more than 11 million citations on Google” (Ladson-Billings, 2006, p. 3). According to the National Governors’ Association (2005), the achievement gap is simply a matter of race and class where a gap in academic achievement continues to persist between White students and disadvantaged and minority students. The literature identified three main factors to affect the achievement gap: family’s socioeconomic status, student behavior, and schooling conditions and practices. The first factor (family’s socioeconomic status) refers to the level of education of parents, the jobs they hold, income of the household and parental presence and involvement. Student behavior involves motivation, desire and effort to learn and self-discipline. Finally, the third factor (schooling conditions) entails inclusion practices, resources, educators’ qualifications, dropout rates … etc. (Lee, 2002).

The most recent effort to close the achievement gap is the blueprint proposed by the Obama administration to reauthorize the ESEA offering some flexibility to the NCLB; however no one can predict if this will help narrow or close the persistent achievement gap (U.S. Department of Education, 2010).

**Evaluation of Preparation Programs**

Even though many preparation programs have attempted to integrate and focus on issues of diversity and cultural competence within their components, there is no way to tell whether these efforts were successful or not (Chan, 2006). Crow, Young, Murphy and Ogawa (2009) believe that educational leadership’s body of research lacks studies about program evaluation and student assessment. “Student assessment is one of the most glaring areas lacking research…. One of the most needed and evolving areas of research on leadership development is program evaluation” (p. 537). “Several educational leadership professors have pointed to a lack of
systemic program evaluation work that systematically builds on previous research” (Black, 2011, p. 3).

The University Council for Educational Administration (UCEA) has made some effort to evaluate preparation programs, the UCEA “has been a strong advocate and positive instigator of preparation program evaluation and empirical study of leadership preparation in general during the past decade” (Kottkamp, 2011, p.12). Also, certain educational leadership programs have made isolated efforts to assess their efforts in preparing their students to lead in culturally diverse contexts (Chan, 2006).

Preparation programs have been criticized for their lack of sufficient, systemic evaluation of practices and outcomes. Some interviews with school principals showed that they did not perceive going through their preparation program as adequate preparation for the challenges and demands which they face as school principals (Fry, et al., 2005; Roza, Cielo, Harvey, & Wishon, 2003; Schulman, Golde, Bueschel, & Garabedian, 2006). Preparation programs lack data or evidence about their effectiveness in affecting leadership behavior, informing organizational change, positively impacting student achievement or preparing socially just school leaders, in other words educational leadership preparation programs lack practical systemic accountability measures (Black & Murtadha, 2007).

As a response to external critique of educational leadership preparation programs, as well as internal reflections of members and stakeholders of those programs, the UCEA, together with TEA-SIG (Teaching in Educational Administration Special Interest Group) created a taskforce in 2000 to engage practitioners in a conversation about preparation programs with the objective of developing more comprehensive model that develops beyond mere skill acquisition (Black & Murtadha, 2007). In 2004, UCEA, NCPEA (National Council of Professors of Educational
Administration), Division A of AERA (American Educational Research Association), and the TEA-SIG of AERA established a collaborative taskforce focusing on research in educational leadership preparation.

The taskforce faced many methodological challenges but succeeded in conducting longitudinal studies of educational leadership preparation programs, studies focusing on their graduates’ impact on real life school leadership contexts and also their impact on student achievements. The taskforce also participated in studies of the nature of effective schools leadership which were used in backward mapping of preparation programs (Black & Murtadha, 2007). In addition to the above-mentioned efforts, members of UCEA developed a research agenda which focused on the progress of educational leadership preparation programs graduates and their ability to inform first, second and third order changes to encompass organizational and students outcomes within their institutions (Black & Murtadha, 2007; Orr, 2006; Pounder & Hafner, 2006; Young, 2003).

Driven by their awareness of the demographic changes and persistent achievement gap within the educational public system, some members of UCEA further pushed for examining the preparation of culturally competent school leaders capable of promoting equity, inclusion and equal access to the increasingly culturally diverse public education system (Black & Murtadha, 2007). Madsen and Mabokela (2005) claimed that school leaders must understand racial, ethnic and cultural issues; they must become proactive agents of change and challenge the unjust status quo. They stated that “. . . if leaders are to be responsive to constituencies outside the school context, they must create an environment for community involvement . . .” (Madsen & Mabokela, 2005, p. 119). “Culturally engaging leaders cross boundaries to understand how
different groups struggle to make sense of their existence within this society” (Black & Murtadha, 2007, p. 9).

**Elements of Preparation Programs to Correlate with Social Justice and Cultural Competence**

Literature suggested that some program elements positively correlate with social justice and cultural competence of educators. These elements were: (1) the admission process, (2) study abroad opportunities, (3) diverse cohort and faculty members, (4) field experiences and internship element, and (5) a special course on diversity or social justice.

**Admission process.** Ladson-Billings (1997) stated: “I agree with Haberman’s assertion that teacher educators are unlikely to make much of a difference in the preparation of teachers to work with students in urban poverty unless they are able to recruit ‘better’ teacher candidates” (p. 483), where better teacher candidates refers to teachers committed to culturally diverse and disadvantaged students. McKenzie et al. (2008) recommended the following criteria when recruiting students for educational leadership preparation programs: “(a) a strong commitment to social justice or equity or, at least, an already existing tendency to question social inequities” (p. 119).

**Study abroad and diverse cohort and faculty members.** Four main factors were identified to positively impact cultural competence of students of an educational leadership program. These four factors were: “(1) exposure to multiple different culturally diverse groups whether it be through friends or colleagues etc., (2) education, for example the influence of teachers or faculty members and certain courses or curricula, etc., (3) Travel like study abroad, living abroad, etc., and (4) personal experience with discrimination as a child or adult (membership in a marginalized group)” (Smith, Moallem, & Sherrill, 1997, p. 54). Even though
courses on diversity and multicultural education and internship experiences are effective tools to develop educational leadership students’ cultural competence, these factors alone cannot overpower negative preexisting attitudes, beliefs and views (Garmon, 2004)

**Internship in diverse setting.** The importance of internship and induction elements of preparation programs has been stressed in recent research (Villani, 2005; Wilmore, 2004). With the objective of preparing socially just education leaders the current design of preparation programs including required courses alone does not seem to provide the necessary preparation and training. Assuming that graduates of preparation programs, upon graduation, will likely work in settings which are not socially just or in settings which do not challenge or attempt to change the exclusive inequitable nature of the current condition of public education. This assumption makes it necessary for graduates of educational leadership preparation programs to receive internship training where they can practice social justice on a daily basis, in a positive environment, so that they become empowered to apply their social justice advocacy skills to real-life settings when the time comes (McKenzie et al., 2008).

Educational leadership interns should practice in diverse school settings so that they could understand the challenging and complicated environment of public education. They should work side-by-side with educators and policy makers and get involved in the complex decision making process. Internships in diverse settings serve two purposes; the first is to offer additional support to schools and neighborhoods, and the second purpose is for the interns to further develop their learning. Interns get the chance to apply and make sense of what they learned within their programs in real life situations (Black & Murtadha, 2007). Because of participating in internship elements of preparation programs, educational leadership students “move beyond isolated university classrooms and work in problem-solving teams as educational
leadership interns, collaborating with university liaisons and field-based educators and/or policy makers” (Black & Murtadha, 2007, p. 14).

**Special course(s) about diversity.** Attending a course on diversity has positively impacted educational leadership preparation programs students’ beliefs and attitudes towards racial issues (Artiles & McClafferty, 1998; Bennett, Niggle, & Stage, 1990; Bondy, Schmitz, &Johnson, 1993; Delany- Barmann & Minner, 1997; Reed, 1993; Ross & Smith, 1992; Tran, Young, & Di Lella, 1994). Other studies concluded that effects of a course on diversity vary according to students’ different beliefs and views. Garmon (1996) concluded that students starting a course on diversity with positive beliefs and attitudes towards cultural diversity benefit from attending that course and develop better positive dispositions towards cultural diversity and become more sensitive to diverse students’ needs after concluding that diversity course, while the opposite is also true. This is in accordance with Kagan’s (1992) findings that “candidates tend to use the information provided in course work to confirm rather than to confront and correct their preexisting beliefs” (p. 154). Literature also suggested that some personal attributes positively affect cultural competence.

**Personal attributes that positively affect cultural competence.** “Minority students performed better than their white counterparts despite other findings that minorities generally perform at lower levels than white students on many standardized measures suggests something about the nature of the relationship between knower and knowledge” (Ladson-Billings, 1992, p. 153). Research suggests that ethnically diverse teachers communicate and instruct using teaching strategies which are compatible with the learning styles of students of color thus enhancing their learning experiences, academic achievements and social development (Dilworth, 1990). Ethnically diverse teachers operate as cultural bridges and connectors (Irvine, 1989); they
utilize culturally relevant instructional strategies which also positively impact student achievement and success. Ethnically diverse teachers are more likely to create inclusive classrooms where students’ differences are celebrated and all student voices are heard and considered valuable, they foster critical thinking and civil consciousness and empower students to change their environment (Darder, 1995; Irvine, 1989; Ladson-Billings, 1992).

Because of their personal experiences with prejudice, discrimination and racism ethnically diverse teachers are more likely to identify and resist any and all forms of discriminatory schooling practices against students form culturally diverse backgrounds (Meier, Stewart, & England, 1989). Ethnically diverse teachers are less likely to maintain White privilege and will promote critical consciousness, set realistic and high expectations for culturally diverse students’ success, form meaningful relationships with students’ families and advocate for their students (Darder, 1995; Rios & Montecinos, 1999).

**Cultural Competence**

Culture is a complex concept which is rooted in many disciplines like anthropology, sociology, intercultural communication and cross-cultural psychology and has a range of definitions. Based on an extensive literature review, Bustamante, Nelson and Onwuegbuzie (2009) summarized the description of culture as being:

A learned meaning system of shared beliefs, values, norms, symbols, customs, behaviors, and artifacts that members of a group use to make sense of their world and foster a sense of identity and community…. Culture is typically transmitted across generations…is more unconsciously experienced than taught…. Cultures are not homogeneous, and subgroups or subcultures exist within larger cultures…. A single person might belong to
multiple cultures … and people might identify with more than one culture, depending on
situations and points in time. (pp. 796–797)

Cultural competence can be defined as possessing the necessary skills to successfully
collaborate or work with others from cultural backgrounds which are different from their own
such as, race, ethnicity, culture, socio-economic status, gender, sexual orientation, religion and
ability (Kohli et al., 2009)

Theories

There is a lack of a grounding theory in the educational leadership literature that explains
the process of preparing culturally competent educational leaders. Much of what we know about
developing cultural competence is borrowed from other disciplines (El Ganzoury, 2012). In the
field of social work Kohli, Kohli, Huber and Faul (2009) proposed that to integrate cultural
competence issues into social work preparation, instructors should “aim to combine student’s
theoretical understanding with personal experiences in a reflective manner” (p. 10). Competence
combines knowledge and experience (theory together with practice) interacting together and we
cannot rely on one without the other (Kohli, et al., 2009).

Effective educators can use culturally relevant examples and recognize different cultural
orientations that are in the classroom which would help create supportive relationships between
teachers and students. Pang, Stein, Gomez, Matas and Shimogori (2011) reinforced establishing
caring, trusting relationships as they serve as the foundation to creating or implementing student-
centered instruction and engages students in their learning. “Culturally competent educators
cultivate their abilities to combine the ethic of care and elements of culture in creating effective
learning environments” (p. 561). A multicultural educational framework reflecting caring and
social justice represents a means to achieve cultural competence. Pang (2010) proposed a
cultural competencies framework composed of an ethic of care, based on Noddings’ work (1992); socio-cultural theory of learning, based on Cole’s research (1996); and Dewey’s (1916) theory of education for democracy.

The framework reinforces the importance of schools and teacher’s demonstrating empathy, affirming students, establishing a positive school climate, committing to care for others, and developing a compassionate community. There is a climate of social justice, one of active caring on the part of educators. Educators that are interested in knowing about students’ cultural values, expectations, and behaviors will transfer these approaches when implementing effective instruction (Pang, Stein, Gomez, Matas, & Shimogori, 2011).

Pang, Stein, Gomez, Matas, and Shimogori (2011) identified four cultural competencies that educators should possess in order to provide educational equity for students. The four competencies were: 1) competence in understanding one’s own biases and cultural orientations; 2) competence in providing effective instruction for students who are English learners so that appropriate language acquisition skills are present and in use; 3) competence in interdisciplinary content and instructional practices to impart complex global concepts and address social issues within the society; and 4) competence in teaching higher order thinking skills to encourage students to become responsible citizens and make socially just decisions. These cultural competencies can be shared and incorporated into professional development programs for teachers and school administrators.

Sue (2001) identified a conceptual framework related to cultural competence. The Multiple Dimensions of Cultural Competence (MDCC) was organized using three primary dimensions of multicultural competence: (1) a specific racial/cultural group perspective, (2) components of cultural competencies, and (3) cultural competence as examined through the
person/individual versus the organization/system. This model provides a conceptual framework that can be used as a systemic and holistic approach to developing cultural competencies.

**Relationship between Cultural Competence and Social Justice**

Jennings (1995) stated that “culturally inclusive education is inseparably linked to social justice” (p. 1), so to develop an educational system that is socially just and inclusive educators’ preparation programs must clearly convey the true meaning of culture, which is “the way people make sense of their everyday lives” (Ross, 2008, p. 9), to teachers and school leaders. Educators must also be trained to accept other’s values and cultural norms by being exposed to multicultural experiences (Ross, 2008).

Recently Furman (2012) proposed a parallel conceptual framework that views social justice leadership as praxis, a framework that could prove helpful for educational leadership preparation programs. In her article, Furman (2012) suggests that social justice leadership is a praxis which involves reflection and action and that most preparation programs address the reflective aspect well where students are challenged to develop “critical consciousness about social justice” while actual social justice skill development is often ignored (p. 191). Furman (2012) recommend assessing school wide cultural competence as an auditing tool to help educators assess their awareness of social justice concepts as part of the proposed praxis.

**Variables Supporting Cultural Competence**

Young and Brooks (2008) reinforced the importance of increased diversity within the U.S. school leadership roles which requires promoting people of color for school administration and professorial positions. Racial issues were investigated in educational administration preparation programs and they identified strategies that faculty members and institutions could do to support graduate students of color. Support for graduate students of color can occur during
distinct phases including recruitment, orientation and induction, faculty and peer mentoring, in-
program experiences, and opportunities for career socialization and advancement.

Effective recruitment takes place in schools and neighborhoods that are traditionally
underrepresented. Event representatives should be individuals of color who can address pre-
admission support, application processes, financial and social support processes. Orientations
should include ongoing, campus-wide, college-wide, programmatic sessions instead of just a
one-time event. Faculty and peer tutoring extend beyond the traditional academic advisor and
advisee role. The relationship should be empathetic and serve as a proactive partnership in
which there is an equal amount of responsibility and commitment to the success of both partners.
In-program experiences can be structured to include problem-based learning strategies, cohort
groups, collaborative partnerships, and field experiences. Experiences should include focused
support throughout the coursework, dissertation, and any internship experiences (Young &
Brooks, 2008).

Opportunities for career socialization and advancement include supporting attendance at
congresses, publications, internships, and networking at national, regional, and local levels.
Substantive change will occur as university-based educational administrative faculty shift away
from the impersonal advising and move towards authentic mentoring of graduate students of
color. Young and Brooks (2008) indicated that effective faculty and peer mentoring include
ongoing socialization and networking opportunities within the K–12 settings, the department,
college, or university levels, and the educational administration profession.

The Importance of Educational Leaders’ Cultural Competence for Students

The increasing significance of culturally relevant, responsive, and competent leadership
in schools is made clear given the sheer increase in the number and percentage of school
children representing a diversity of racial, ethnic, and linguistic populations in the United States. (Horsford, Grosland & Gunn, 2011)

Educational leaders must acquire the necessary knowledge and skills. They must pair knowledge and skills with ethical values and beliefs to support intercultural communication. Create multicultural and socially just school communities to operate successfully within the emerging global education environment (Grestl-Pepin & Aiken, 2012). “As we begin to face a new global order, leaders are challenged by changes such as increasing cultural diversity, changing demographics, economic exigencies, complexity, … social change, … classism and values tension, as well as expressions of spirituality, religion or faith” (Grestl-Pepin & Aiken, 2012, p. xv).

Research shows that culturally and linguistically diverse students are underrepresented in advanced and gifted programs while they are over represented in intellectual and learning disabilities as well as emotional disturbance categories (Huber, Hynds, Skelton, Papacek, Gonzalez & Lacy, 2012). Research argues that all students are capable of and actually do achieve when placed in a positive learning environment (Donovan & Cross, 2002; Gandara, 2000; Huber et al., 2012). This could mean that the achievement gap among students from marginalized groups could be due to educational leaders’ lack of cultural knowledge and skills as well as cultural mismatch between home and school (Huber, et al., 2012; Sirin, Rogers-Sirin & Collins, 2010).

Approximately 40% of public school students belong to minority families while approximately 85% of educators who serve these students are White (Aud, et al., 2011). This creates what is known as ‘cultural mismatch’. Trying to diversify educators in public education is an important long term goal however this does not solve the urgent and pressing endeavor of
eliminating the current mismatch, so the second best scenario to solve the cultural mismatch would be to increase educator’s cultural competence (Sirin, Roger-Sirin & Collins, 2010).

Research suggests that cultural mismatch could negatively impact student achievement, their self-perception and overall wellbeing if it is manifested in any form of prejudice or discrimination (Sirin, Roger-Sirin & Collins, 2010). Cultural mismatch is often considered as one of the reasons behind the current and persistent achievement gap (Gregory, Skiba & Noguera, 2010). Thus, it is clearly necessary to teach all educators how to maintain a classroom that is sensitive to cultural diversity and uphold high, ethically justifiable standards of fairness in their work (Sirin, Roger-Sirin & Collins, 2010, p.50).

White middle class female teachers represent the majority of educators in the United States public school system. Their cultural background is completely different from a large percentage of the students which they serve. This creates a cultural mismatch. That being said what widens the mismatch gap and puts these educators at odds with students and their families is a lack of cross-cultural knowledge, experience or exposure (Ross, 2008, Sleeter, 2001). Another reason for the existing cultural mismatch is a cultural misunderstanding. There seems to be a superficial perception of culture within the current education system, where it is stripped-down to ethnic food, music and art museums (Rosaldo 1993, Ross, 2008).

**Cultural Competence as a Construct in Educational Leadership Discipline**

Hansuvadha and Slater (2012) addressed the relationship between leading and learning. Learning-centered leadership emphasizes specific skills and learner-centered leadership develops independent and critical thinking to solve current issues. Cultural competence is an aspect of learner-centered leadership and school administrators interested in promoting effective interactions with other cultural groups would support and encourage educators to recognize the
culturally diverse classroom as a learning opportunity. However, students’ needs will not be identified or met unless school administrators favor or support the knowledge, behavior, and dispositions to promote cultural diversity.

Culturally competent educators capitalize on students’ diverse cultures to enhance the learning environment. Students can then connect with the curriculum content and develop advanced cognitive skills. More research is needed that clearly demonstrates how beginning school principals perceive their role and ability as culturally competent learners, as well as the necessary supports that ensure their effectiveness to lead in the face of existing professional challenges (Hansuvadha & Slater, 2012, p. 175).

Administrator preparation programs should require a component of self-reflection and examination of the participant’s own culture at both the pre-service and in-service levels. These programs should build in the knowledge, skills, and dispositions so that administrators can become culturally competent leaders and provide the support and environment needed to nurture and maintain culturally competent teachers (Hansuvadha & Slater, 2012).

**Cultural Competence as a Construct in Other Disciplines**

Sue, Ivey and Pedersen (1996) developed a conceptual framework which is widely recognized in the field of mental health. This conceptual framework is grounded in an assumption that mental health professionals have to possess specific cultural knowledge and skills which are relevant to members of a culture in order for the mental health professionals to be able effectively serve those members of that particular culture. The above-mentioned conceptual framework has been adopted by the American Psychological Association and encompasses three sections: (1) cultural awareness, (2) cultural knowledge, and (3) cultural skills.
Building cultural competence requires developing the capacity from within the person or organization. It requires examining personal biases, beliefs and values and should be included in teacher education programs to prepare educators to work with all student and colleagues’ cultures (Campbell Jones, Campbell Jones, & Lindsey, 2010; Cross, Bazron, Dennis, & Isaacs, 1989; Madda & Schultz, 2009; Pang, 2010; Terrell & Lindsay, 2008; Tidwell & Thompson, 2008). One trend involves the use of instruments that identify cultural awareness and understanding.

Cultural competence is a developmental process and has been categorized into six categories (Campbell Jones, Campbell Jones, Lindsey, 2010; King, Sims, & Osher, n.d.). The categories progressively build on each other and consist of: 1) cultural destructiveness – negating cultures that are different than your own; 2) cultural incapacity – feeling your own cultural values and beliefs are superior to others; 3) cultural blindness – acting as if there are no differences between or among cultures; 4) cultural pre-competence – realizing that there might be more to know or experience in order to understand other cultures; 5) cultural competence – interacting with other cultural groups in order to expand knowledge and value differences; and 6) cultural proficiency – honoring differences and recognizing diversity as a benefit. King, Sims, and Osher (n.d.) stressed the importance of individuals or institutions assessing their standing along the six category continuum as these assessments can be useful for further development of culturally competent educators.

**How is Cultural Competence Measured?**

Cultural assessments could include one such as the Intercultural Development Inventory (IDI) which measures orientations toward cultural differences (Hammer, Bennett, & Wiseman, 2003). The IDI identifies three ethnocentric orientations: Denial, Defense, and Minimization,
where an individual’s culture is experienced as central to reality; and, three ethnorelative orientations: Acceptance, Adaptation, and Integration, where an individual’s culture is experienced as in the context of other cultures. Intercultural relationships are expanding from domestic to global settings and require intercultural sensitivity and intercultural competence. Intercultural sensitivity is the ability to discriminate and experience relevant cultural differences and intercultural competence is the ability to respond in interculturally appropriate ways.

Another cultural assessment instrument is the Cultural Intelligence Scale (CQ). Cultural intelligence (CQ) refers to the ability to function effectively in culturally diverse settings (Ang, et al., 2007). “CQ is a multidimensional construct targeted at situations involving cross-cultural interactions arising from differences in race, ethnicity and nationality” (p. 336). It comprises four intelligence loci: cognitive (knowledge of cultural norms, practices and customs of different cultures); meta-cognitive (revision and correction of mental models and stereotypes about different cultures); motivational (devoting attention, effort and energy toward learning about and functioning within different cultures); and, behavioral (properly communicating both verbally and nonverbally when cooperating with people from other cultures) (Ang et al., 2007). The CQ is the only cultural competence instrument that is based on contemporary theories of intelligence, assesses four facets of intelligence and is not specific to a particular culture. The results on the CQ can provide initial predictions of an individual’s cultural judgment and decision making as well as cultural adaptation and task performance (Ang et al., 2007).

Conclusion

According to the National Center of Education Statistics [NCES] (2010) culturally diverse students comprise approximately 45% of public schools population as of 2009; therefore it is critical that the public education system addresses their needs (Taylor, 2010). This is not an
easy tenant when eight out of ten teachers who work with these diverse students are White (NCES, 2009). This can create ‘cultural mismatch’ (Horsford, Grosland & Gunn, 2011; Sirin, Roger-Sirin & Collins, 2010).

Trying to diversify the teaching profession is a very important goal; however it might not instantly eliminate mismatch, so the second urgent goal would be to increase educator’s cultural competence (Sirin, Roger-Sirin & Collins, 2010). The literature concerning cultural competence and social justice in educational leadership preparation programs is growing and becoming more robust (Cambron-McCabe & McCarthy, 2005; Reames, 2010; Theoharis, 2007). The most current education research and best practice literature suggests leadership programs should advocate for inclusion, and resist any and all forms of discrimination and exclusion (Oplatka, 2009). Since, as stated by Liang and Zhang (2009), “In the core of cultural competence is a commitment to social justice and equity. This entails actively challenging the status quo in order to transform belief systems into action” (p.19), this increases educational leaders’ and teachers’ need to develop a broad range of multicultural/social justice competencies necessary for their effective functioning in their challenging future endeavors (Zalaquett, Foley, Tillotson, Dinsmore, & Hof, 2008).

There is a need for culturally competent educators who comprehend, understand, and perform effectively in culturally diverse situations and do so when their values, beliefs, and traditions are different than others (Pang, Stein, Gomez, Matas, & Shimogori, 2011). Educators who have the ability to integrate cross cultural experiences will be more effective since they can identify and use cultural contexts and contents in their classroom instruction (Gallavan, 2000; King, Sims, & Osher, n.d.; Pang, Stein, Gomez, Matas, & Shimogori, 2011).
Educational leadership programs carry the great responsibility for preparing school leaders to become agents of social justice in their schools and communities (American Association of Colleges for Teacher Education, 1988; Barakat, Reames & Kensler, 2012; Ingram & Walters, 2007; Styron & LeMire, 2009). Currently there are between 450–500 university leadership preparation programs across the United States. These programs cover a wide range of expertise between programs offering master’s (M.Ed.), specialist (Ed.S.), and doctoral (Ph.D., Ed.D.) degrees. Approximately 472 higher education institutions offer master’s and doctoral degrees while 162 offer the education specialist degree (Young & Brewer, 2008).

With college and university educational leadership programs being the primary preparation route and given the pressure these programs are under to provide relevant and rigorous curricula it seems important that leadership faculty would pay particular attention to the implementation and evaluation in regards to national standards such as cultural competence and social justice. Program evaluation and student assessment are lacking in research (Crow, Young, Murphy & Ogawa, 2009). “Student assessment is one of the most glaring areas lacking research…. One of the most needed and evolving areas of research on leadership development is program evaluation” (p. 537).

Some educational organizations like University Council for Educational Administration (UCEA) have made an effort to promote and foster student and program evaluation. “UCEA has been a strong advocate and positive instigator of preparation program evaluation and empirical study of leadership preparation in general during the past decade” (Kottkamp, 2011, p. 12). Also, some educational leadership programs have made isolated efforts to assess their success in specifically preparing their candidates for leading in diverse contexts (Chan, 2006). This study is designed to add to the ongoing efforts to build the literature on program and student evaluation
and to specifically shed light on measuring cultural competence and preparing culturally competent leaders.
CHAPTER THREE. METHODS

Introduction

The increasing percentage of students from culturally diverse backgrounds in the United States public school system has made culturally competent school leadership important and necessary (Horsford, Grosland & Gunn, 2011). As of 2009, 45% percent of public schools’ student population belongs to minorities (National Center of Education Statistics [NCES] 2010). It becomes crucial for educators to fulfill their diverse student’s learning and educational needs (Taylor, 2010), which is a challenging endeavor. There are cultural differences between culturally diverse minority students and teachers who are eighty percent White, middle class, females (NCES, 2009), and between minority students and school principals who are 88% White (Evans, 2007). This creates what is known as cultural mismatch (Horsford, Grosland & Gunn, 2011; Sirin, Roger-Sirin & Collins, 2010). Cultural mismatch makes the connections needed for students to have positive educational outcomes difficult to achieve. Diversifying the population of school educators would help solve the cultural divide (mismatch) between school leaders and the school community. However, this is a long term solution that can not eliminate the current problem. The time sensitive solution is to increase educator’s cultural competence (Horsford, Grosland & Gunn, 2011; Sirin, Roger-Sirin & Collins, 2010).

Preparing culturally competent and socially just school leaders who act as change agents for their schools and communities is the responsibility of educational leadership preparation programs (American Association of Colleges for Teacher Education, 1988; Ingram & Walters,
Some programs have attempted to evaluate their efforts preparing students to lead in diverse contexts however; these were small scale isolated efforts (Chan, 2006). There is an existing gap in educational leadership research in regards to program and student evaluation (Crow, Young, Murphy & Ogawa, 2009). With this proposed study I hoped to add to the literature on leadership program evaluation. The focus of the study was on cultural competence preparation, predictors, and evaluation.

A quantitative cross sectional causal comparative research design was used to identify the individual attributes and personal and programmatic experiences associated with cultural competence of students and graduates of educational leadership preparation programs. The research was mainly quantitative [demographic, experiential and closed-ended survey items]. One open-ended question was added to the survey. Cross-sectional causal comparative research design was used, utilizing the Cultural Competence of Educational Leaders (CCEL) questionnaire to measure cultural competence as a compiled construct of four sub-constructs: (1) cultural knowledge, (2) cultural attitudes and beliefs, (3) cultural skills, and (4) cultural motivation. Cross-sectional method was selected because “differences between defined groups in the cross-sectional study may represent changes that take place in a larger defined population” (Wiersma & Jurs, 2009, p. 196), and because “causal comparative research explores effects between variables in a non-experimental setting” (Wiersma & Jurs, 2009, p.190).

This chapter outlines this study’s research methodology. First, the research questions are stated. Second, participants are described. Third, the survey instrument (questionnaire) used in the study is described in details. Fourth, data collection procedures and analysis are explained, and finally, limitations of the study are stated.
Research Questions

This causal comparative study was guided by the following questions:

1. What are the psychometric properties of the Cultural Competence for Educational Leaders [CCEL] instrument?

2. Using the CCEL to measure cultural competence, is there a difference in (1) cultural knowledge, (2) cultural attitudes and beliefs, (3) cultural skills, and (4) cultural motivation between students beginning an educational leadership master’s program and students graduating?

3. Do certain personal attributes and experiences have an effect on cultural competence of students in educational leadership preparation programs?

Participants

The target population is graduate students in educational leadership Master’s programs [programs which prepare school leaders as assistant principals, principals etc…] in the United States. The sample population is graduate students in educational leadership certification, Master’s programs in universities that are members of the University Council for Educational Administration (UCEA). UCEA has a total of ninety-two member universities of which eighty-seven are in the USA (http://curry.virginia.edu/uceamembership/). To run the factor analysis for the study, the sample size should be 100 or greater as suggested by Hair et al. (1995). In another guide to sample sizes it was proposed that a sample size of 100 was poor while a sample size of 200 was fair and that of 300 was good (Comrey, 1973; Williams, Brown & Onsman, 2012).

I used purposeful sampling to target leadership programs affiliated with the strong body of research concerning the need for educators to lead through a lens of social justice and cultural competence. UCEA is a community of learners that expresses values and goals associated with social justice and cultural competence. They recognize the importance of developing learning
and social development for all children and the direct contributions school leaders make to this development. UCEA cherishes the professional educational leadership community, the collegiality and respectful interactions of diverse perspectives (http://ucea.org/values-vision-goals/). Programs purposefully chosen for the study should reflect these goals and demonstrate a focus on social justice, diversity and cultural competence.

Instrument Development

Description of Instrument

A three part questionnaire entitled the Cultural Competence of Educational Leaders (CCEL) (see Appendix A) was developed to survey students starting master’s leadership preparation programs and students graduating from programs. Part I consisted of seven multiple choice questions and one open-ended question about the participants master’s leadership preparation program.

The second part of the survey which measured the cultural competence construct consisted of a total of 24 close-ended questions where most questions had a five-point Likert-type scale. According to Andres (2012), “There is consensus that scales should contain no more than seven categories, but five is probably sufficient.” He also stated, “Providing labels for more than five anchor points can be problematic” (p. 74). Those 24 questions were divided into four subsections; each section was comprised of six questions and measured a sub-construct (variable) of cultural competence: (1) cultural knowledge, (2) cultural attitudes and beliefs, (3) cultural skills, and (4) cultural motivation.

The third part of the survey collected demographic and experiential information about the participating students. The purpose of this part of the survey was to collect information that would help clarify potential connections between specific demographic and experiential variables and cultural competence. The demographic and experiential part of the survey will
comprise of 8 questions to inquire about personal attributes of the participant, their personal and professional experiences. The following are attributes and elements that were identified by literature to have positively influenced cultural competence.

1. Belonging to a historically marginalized group (Dilworth, 1990; Irvine, 1989; Ladson-Billings, 1992; Smith, Moallem, & Sherrill, 1997)
2. Travel abroad experience (Reames, Kaminski, Downer & Barakat, in press; Smith, Moallem, & Sherrill, 1997)
3. Internship opportunities in a diverse setting (Black & Murtadha, 2007; McKenzie et al., 2008; Villani, 2005; Wilmore, 2004)
4. The admission process for programs (Ladson-Billings, 1997; McKenzie et al., 2008)
5. A specific course about diversity of multiculturalism (Artiles & McClafferty, 1998; Bennett, Niggle, & Stage, 1990; Bondy, Schmitz, & Johnson, 1993; Delany-Barmann & Minner, 1997; Garmon, 2004; Reed, 1993; Ross & Smith, 1992; Tran, Young, & Di Lella, 1994)
6. Diversity of the faculty and cohort members (Darder, 1995; Irvine, 1989; Ladson-Billings, 1992; Smith, Moallem & Sherrill, 1997)

The Auburn University Institutional Review Board for the Protection of Human Subjects in Research (IRB) granted permission to collect data using the above-mentioned instrument (see Appendix B).

Conceptual Framework [Instrument]

The conceptual framework for the design of the Cultural Competence for Educational Leadership (CCEL) instrument is multi-dimensional (see Figure 2). It draws from the fields of psychology and social work and is aligned with the general conceptual framework of the study.
Psychological framework. The literature supports the four aspects of the psychological dimension for cultural competence used in this research. The first dimension is called for by Van Dyne and Ang (2009), who argue that individuals need to “develop their cultural knowledge since knowledge about cultural similarities and differences is the foundation of decision making and performance in cross-cultural situations” (Van Dyne & Ang, 2009, p. 237). For the second dimension, Kohli et al. (2010) conclude that individuals need to be aware of their beliefs and attitudes because this awareness encourages critical thinking and helps the individual challenge mental models and assumptions about other cultures (see also, Van Dyne & Ang, 2009). Individuals also need to develop skills so that they become culturally competent (Kohli et al., 2010, p. 9). Cultural skills are reflected in an individual’s awareness of his or her strengths
and weaknesses when communicating with people from different cultures (Kohli et al., 2010). And finally, individuals need to develop their **motivation** as a person’s motivation to devote his/her energy and attention towards issues of cultural differences is crucial for acting as a culturally competent individual (Van Dyne & Ang, 2009).

**Social work framework.** A cultural competence framework with three major sub-constructs comprises ethno cultural diversity, which refers to the person’s ability to value and recognize different world view. The second sub-construct is fighting oppression, and the third cultural competence sub-construct is labeled vulnerable life situations, which refers to the persons’ commitment to enabling vulnerable population (Anderson, 2003). All three sub-constructs are in alignment with Murphy’s framework where ethno cultural diversity is in alignment with democratic society. Fighting oppression is aligned to social justice and school improvement is in accordance with enabling vulnerable populations by providing an equitable education to all students.

“When developing surveys the designer of a questionnaire must defend the content of the instrument based on the questions of the research and previous trends identified in the literature” (Messick, 1994, p. 15). The survey design tapped into the literature (Boyle & Springer, 2001; Holcomb-McCoy & Meyers, 1999; Krentzman & Townsend, 2008; Lum, 2003; Manoleas, 1994; Sue et al., 1996) to identify the components of cultural competence: (a) knowledge, (b) attitudes and beliefs, (c) skills and (d) motivation. I also selected Kohli’s (2009) cultural competence framework (informed by major contributions of social work) for providing social justice to all with “three major perspectives on human diversity: (a) ethno-cultural diversity, (b) fighting oppression, and (c) enabling people in vulnerable life situations” (Kohli et al., 2009, p. 9) as variables to take into consideration when posing the questions.
In the questionnaire the variables of race, ethnicity, gender, sexual orientation, class, religion, disabilities and national origin were also incorporated to create a multidimensional model (adopted from Sue, 2001, p. 792) (see Figure 2) in order to cover the range of different sub-cultures included in the study. Some questions covered multiple categories such as questions about historically marginalized groups will cover all sub-cultures (see Table 3). There were more questions related to race so that the study’s inclusive approach to cultural competence (ethnicity, gender, sexual orientation, class, religion, disabilities and national origin) would not obscure the importance of race as a powerful dimension of human existence (Carter, 1995; Carter & Qureshi, 1995; Helms, 1995; Helms & Richardson, 1997; Sue, 2001, p. 791).

Survey Blueprint

Cultural competence. Cultural competence can be defined as the ability of professionals to function successfully with people from different cultural backgrounds, including, but not limited to, race, ethnicity, culture, class, gender, sexual orientation, religion, physical or mental ability, age, and national origin (Kohli et al., 2009, p. 8; see also Appleby, Colon, & Hamilton, 2001).

The survey measures the cultural competence construct with a total of 24 closed-ended questions. Most questions had a five-point Likert-type scale with options ranging from “very knowledgeable” to “not aware” or “strongly agree” to “strongly disagree”. Five-point scales have been shown to maximize reliable variance in responses (Andres, 2012). An outline of the questionnaire concepts, definitions, and number of items for the psychological dimension is presented in Table 1. Table 2 presents the dimension derived from social work concepts as they intersect with the psychological dimension. Table 3 shows the overlap of items from the psychological dimension with the dimension related to specific subgroups.
Table 1

*Conceptual Framework for Cultural Competence (Psychological Framework)*

<table>
<thead>
<tr>
<th>Topic</th>
<th>Conceptual Definition</th>
<th>Operational Definition</th>
<th>No. Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Knowledge</td>
<td>Cultural knowledge is defined as the specific information (facts, theories, and principles) learned about human diversity/social justice/marginalized populations for a professional to be culturally effective (pedagogic proficiencies) (Kohli et al., 2009)</td>
<td>Cultural knowledge of norms, practices, and conventions in different cultural settings (Van Dyne, Ang &amp; Koh, 2007). It also includes the ability to actively try to understand worldview of others who are culturally different (Kohli et al., 2009)</td>
<td>6</td>
</tr>
<tr>
<td>Cultural Attitudes &amp; Beliefs</td>
<td>Awareness and values (Sue et al., 1996).</td>
<td>The attitudes and beliefs component of cultural competence measures whether individuals are actively engaged in the process of gaining awareness regarding their own assumptions about different human behaviors, values, attitudes, biases, and preconceived notions (Kohli et al., 2009, p. 11)</td>
<td>6</td>
</tr>
<tr>
<td>Cultural Skills</td>
<td>The development of strategies that facilitate positive communication which strengthens relationships and help overcome cross-cultural barriers (Kohli et al., 2009)</td>
<td>Alertness of person’s own communication styles and barriers (Kohli et al., 2009)</td>
<td>6</td>
</tr>
<tr>
<td>Cultural Motivation</td>
<td>The individual’s capability to direct attention and energy toward cultural differences (Van Dyne, Ang &amp; Koh, 2007, p. 17)</td>
<td>Self-efficacy and intrinsic motivation in cross-cultural situations, sense of confidence and interest in novel settings</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>
Table 2

*Conceptual Framework for Cultural Competence (Intersection of Psychological and Social Work Frameworks)*

<table>
<thead>
<tr>
<th>Topic</th>
<th>Ethno Cultural Diversity (value and recognize worldview differences)</th>
<th>Oppression (fight oppression)</th>
<th>Vulnerable Life Situations (enable people in vulnerable life situations to maximize their potential)</th>
<th>Total # of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Attitudes &amp; Beliefs</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Skills</td>
<td>2</td>
<td>–</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Motivation</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>7</td>
<td>10</td>
<td>24</td>
</tr>
</tbody>
</table>
Table 3

*Distribution of Questionnaire Items per Variable*

<table>
<thead>
<tr>
<th>Topic</th>
<th>Race</th>
<th>Ethnicity/Culture</th>
<th>SES</th>
<th>Gender</th>
<th>Sexual Orientation</th>
<th>Religion</th>
<th>Disability</th>
<th>National Origin</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>ck1-ck3-ck4-ck5</td>
<td></td>
<td></td>
<td></td>
<td>ck1-ck4-ck5</td>
<td>ck1-ck4-ck5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes &amp; Beliefs</td>
<td>cb1-cb2</td>
<td>cb1-cb2-cb4</td>
<td>cb2-cb3</td>
<td>cb2-cb5</td>
<td>cb1-cb2</td>
<td>cb2-cb6</td>
<td>cb1-cb2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills</td>
<td>cs1-cs2-cs3-cs4-cs5</td>
<td>cs1-cs2-cs3-cs4-cs5</td>
<td></td>
<td></td>
<td>cs1-cs2-cs3-cs4-cs5</td>
<td>cs1-cs2-cs3-cs4-cs5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>cm1-cm2-cm5-cm6</td>
<td>cm1-cm2-cm6</td>
<td>cm1-cm4-cm6</td>
<td>cm1-cm3-cm6</td>
<td>cm1-cm6</td>
<td>cm1-cm2-cm6</td>
<td>cm1-cm6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

Note. ck = cultural knowledge; cb = cultural attitudes and beliefs; cs = cultural skills; cm = cultural motivation

**Validity**

Measures in education and psychology are often challenged by the need to measure unobservable constructs. Anders (2012) captured this fundamental issue: “because constructs
per se are abstract and not directly measurable, concrete measures must be developed that can be used to collect information on a survey instrument” (p. 117). As a result, researchers must rely on triangulating evidence to show that our measure reflects the intended construct. To establish evidence of validity of the CCEL for use in educational leadership programs, I focused on amassing evidence of construct and content validity (Messick, 1994).

**Instrument construct validity.** The construct validity argument (the overarching form of evidence in Messick’s [1994] framework) consists of evidence that the measure aligns with existing theory in the field. Accordingly, to insure that the instrument really measured what it was intend to measure, the questionnaire was built based on theories supported by the literature review (see conceptual framework), and operational (measurable) definitions were developed for each sub-construct of cultural competence. Sub-constructs of cultural competence were developed since “multiple measures of one construct are desirable and more than one construct with its related measures may be required to capture a multifaceted overarching construct” (Anders, 2012, p. 117).

**Instrument content validity.** Content validity evidence is primarily focused on ensuring adequate sampling of the intended construct or domain and seeking evidence that other constructs do not contaminate the measure. To ensure that it covered the content full domain (construct representation), a blueprint was developed for the survey (see Figure 1 and Tables 1, 2 and 3) to represent the distribution of questionnaire items per construct and align item development with the study’s conceptual framework of cultural competence.

Additional evidence of construct representation and lack of construct irrelevant variance (Haladyna & Downing, 2004) was also needed. Therefore, the validity of item content was established using four strategies. First, think-aloud sessions with one faculty member and two
educators who also represented the target sample population (graduate-level principal preparation programs) were conducted. During these think-aloud sessions, questions which sounded vague, phrases which were not politically correct and questions with clear biases (which might elicit social desirability effects) were identified. Following revisions made as a result of the think-aloud sessions, the questionnaire was sent electronically to four faculty members outside of the authors’ university who are well versed in cultural competence and educational leadership issues and received feedback from them on the representation of the questionnaire. Their feedback provided additional sources of modifications and confirmation that the measure did indeed seem to measure cultural competence in an appropriate way for educational leadership programs. Finally, the link to the electronic questionnaire was sent to the graduating master’s cohort in the researcher’s department as a pilot test. Four cohort members responded to the survey.

From the many sources of feedback, ten items were deleted and four questions were modified. Some editing occurred to the questionnaire and unnecessary phrases like “I believe…” were removed and preferred terminology used throughout. To further discourage response bias due to social desirability, the words “generally” and “usually” were added to some items to make it more acceptable to say a negative opinion, and to conceal the researcher’s own bias towards cultural acceptance and inclusion. An open-ended question was added related to meaningful situations or experiences within preparation programs which positively influenced cultural competence.

**Reliability**

“Reliability refers to the extent to which the findings of a study can be replicated” (Anders, 2012, p. 122). I will verify the reliability of the questionnaire by calculating Cronbach’s alpha for the entire sample, “Cronbach’s alpha determines the internal consistency or
average correlation of items in a survey instrument to gauge its reliability” (Santos, 1999, para.1).

**Data Collection Procedures**

Initially the survey was administered electronically. Qualtrics was the program used to develop and distribute the questionnaire. Using online surveys will best suit the purpose of the study as I am seeking responses from students of eighty-seven masters programs geographically distributed all over the United States. I will seek the assistance of programs’ coordinators in the distribution of the survey instrument. These reasons made electronic distribution more time efficient and financially sound. Also, electronic distribution offers participants the freedom to take the survey at their convenience which adds flexibility. Andres (2012) stated that “Online surveys are inexpensive to administer and, because they do not require the use of paper, they are environmentally sound. It is possible to collect data quickly and follow-up of non-respondents can be done easily over mail” (p. 50). Finally, the rationale for using online surveys can be connected to new research which suggested that there was no significant difference in response rates between mailed surveys and online surveys (Ammentorp, Rasmussen, Nørgaard, Kirketerp, & Kofoed, 2007; Dillman, 1991; Shannon & Bradshaw, 2002). However, responses to the electronic survey were lower than required, so an adjustment was made to the initial IRB and permission was granted to send hard copies of the survey to program coordinators through mail. Packages with survey letters of information, instructions for the administration of the survey and self-addressed envelopes were sent to program coordinators.

To maximize the number of replies a letter was drafted to convince participants of the importance of the study. I contacted program coordinators at the eighty-seven UCEA member institutions invited to participate in the study and asked them to distribute the survey link to their
graduate students. During the 2013 American Educational Research Association (AERA) annual meeting I was able to network with program coordinators and discuss the study with them. They were advised that the questionnaire, titled Cultural Competence of Educational Leaders (CCEL), would arrive to them via e-mail during the second week of May, 2013 (see Appendix A). This step could increase the response rate since researchers like Mehta and Sivadas (1995) suggested that pre-notification is essential for e-mail surveys. The cover letters (see Appendix B), with links to the survey, were e-mailed on May 14, 2013, and then sent the first reminder was sent one week later on May 21st, 2013. The second reminder was sent on June 4th, 2013, because research suggests that multiple reminders seemed to yield higher response rates (Heberlein & Baumgartner, 1978). After the amendments were made to the IRB and permission was granted to send hard copies of the questionnaire to program coordinators, e-mails were sent asking for phone conferences during which the study was further explained and more program coordinators agreed to invite students in their programs to participate.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) program will be used to analyze data and address the guiding questions of the study.
### Table 4

**Summary of Proposed Data Analysis Methods**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Unit of Analysis</th>
<th>Dependent Variable(s)</th>
<th>Independent Variable</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the psychometric properties of the Cultural Competence for Educational Leaders [CCEL] instrument?</td>
<td>Cohort</td>
<td>DV1: Cultural Knowledge (CK)</td>
<td>IV: Cohort membership (starting/graduating)</td>
<td>MANOVA</td>
</tr>
<tr>
<td>Using the CCEL to measure cultural competence, is there a difference in (1) cultural knowledge (2) cultural attitudes and beliefs (3) cultural skills (4) and cultural motivation between students beginning an educational leadership Master’s program and students graduating?</td>
<td>Cohort</td>
<td>DV1: Cultural Knowledge (CK)</td>
<td>IV: Cohort membership (starting/graduating)</td>
<td>MANOVA</td>
</tr>
<tr>
<td>Do certain personal attributes and experiences have an effect on cultural competence of students in educational leadership preparation programs?</td>
<td>Individual</td>
<td>DV: Cultural Competence</td>
<td>IV1: Gender Male/Female</td>
<td>One way ANOVAs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IV2: Race, Categorical</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IV3: Age, Categorical</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IV4: Membership marginalized group (Yes/No)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IV5: Years of Experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IV6: Traveling abroad (Yes/No)</td>
<td></td>
</tr>
</tbody>
</table>
Research Question 1

Research Question 1 asked, “What are the psychometric properties of the cultural competence for educational leaders [CCEL] instrument?” To identify factors of the CCEL survey instrument I conducted an exploratory factor analysis to find out which items highly correlate indicating measuring the same factor.

Research Question 2

Research Question 2: “By using the CCEL to measure cultural competence, is there a difference in (1) cultural knowledge, (2) cultural attitudes and beliefs, (3) cultural skills, (4) and cultural motivation between students beginning an educational leadership master’s program and students graduating?” To assume similarity between the two cohorts, a chi-square analysis was conducted to examine whether there was statistical significance difference between the starting cohort and the graduation cohort in regard to gender, race, age, perception of belonging to a historically marginalized group, years of experience and travel abroad. A multivariate analysis of variance (MANOVA) was then conducted which is designed to test the significance of group differences (Mertler & Vannatta, 2010, p. 117) and could be used to answer questions pertaining to “(a) determining outcome variable subsets that account for group separation; (b) determining the relative contribution to group separation of the outcome variables in the final subset; and (c) identifying underlying constructs associated with the obtained MANOVA results” (Huberty & Morris, 1989, p. 304). MANOVA was also chosen because the outcome variables (DV) were not conceptually independent (Huberty & Morris, 1989).

Research Question 3

Research Question 3 wanted to know, “Do certain personal attributes and experiences have an effect on cultural competence of students in educational leadership preparation
programs?” To determine whether statistically significant differences to cultural competence as measured by the CCEL existed in correlation to the six independent variables (IV1: Gender, IV2: Race, IV3: Age, IV4: Membership in Historically Marginalized Group, IV5: Years of Experience, and IV6: Traveling abroad) I conducted multiple one-way ANOVAs. To adjust for type one error I used a simple Bonferroni correction, testing each ANOVA at the $\alpha/p$ per ANOVA (where $p$ is the number of tests (Huberty & Morris, 1989).

**Limitations**

A major limitation of this study was using a cross-sectional design verses a longitudinal design, which raises questions about the comparability of the two cohorts participating in the study. Also, concerns about dropout rates were associated with the cross-sectional design. Another limitation of this study was the use of purposeful sampling; by choosing UCEA member programs only, the study overlooked other programs which do graduate many school leaders into the US K–12 educational system. A limitation of survey research in general and accordingly of this study was the concern that participants might choose socially desirable responses (van de Mortel, 2008).

**Summary**

Since culturally competent educational leaders are able to serve the rapidly increasing culturally diverse student population and support learning and achievement of all students which is a crucial task in today’s rapidly changing educational arena. The purpose of this study was to explore what makes educational leaders culturally competent [personal attributes, life experiences and preparation]. And to look into the extent to which educational leaders’ preparation programs positively affect their graduates’ cultural competence. By using quantitative research and a researcher-developed questionnaire, this study investigated personal
and experiential factors influencing educational leaders’ cultural competence as well as the effect of going through master’s degree preparation programs. A questionnaire called the Cultural Competence of Educational Leaders (CCEL) was designed to collect demographic and programmatic data as well as data about (1) cultural knowledge, (2) cultural attitudes and beliefs, (3) cultural skills, and (4) cultural motivation. The content validity of the instrument was established through conducting think-aloud sessions, expert panel review, and pilot study with individuals similar to the target population. The survey was sent electronically to program coordinators who forwarded it to master’s program students. Participants completed the surveys electronically and in hard copies, and the data was analyzed using SPSS to answer the study’s guiding questions.
CHAPTER FOUR. RESULTS

This chapter presents the findings of the research undertaken to explore cultural competence of students in master’s degree educational leadership preparation programs in colleges which are members of the University Council for Educational Administration (UCEA). The first step in the research process was the development of the questionnaire, Cultural Competence of Educational Leaders (CCEL). The CCEL was then used to examine the conceptual framework (Figure 1) from which the research questions were derived.

This chapter begins by describing participating programs and the demographic data of the participants. It then describes the process used to develop the CCEL. The chapter then reports on the findings related to the research questions addressed:

1. What are the psychometric properties of the Cultural Competence for Educational Leaders [CCEL] instrument?

2. Using the CCEL to measure cultural competence, is there a difference in (1) cultural knowledge, (2) cultural attitudes and beliefs, (3) cultural skills, and (4) cultural motivation between students beginning an educational leadership master’s program and students graduating?

3. Do certain personal attributes and experiences have an effect on cultural competence of students in educational leadership preparation programs?”
Descriptive Data

Participating Programs

There are 87 educational leadership programs in the US which are UCEA members. Seventy-seven (77) of these programs offer principal certification master’s degrees. Letters of invitation to participate in the study were sent to the coordinators of the 77 programs asking them to forward the invitation to students in their respective master’s principal preparation program. Twenty-seven (27) program coordinators initially responded to the invitation and confirmed programs’ descriptive information found on their respective web pages. However, students from only 16 programs participated in the study. The percentage of program participation was 21%. The respondent master’s principal preparation programs which participated in this study represented 16 institutions which are members in UCEA. The participating programs encompass different elements which could be found in the overall population of UCEA member institutions, elements such as the cohort model, online and hybrid courses, and internship or field-based experiences.
### Table 5

**Description of Participating Programs**

(Institution Location: state where participating program is located)

<table>
<thead>
<tr>
<th>Institution Location</th>
<th>Length and dates</th>
<th>Method of Delivery</th>
<th>Model (Cohort/Non-cohort)</th>
<th>Internship</th>
<th>Course on Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alabama</td>
<td>33 Credit hours</td>
<td>Face to face</td>
<td>Cohort model</td>
<td>30 days</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Start – End</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summer-Summer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Ohio</td>
<td>33 Credit hours</td>
<td>Online–Hybrid</td>
<td>Cohort model</td>
<td>225 hours</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Start – End</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall-Summer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Virginia</td>
<td>36 Credit hours</td>
<td>Face to face</td>
<td>Cohort model</td>
<td>180 hours</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Start – End</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall-Summer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Florida</td>
<td>36 Credit hours</td>
<td>Fully online</td>
<td>Cohort model</td>
<td>Internship is built into classes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Start – End</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall-Spring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Ohio</td>
<td>33 Credit hours</td>
<td>Face-to-face</td>
<td>No Cohort</td>
<td>150 hours field and 45 contact</td>
<td>Yes, diversity embedded in courses</td>
</tr>
<tr>
<td></td>
<td>Start: Fall</td>
<td>Online–Hybrid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Combination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. North Carolina</td>
<td>42 Credit hours</td>
<td>Face to face</td>
<td>Cohort model</td>
<td>18 Credit hours</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Fall-Spring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. New York</td>
<td>30 Credit hours</td>
<td>Face-to-face</td>
<td>Cohort model</td>
<td>540 hours</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Start – End</td>
<td>Online – Hybrid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall-Spring</td>
<td>Combination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring-Summer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Alabama</td>
<td>30 Credit hours</td>
<td>Face-to-face</td>
<td>Cohort model</td>
<td>3 semester hour credit +</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Start – End</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fall – Fall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4-Semesters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution Location</td>
<td>Length and dates</td>
<td>Method of Delivery</td>
<td>Model (Cohort/Non-cohort)</td>
<td>Internship</td>
<td>Course on Diversity</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
<td>------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>9. Arkansas</td>
<td>33 Credit hours</td>
<td>Combination face-to-face and online</td>
<td>No Cohort</td>
<td>216 hours for 17 required activities</td>
<td>No</td>
</tr>
<tr>
<td>10. Illinois</td>
<td>40 Credit hours (10 courses)</td>
<td>Face-to-face Online – Hybrid Combination</td>
<td>Cohort model</td>
<td>200 hours over 12 month</td>
<td>No</td>
</tr>
<tr>
<td>11. Kansas</td>
<td>36 Credit hours</td>
<td>Combination face-to-face and online</td>
<td>Cohort model</td>
<td>240 hours</td>
<td>Yes</td>
</tr>
<tr>
<td>12. Massachusetts</td>
<td>36 Credit hours</td>
<td>Face-to-face</td>
<td>Cohort model</td>
<td>500 hours</td>
<td>Yes</td>
</tr>
<tr>
<td>13. North Carolina</td>
<td>33 Credit hours</td>
<td>Face-to-face</td>
<td>Cohort model</td>
<td>6–12 Credit hours</td>
<td>Yes</td>
</tr>
<tr>
<td>14. Texas</td>
<td>39 Credit hours</td>
<td>Face-to-face</td>
<td>Cohort model</td>
<td>220 hours</td>
<td>Yes</td>
</tr>
<tr>
<td>15. Wisconsin</td>
<td>33 Credit hours</td>
<td>Face-to-face</td>
<td>Cohort model</td>
<td>3–6 Credit hours</td>
<td>Yes</td>
</tr>
<tr>
<td>16. Virginia</td>
<td>33 Credit hours</td>
<td>Combination face-to-face and online</td>
<td>Cohort model</td>
<td>5–7 Credit hours</td>
<td>Yes</td>
</tr>
</tbody>
</table>
The programs vary in length and requirements between 30 and 42 credit hours, as well as starting and ending dates. The method of delivery in some of the programs was strictly face-to-face, in one program it was fully online, while the majority of programs used a combination of both face-to-face and online format. Some programs utilized the cohort model while others did not. All programs had an internship element; however the length and context of the internship varied. Some programs required their students to register for a special course on diversity, while other programs did not. The content of the courses on diversity was also different. The 16 programs were located in 12 different states (see Figure 3).

![Map of the USA with red stars indicating the presence of participating programs in each state]

*The red star represents the presence of one or two participating programs in a state

*Figure 3. Distribution of the Participating Programs over the USA*
The 16 participating programs were from institutions located in US regions with high membership representation in the UCEA. Eight of the participating programs were from the Southern region of the US, six were from the Midwest and two programs were from the Northeast (see Figure 3). The most participation came from the Southern region which was also the region with the most institutional membership in UCEA. None of the programs in the Western region of the US agreed to participate in the study. The West was the region with the least institutional membership in the UCEA. The 16 programs varied in length, requirements, methods of delivery and the utilization of the cohort model or the lack there of. All programs had an internship or field-based experience; however, these experiences varied in length and context.
Demographic Profile of the Participants

**Gender.** All participants ($n = 251$) were invited to complete the CCEL questionnaire. Out of the 251 participants, 152 (60.6%) were female and 86 (36.1%) were male. The ratio of female participants to male participants was higher in this sample than in the general population, which is consistent with demographic trends in the field of education (Ross, 2008; Sleeter, 2001).

Table 6

*Gender of Participants*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>152</td>
<td>60.6%</td>
</tr>
<tr>
<td>Male</td>
<td>86</td>
<td>36.1%</td>
</tr>
<tr>
<td>Not Reported</td>
<td>13</td>
<td>5.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>251</strong></td>
<td></td>
</tr>
</tbody>
</table>

Percentage of female participants in starting cohort was 62.6% and percentage of female participants in graduating cohort was 66.3%. Percentage of male participants in starting cohort was 37.4% and percentage of male participants in graduating cohort was 33.7%. The female to male ratio in both cohorts is quite similar (see Table 7).
Table 7

Gender of Participants: Beginning and Ending Cohorts

<table>
<thead>
<tr>
<th></th>
<th>Starting Cohort</th>
<th>Graduating Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Count</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>% within Group</td>
<td>62.6%</td>
</tr>
<tr>
<td>Male</td>
<td>Count</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>% within Group</td>
<td>37.4%</td>
</tr>
</tbody>
</table>

Race. The majority of participants, 176 (70.7%) self-identified as White, 36 (14.3%) self-identified as African American, and ten (4%) self-identified as Hispanic (see Table 8). The demographic profiles, based on race, for the beginning and the graduating cohorts were similar (see Table 6).
<table>
<thead>
<tr>
<th>Race of Participants</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>36</td>
<td>14.3%</td>
</tr>
<tr>
<td>American Indian / Pacific Islander</td>
<td>2</td>
<td>.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>1.6%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10</td>
<td>4.0%</td>
</tr>
<tr>
<td>White</td>
<td>176</td>
<td>70.7%</td>
</tr>
<tr>
<td>Biracial</td>
<td>6</td>
<td>2.4%</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>2.0%</td>
</tr>
<tr>
<td>Not reported</td>
<td>11</td>
<td>4.4%</td>
</tr>
<tr>
<td>Total</td>
<td>251</td>
<td></td>
</tr>
</tbody>
</table>
Table 9

*Race of Participants: Beginning and Ending Cohorts*

<table>
<thead>
<tr>
<th>Race of Participants</th>
<th>Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Starting Cohort</td>
<td>Graduating Cohort</td>
</tr>
<tr>
<td><strong>African American</strong></td>
<td>Count</td>
<td>20</td>
</tr>
<tr>
<td>% within Group</td>
<td>13.7%</td>
<td>14.6%</td>
</tr>
<tr>
<td><strong>American Indian / Pacific Islander</strong></td>
<td>Count</td>
<td>1</td>
</tr>
<tr>
<td>% within Group</td>
<td>0.7%</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>Asian</strong></td>
<td>Count</td>
<td>3</td>
</tr>
<tr>
<td>% within Group</td>
<td>2.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>Hispanic</strong></td>
<td>Count</td>
<td>6</td>
</tr>
<tr>
<td>% within Group</td>
<td>4.1%</td>
<td>3.9%</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>Count</td>
<td>103</td>
</tr>
<tr>
<td>% within Group</td>
<td>70.5%</td>
<td>70.9%</td>
</tr>
<tr>
<td><strong>Biracial</strong></td>
<td>Count</td>
<td>3</td>
</tr>
<tr>
<td>% within Group</td>
<td>2.1%</td>
<td>2.9%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Count</td>
<td>3</td>
</tr>
<tr>
<td>% within Group</td>
<td>2.1%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>
Age. The demographic data showed that 91 participants (38.6%) were between the ages of 21 and 30. One hundred and two participants (102, 43.2%) were between the ages of 31 and 40 while 32 participants (13.6%) were between the ages 41 and 50, and 10 (4.2%) were between the ages 51 and 60. Only one participant (.4%) reported she or he was 61 or older.

Table 10

*Age of Participants*

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>21–30</td>
<td>91</td>
<td>38.6%</td>
</tr>
<tr>
<td>31–40</td>
<td>102</td>
<td>43.2%</td>
</tr>
<tr>
<td>41–50</td>
<td>32</td>
<td>13.6%</td>
</tr>
<tr>
<td>51–60</td>
<td>10</td>
<td>4.2%</td>
</tr>
<tr>
<td>61+</td>
<td>1</td>
<td>.4%</td>
</tr>
<tr>
<td>Total</td>
<td>236</td>
<td></td>
</tr>
<tr>
<td>Not reported</td>
<td>15</td>
<td>5.9%</td>
</tr>
<tr>
<td>Total</td>
<td>251</td>
<td></td>
</tr>
</tbody>
</table>
Table 11

Age of Participants: Beginning and Ending Cohorts

<table>
<thead>
<tr>
<th>Age</th>
<th>Count Starting Cohort</th>
<th>Count Graduating Cohort</th>
<th>Total</th>
<th>% within Group Starting Cohort</th>
<th>% within Group Graduating Cohort</th>
<th>% within Group Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>21–30</td>
<td>59</td>
<td>32</td>
<td>91</td>
<td>43.1%</td>
<td>32.7%</td>
<td>38.7%</td>
</tr>
<tr>
<td>31–40</td>
<td>59</td>
<td>42</td>
<td>101</td>
<td>43.1%</td>
<td>42.9%</td>
<td>43.0%</td>
</tr>
<tr>
<td>41–50</td>
<td>15</td>
<td>17</td>
<td>32</td>
<td>10.9%</td>
<td>17.3%</td>
<td>13.6%</td>
</tr>
<tr>
<td>51–60</td>
<td>3</td>
<td>7</td>
<td>10</td>
<td>2.2%</td>
<td>7.1%</td>
<td>4.3%</td>
</tr>
<tr>
<td>61+</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0.7%</td>
<td>0.0%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>
Figure 5. Age Categories: Beginning and Ending Cohorts

**Age categories.** The demographic profile of the starting cohort showed that it was a younger cohort where 43% of its members were between the age of 21 and 30 and 86% were 40 years old or younger. While in the graduating cohort, only 32.7% of its members were between the age of 21 and 30 and 74% were 40 years old or younger.

**Years of experience.** The demographic data showed that 60 participants (25.4%) had between 1 and 5 years of experience, 95 participants (40.3%) had between 6 and 10 years of experience, 50 participants (21.2%) had between 11 and 15 years of experience while 20 participants (8.5%) had between 16 and 20 years of experience, and eight participant (3.4%) had
between 20 and 25 years of experience. Only three participants (1.3%) reported that they had more than 25 years of experience.

Table 12

*Years of Experience*

<table>
<thead>
<tr>
<th>Years of Experience Categories</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–5</td>
<td>60</td>
<td>23.9%</td>
</tr>
<tr>
<td>6–10</td>
<td>95</td>
<td>37.8%</td>
</tr>
<tr>
<td>11–15</td>
<td>50</td>
<td>19.9%</td>
</tr>
<tr>
<td>16–20</td>
<td>20</td>
<td>7.9%</td>
</tr>
<tr>
<td>20–25</td>
<td>8</td>
<td>3.2%</td>
</tr>
<tr>
<td>26+</td>
<td>3</td>
<td>1.2%</td>
</tr>
<tr>
<td>Not reported</td>
<td>15</td>
<td>5.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>251</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Table 13

**Years of Experience: Beginning and Ending Cohorts**

<table>
<thead>
<tr>
<th>Experience</th>
<th>Count</th>
<th>Starting Cohort</th>
<th>Graduating Cohort</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–5</td>
<td>40</td>
<td>19</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>% within Group</td>
<td>29.2%</td>
<td>19.4%</td>
<td>25.1%</td>
<td></td>
</tr>
<tr>
<td>6–10</td>
<td>57</td>
<td>38</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>% within Group</td>
<td>41.6%</td>
<td>38.8%</td>
<td>40.4%</td>
<td></td>
</tr>
<tr>
<td>11–15</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>% within Group</td>
<td>18.2%</td>
<td>25.5%</td>
<td>21.3%</td>
<td></td>
</tr>
<tr>
<td>16–20</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>% within Group</td>
<td>7.3%</td>
<td>10.2%</td>
<td>8.5%</td>
<td></td>
</tr>
<tr>
<td>20–25</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>% within Group</td>
<td>2.2%</td>
<td>5.1%</td>
<td>3.4%</td>
<td></td>
</tr>
<tr>
<td>26+</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>% within Group</td>
<td>1.5%</td>
<td>1.0%</td>
<td>1.3%</td>
<td></td>
</tr>
</tbody>
</table>

The demographic profile showed that members of both cohorts had experience, where 70% of members of the starting cohort had more than 5 years of experience while 80% of the graduating cohort members had more than 5 years’ experience. Approximately 40% of both cohort members had between 6 and 10 years of experience. Twenty-five percent (25%) of the members of the graduating cohort had between 11 and 15 years of experience versus 20% of the
members of the starting cohort. In average the graduating cohort members had more years of experience than the starting cohort which is in accordance with the age demographic data.

Figure 6. Experience Categories: Beginning and Ending Cohorts

**Perception of belonging to a marginalized group.** The demographic data showed that 77 participants (30.8%) have self-identified as belonging to a historically marginalized group.
Table 14

Percentage of Belonging to Marginalized Group

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not marginalized</td>
<td>173</td>
<td>69.2%</td>
</tr>
<tr>
<td>Yes marginalized</td>
<td>77</td>
<td>30.8%</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 15

Percentage of Belonging to Marginalized Group: Beginning and Ending Cohorts

<table>
<thead>
<tr>
<th></th>
<th>Starting Cohort</th>
<th>Graduating Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>Not marginalized</td>
<td>105</td>
<td>68</td>
</tr>
<tr>
<td>Marginalized</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>71.9%</td>
<td>66.0%</td>
</tr>
<tr>
<td>Yes marginalized</td>
<td>41</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>% within Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28.1%</td>
<td>34.0%</td>
</tr>
</tbody>
</table>

The demographic data showed that in both cohorts approximately 30% of the participants have self-identified as belonging to one or more historically marginalized groups. In the graduating cohort the percentage of students who self-identified as belonging to a marginalized group was higher than the starting cohort.
Table 16

*Reason for Belonging to Marginalized Group*

<table>
<thead>
<tr>
<th>Reason for Marginalization</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>9</td>
<td>3.6%</td>
</tr>
<tr>
<td>Disability</td>
<td>3</td>
<td>1.2%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>34</td>
<td>13.7%</td>
</tr>
<tr>
<td>Gender</td>
<td>39</td>
<td>15.7%</td>
</tr>
<tr>
<td>National Origin</td>
<td>4</td>
<td>1.6%</td>
</tr>
<tr>
<td>Race</td>
<td>40</td>
<td>16.2%</td>
</tr>
<tr>
<td>Religion</td>
<td>15</td>
<td>6%</td>
</tr>
<tr>
<td>SES</td>
<td>21</td>
<td>8.5%</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td>2</td>
<td>0.8%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

The demographic data showed that nine (3.6%) participants felt that they were marginalized because of age and only three (1.2%) chose disability as the reason for their marginalization. Thirty-four participants (13.7%) felt that they were marginalized because of ethnicity while 39 (15.7%) thought that they were marginalized because of gender. Four participants (1.6%) felt that they were marginalized because of their national origin while 40 (16.2%) of the participants felt that they were marginalized because of race. Fifteen (6%) of the participants felt that they were marginalized because of religion and 21 (8.5%) felt that they were marginalized because of their socioeconomic status. Only two (0.8%) participants chose sexual
orientation as the reason for their marginalization while four (1.6%) felt marginalized because of reasons other than the ones listed.

**Travel abroad.** The descriptive data showed that 154 participants (61.6%) have traveled abroad, while 95 (38.4%) have not travelled abroad.

Table 17

*Travel Abroad*

<table>
<thead>
<tr>
<th>Travel Abroad</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Travel Abroad</td>
<td>96</td>
<td>38.4%</td>
</tr>
<tr>
<td>Travel Abroad</td>
<td>154</td>
<td>61.6%</td>
</tr>
<tr>
<td>Not Reported</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>251</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 18

*Percentage of Travel Abroad: Beginning and Ending Cohorts*

<table>
<thead>
<tr>
<th>Group</th>
<th>Starting Cohort</th>
<th>Graduating Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Travel Abroad</strong></td>
<td>61</td>
<td>35</td>
</tr>
<tr>
<td>% within Group</td>
<td>41.8%</td>
<td>34.0%</td>
</tr>
<tr>
<td><strong>Travel Abroad</strong></td>
<td>85</td>
<td>68</td>
</tr>
<tr>
<td>% within Group</td>
<td>58.2%</td>
<td>66.0%</td>
</tr>
</tbody>
</table>

After looking at the descriptive data of the starting and graduating cohorts, the demographic profile of the two cohorts seemed similar in regards to gender, race, age, years of
experience, perception of marginalization and travel abroad experience. To further examine whether a statistically significant difference between the two cohorts in regards to the above mentioned variables exists, a chi-square statistical analysis was conducted. Results of the chi-square statistical analysis, presented in Table 19, showed that no statistically significant difference exists between the two cohorts. Therefore it is reasonable to assume similarity between the starting and graduating cohorts.

Table 19

Statistical Difference between Starting and Graduating Cohorts

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chi-square (X&lt;sup&gt;2&lt;/sup&gt;)</th>
<th>Degrees of freedom (df)</th>
<th>Sig. (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.350</td>
<td>1</td>
<td>0.554</td>
</tr>
<tr>
<td>Race</td>
<td>0.004</td>
<td>1</td>
<td>0.533</td>
</tr>
<tr>
<td>Age</td>
<td>7.663</td>
<td>4</td>
<td>0.105</td>
</tr>
<tr>
<td>Years of experience</td>
<td>5.809</td>
<td>5</td>
<td>0.325</td>
</tr>
<tr>
<td>Marginalization</td>
<td>0.986</td>
<td>1</td>
<td>0.321</td>
</tr>
<tr>
<td>Travel abroad</td>
<td>1.560</td>
<td>1</td>
<td>0.212</td>
</tr>
</tbody>
</table>

The demographic profile of the participants was in the expected directions as reflected in the literature, the percentage of female participants was higher than that of male participants. The percentage of racial minorities was approximately 30% which reflected the existing cultural mismatch between students and educators. The majority of participants were 40 years old or younger with more than five years of experience. Thirty percent of the participants self-identified as belonging to historically marginalized groups, reasons for marginalization were
various. Most of the participants had some travel abroad experience. The interpretation and implications of the demographic profile of participants will be further discussed in Chapter Five.

Results

Research Question 1

To answer the first research question, “What are the psychometric properties of the Cultural Competence for Educational Leaders [CCEL] instrument?”, Exploratory Factor Analysis (EFA) was conducted. EFA examines how many factors emerge among the items on an instrument (Pedhazur & Schmelkin, 1991) and reduces a large number of variables into a smaller set of factors (Williams, Brown & Onsman, 2012). Factor analysis was chosen because it is commonly used in the field of education and is especially used for interpreting self-reporting questionnaires. Factor analysis “establishes underlying dimensions between measured variables and latent constructs, thereby allowing the formation and refinement of theory” (Williams, Brown & Onsman, 2012, p. 2).

Items of the Cultural Competence for Educational Leaders (CCEL) questionnaire were based on four sub-constructs of cultural competence (cultural knowledge, cultural beliefs and attitudes, cultural motivation and cultural skills) which were identified in the research literature. As explained by Van Dyne and Ang (2009), the psychological dimensions of cultural competence cultural: knowledge is the foundation of decision making and performance in cross-cultural situations, cultural beliefs and attitudes encourages critical thinking and challenges assumptions about other cultures, and cultural motivation leads to the devotion of energy and attention towards issues of cultural differences. Cultural skills and the ability to communicating with people from different cultures is the fourth dimension of cultural competence (Kohli et al., 2010).
Scores on items within each of the four sub-constructs of cultural competence was expected to be strongly and positively correlated with one another. To determine whether or not the questionnaire items would load on the four sub constructs as expected, an EFA was conducted. To determine sample adequacy and propriety for conducting EFA the Kaiser-Meyer-Olkin measure of sampling adequacy was used. Kaiser-Meyer-Olkin statistic varies between 0-1 where a value close to one indicates that “the patterns of correlations are relatively compact and so factor analysis is appropriate” (Field, 2005, p. 6). Values of Kaiser-Meyer-Olkin statistic between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb (Hutcheson, & Sofroniou, 1999). Bartlett’s test of sphericity was used to test “the null hypothesis that the original correlation matrix is an identity matrix” (Field, 2005, p, 6).

The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.832, indicating high correlations between pairs of variables and appropriateness of data for factor analysis, and Bartlett’s test of sphericity was statistically significant, indicating that the correlation matrix was not an identity matrix, \( \chi^2(253) = 1561.778, \ p < 0.001 \), and that the sample and correlation matrix were suitable for factor analysis. Exploratory factor analysis procedures using maximum likelihood estimator of EFA were used on the data set (n = 252). Orthogonal varimax rotation was chosen because factors were not expected to correlate (Costello & Osborne, 2005). As stated earlier, theory found in the literature review guided the determination of the number of factors to be retained, four factors solution was chosen.

**Four factor solution results.** Exploratory factor analysis was conducted to determine what, if any, underlying structure exists for measures on the twenty three variables of the CCEL questionnaire. Criteria used to determine the appropriate number of components to retain was
theory found in the literature. Thus, exploratory factor analysis was conducted to retain four factors and apply the varimax rotation. After rotation, the first factor accounted for 16.6% of the total variance, the second factor accounted for 10.0%, the third factor accounted for 6.9% and the fourth factor accounted for 4.9% of the variance. The total variance of the four factors together was 38.5%.

Based on the item loading on the first factor, factor 1 was determined to represent *Cultural Beliefs and Motivation*, item loading for factor 1 ranged between 0.315 and 0.780 with a mean of 0.54, which were considered strong item loadings. Factor 2 was determined to represent *Cultural Skills*, item loading for factor 2 ranged between 0.415 and 0.884 with a mean of 0.586 also considered strong item loadings. Five items loaded to factor 3 and it was determined to represent *Cultural Knowledge*. Item loading for factor 3 ranged between 0.23 and 0.578 with a mean of 0.413. Only one item loaded to the last factor (factor 4) so examining a three factor solution was considered.

The fourth sub-construct of cultural competence (*cultural motivation*) which was expected to emerge as the fourth factor, based on the selected theory found in the literature, did not manifest as a factor and its items loaded on to the cultural beliefs factor. The four factor solution had three strong factors which were cultural beliefs and motivation (CMB), cultural skills (CS) and the third factor cultural knowledge (CK). The fourth factor had only one item load to it; taking these results into consideration, examining a three factor solution was decided.
Table 20

Eigenvalues, Percentages of Variance, and Cumulative Percentages for Four Factors of the CCEL Questionnaire

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.83</td>
<td>16.66</td>
<td>16.66</td>
</tr>
<tr>
<td>2</td>
<td>2.30</td>
<td>10.00</td>
<td>26.66</td>
</tr>
<tr>
<td>3</td>
<td>1.59</td>
<td>6.95</td>
<td>33.61</td>
</tr>
<tr>
<td>4</td>
<td>1.12</td>
<td>4.91</td>
<td>38.52</td>
</tr>
</tbody>
</table>

Table 21

Summary of Items and Factor Loadings for Varimax Orthogonal Four-Factor Solution for the CCEL Questionnaire (N=251)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Students who belong to historically marginalized minorities are still subjected to injustices in US public education</td>
<td>1</td>
</tr>
<tr>
<td>22. I don’t think it is necessary for women to still argue feminist ideas, now that they are treated equally</td>
<td>2</td>
</tr>
<tr>
<td>7. The increase in foreign influence of immigrants threatens the US identity</td>
<td>3</td>
</tr>
<tr>
<td>21. I feel deeply upset when I hear teachers or students make fun of or use offensive terms to describe LGBT individuals.</td>
<td>1</td>
</tr>
<tr>
<td>23. It is unfair when a African American student gets a White students place in a prestigious university because of Affirmative Action</td>
<td>1</td>
</tr>
<tr>
<td>12. There are injustices in the US public education system in regards to students with special needs or disabilities</td>
<td>1</td>
</tr>
</tbody>
</table>
## Rotated Component Matrix

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
<td><strong>Factor loading</strong></td>
</tr>
<tr>
<td>11. A (LGBT) teacher should be discreet about his/her private life in order to spare the school administration conflict with the community</td>
<td>.530 .158 .102</td>
</tr>
<tr>
<td>10. Usually parents of students from low socioeconomic status do not care about their children’s academic success</td>
<td>.520 .124 .145</td>
</tr>
<tr>
<td>6. Protecting Lesbian, Gay, Bisexual and Transgender (LGBT) students from bullying and creating a safe environment for them is my responsibility</td>
<td>.506 .383</td>
</tr>
<tr>
<td>20. I get frustrated with the over representation of minority students in discipline referrals</td>
<td>.493 .194 -.105</td>
</tr>
<tr>
<td>4. In regards to history of oppression of marginalized students in America education, I am …</td>
<td>.424 .219 .303 .213</td>
</tr>
<tr>
<td>24. School leaders should set high expectations for minority and historically marginalized students</td>
<td>.315 .173 .303 .130</td>
</tr>
<tr>
<td>14. I know how to collaborate with parents and community members from cultures other than mine</td>
<td>.884</td>
</tr>
<tr>
<td>15. I know how to assess students in multiple ways to accommodate the diversity of students under my care</td>
<td>.641 .155 .107</td>
</tr>
<tr>
<td>19. I enjoy interacting with students , parents and colleagues from different cultures</td>
<td>.251 .541 .189 .113</td>
</tr>
<tr>
<td>18. I know how to form partnerships with parents who are not native speakers of English</td>
<td>.107 .449 .195</td>
</tr>
<tr>
<td>2. In regards to different religious beliefs of my students, I am ….</td>
<td>.180 .415 .277 .237</td>
</tr>
<tr>
<td>16. I know how to apply disability laws within my school</td>
<td>.106 .578</td>
</tr>
<tr>
<td>17. I know how to use data driven (evidence informed) strategies to ensure the success of minority students and close the achievement gap</td>
<td>.227 .536 .180</td>
</tr>
<tr>
<td>13. I know how to incorporate a variety of instructional materials and strategies in my school that are bias-free and respectful of diverse groups</td>
<td>.344 .371</td>
</tr>
<tr>
<td>9. Generally girls cannot do well in math</td>
<td>.143 .351</td>
</tr>
<tr>
<td>8. The more I know about my students and their family’s cultural norms, the better I can support their success</td>
<td>.196 .230</td>
</tr>
<tr>
<td>1. In regards to cultural and social norms of students under my care I am ….</td>
<td>.119 .314 .119 .934</td>
</tr>
</tbody>
</table>

Note: Suppressed loadings below 0.1

Strongest loading in bold (all loading above 0.3)
Three factor solution results. Exploratory factor analysis was conducted to retain three factors and apply the varimax rotation. After rotation, the first factor accounted for 16.6% of the variance, the second factor accounted for 11.2%, and the third factor accounted for 6.6%. The total variance of the three factors together was 34.3%, which is not a substantial decrease from the four-factor solution. Factor 1 was again characterized as Cultural Beliefs and Motivation, item loading for factor 1 ranged between 0.314 and 0.781 with a mean of 0.538, these are considered strong item loadings. Factor 2 was determined to represent Cultural Skills, item loading for factor 2 ranged between 0.382 and 0.804 with a mean of 0.548, also considered to be strong item loadings. And the last factor (Factor 3) was determined to represent Cultural Knowledge, item loading for factor 3 ranged between 0.232 and 0.564 with a mean of 0.418.

Table 22

Eigenvalues, Percentages of Variance, and Cumulative Percentages for Three Factors of the CCEL Questionnaire

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rotation Sums of Squared Loadings</th>
<th>Total Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eigenvalue</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>3.811</td>
<td>16.567</td>
</tr>
<tr>
<td>2</td>
<td>2.582</td>
<td>11.227</td>
</tr>
<tr>
<td>3</td>
<td>1.510</td>
<td>6.567</td>
</tr>
</tbody>
</table>
Table 23

Summary of Items and Factor Loadings for Varimax Orthogonal Three-Factor Solution for the CCEL Questionnaire (N=252)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotated Component Matrix&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>1</td>
</tr>
<tr>
<td>5. Students who belong to historically marginalized minorities are still subjected to injustices in US public education</td>
<td>.781</td>
</tr>
<tr>
<td>22. I don’t think it is necessary for women to still argue feminist ideas, now that they are treated equally</td>
<td>.660</td>
</tr>
<tr>
<td>7. The increase in foreign influence of immigrants threatens the US identity</td>
<td>.586</td>
</tr>
<tr>
<td>23. It is unfair when a African American student gets a White students place in a prestigious university because of Affirmative action</td>
<td>.561</td>
</tr>
<tr>
<td>21. I feel deeply upset when I hear teachers or students make fun of or use offensive terms to describe LGBT individuals.</td>
<td>.559</td>
</tr>
<tr>
<td>12. There are injustices in the US public education system in regards to students with special needs or disabilities</td>
<td>.536</td>
</tr>
<tr>
<td>11. A(LGBT) teacher should be discreet about his/her private life in order to spare the school administration conflict with the community</td>
<td>.529</td>
</tr>
<tr>
<td>10. Usually parents of students from low socioeconomic status do not care about their children’s academic success</td>
<td>.523</td>
</tr>
<tr>
<td>6. Protecting Lesbian, Gay, Bisexual and Transgender (LGBT) students from bullying and creating a safe environment for them is my responsibility</td>
<td>.503</td>
</tr>
<tr>
<td>20. I get frustrated with the over representation of minority students in discipline referrals</td>
<td>.485</td>
</tr>
<tr>
<td>4. In regards to history of oppression of marginalized students in America education, I am …</td>
<td>.426</td>
</tr>
<tr>
<td>24. School leaders should set high expectations for minority and historically marginalized students</td>
<td>.314</td>
</tr>
<tr>
<td>14. I know how to collaborate with parents and community members from cultures other than mine</td>
<td>.804</td>
</tr>
<tr>
<td>15. I know how to assess students in multiple ways to accommodate the diversity of students under my care</td>
<td>.676</td>
</tr>
<tr>
<td>Item</td>
<td>Factor loading</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>19. I enjoy interacting with students, parents and colleagues from different cultures</td>
<td>.242 .582 .150</td>
</tr>
<tr>
<td>2. In regards to different religious beliefs of my students, I am ....</td>
<td>.178 .490 .258</td>
</tr>
<tr>
<td>18. I know how to form partnerships with parents who are not native speakers of English</td>
<td></td>
</tr>
<tr>
<td>1. In regards to cultural and social norms of students under my care I am ....</td>
<td>.149 .441 .177</td>
</tr>
<tr>
<td>13. I know how to incorporate a variety of instructional materials and strategies in my school that are bias-free and respectful of diverse groups</td>
<td>.382 .342</td>
</tr>
<tr>
<td>16. I know how to apply disability laws within my school</td>
<td>.128 .564</td>
</tr>
<tr>
<td>17. I know how to use data driven (evidence informed) strategies to ensure the success of minority students and close the achievement gap</td>
<td>.281 .538</td>
</tr>
<tr>
<td>9. Generally girls cannot do well in math</td>
<td>.140 .339</td>
</tr>
<tr>
<td>8. The more I know about my students and their family’s cultural norms, the better I can support their success</td>
<td>.195 .232</td>
</tr>
</tbody>
</table>

Note: Suppressed loadings below 0.1

Strongest loading in bold (all loading above 0.3)

**Reliability: Cronbach’s alpha.** Cronbach’s alpha is a measure of internal consistency or reliability which is often used by researchers collecting survey data with Likert-type scales (Shannon & Davenport, 2001). Reliability of a questionnaire is the extent to which its results are consistent and repeatable (Fowler, 1993). To examine the reliability of the CCEL, the Cronbach’s alpha was calculated for the entire questionnaire and for each sub-construct (each one of the three factors) separately. George and Mallery (2003) provide the following rules of thumb for the value of Cronbach’s alpha: “≥ .9 – Excellent, ≥ .8 – Good, ≥ .7 – Acceptable, ≥ .6 – Questionable, ≥ .5 – Poor and < .5 – Unacceptable” (p. 231).
Cronbach’s alpha for the CCEL questionnaire was 0.851. Cronbach’s alpha for factor 1 (cultural beliefs and motivation) was 0.846. Cronbach’s alpha for factor 2 (cultural skills) was 0.76 and Cronbach’s alpha for factor 3 (cultural knowledge) was 0.461.

Table 24

*Summary of Items Means and Standard Deviations*

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. The more I know about my students and their family’s cultural norms, the better I can support their success</td>
<td>245</td>
<td>4.4</td>
<td>.77</td>
</tr>
<tr>
<td>9. Generally girls cannot do well in Math</td>
<td>245</td>
<td>4.4</td>
<td>.95</td>
</tr>
<tr>
<td>19. I enjoy interacting with students, parents and colleagues from different cultures</td>
<td>243</td>
<td>4.4</td>
<td>.63</td>
</tr>
<tr>
<td>6. Protecting Lesbian, Gay, Bisexual and Transgender (LGBT) students from bullying and creating a safe environment for them is my responsibility</td>
<td>246</td>
<td>4.3</td>
<td>.80</td>
</tr>
<tr>
<td>24. School leaders should set high expectations for minority and historically marginalized students</td>
<td>243</td>
<td>4.3</td>
<td>.75</td>
</tr>
<tr>
<td>21. I feel deeply upset when I hear teachers or students make fun of or use offensive terms to describe LGBT individuals.</td>
<td>242</td>
<td>4.1</td>
<td>.88</td>
</tr>
<tr>
<td>14. I know how to collaborate with parents and community members from cultures other than mine</td>
<td>242</td>
<td>4.1</td>
<td>.65</td>
</tr>
<tr>
<td>15. I know how to assess students in multiple ways to accommodate the diversity of students under my care</td>
<td>243</td>
<td>4.1</td>
<td>.64</td>
</tr>
<tr>
<td>13. I know how to incorporate a variety of instructional materials and strategies in my school that are bias-free and respectful of diverse groups</td>
<td>242</td>
<td>4.0</td>
<td>.65</td>
</tr>
<tr>
<td>10. Usually parents of students from low socioeconomic status do not care about their children’s academic success</td>
<td>243</td>
<td>4.0</td>
<td>.99</td>
</tr>
<tr>
<td>1. In regards to cultural and social norms of students under my care I am .....</td>
<td>247</td>
<td>3.9</td>
<td>.86</td>
</tr>
<tr>
<td>17. I know how to use data driven (evidence informed) strategies to ensure the success of minority students and close the achievement gap</td>
<td>243</td>
<td>3.9</td>
<td>.74</td>
</tr>
<tr>
<td>16. I know how to apply disability laws within my school</td>
<td>243</td>
<td>3.9</td>
<td>.87</td>
</tr>
<tr>
<td>5. Students who belong to historically marginalized minorities are still subjected to injustices in US public education</td>
<td>246</td>
<td>3.8</td>
<td>.96</td>
</tr>
<tr>
<td>Item</td>
<td>N</td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----</td>
<td>------</td>
<td>----------------</td>
</tr>
<tr>
<td>12. There are injustices in the US public education system in regards to students with special needs or disabilities</td>
<td>244</td>
<td>3.8</td>
<td>.92</td>
</tr>
<tr>
<td>4. In regards to history of oppression of marginalized students in America education, I am …</td>
<td>246</td>
<td>3.6</td>
<td>.83</td>
</tr>
<tr>
<td>2. In regards to different religious beliefs of my students, I am …</td>
<td>247</td>
<td>3.6</td>
<td>.82</td>
</tr>
<tr>
<td>7. The increase in foreign influence of immigrants threatens the US identity</td>
<td>245</td>
<td>3.6</td>
<td>1.0</td>
</tr>
<tr>
<td>22. I don’t think it is necessary for women to still argue feminist ideas, now that they are treated equally</td>
<td>242</td>
<td>3.5</td>
<td>.99</td>
</tr>
<tr>
<td>18. I know how to form partnerships with parents who are not native speakers of English</td>
<td>243</td>
<td>3.5</td>
<td>.96</td>
</tr>
<tr>
<td>20. I get frustrated with the overrepresentation of minority students in discipline referrals</td>
<td>241</td>
<td>3.4</td>
<td>1.0</td>
</tr>
<tr>
<td>23. It is unfair when a African American student gets a White student’s place in a prestigious university because of Affirmative Action</td>
<td>242</td>
<td>3.1</td>
<td>1.1</td>
</tr>
<tr>
<td>11. A(LGBT) teacher should be discreet about his/her private life in order to spare the school administration conflict with the community</td>
<td>244</td>
<td>3.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Guided by the theory found in the literature, a four factor solution was conducted which resulted in items loading to three factors and only one item loading to the fourth factor. Accordingly moving to a three factor solution seemed to be the logical following step. The three factor solution provided two strong factors with high item loading and good reliability. The third factor was not as strong a factor and will need further development. Further detailed interpretation of the EFA conducted on the CCEL will be presented in chapter five.

**Research Question 2**

Similarity between the starting and graduating cohorts was established based on the descriptive and demographic data. Also results of the chi-square statistical analysis, presented in Table 19, showed that no statistically significant difference exists between the two cohorts in regards to gender, race, age, years of experience, perception of marginalization and travel abroad.
Next the second research question was addressed, which was now modified (based on the three factor analysis) to read: Is there a difference in (1) cultural beliefs and motivation, (2) cultural skills, and (3) cultural knowledge, between students beginning an educational leadership Master’s program and students graduating? To address this question, multivariate analysis of variance (MANOVA) was conducted. MANOVA was used instead of multiple ANOVAS to discover if there were any significant differences among the starting and graduating cohorts on the **combined dependent** variables while also investigating if cohort differences were significant for **each** dependent variable (Huberty & Morris, 1989).

Table 25

*Means and Standard Deviations for CMB, CS and CK by Cohort Categories*

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Cultural Beliefs &amp; Motivation CMB</th>
<th>Cultural Skills CS</th>
<th>Cultural Knowledge CK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Starting Cohort</td>
<td>3.57</td>
<td>.58</td>
<td>3.96</td>
</tr>
<tr>
<td>Graduating Cohort</td>
<td>3.97</td>
<td>.58</td>
<td>4.01</td>
</tr>
</tbody>
</table>

Table 26

*Multivariate Tests*

<table>
<thead>
<tr>
<th>Effect</th>
<th>Hypothesis</th>
<th>Partial Eta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort groups</td>
<td>Wilks’ Lambda</td>
<td>.883</td>
</tr>
</tbody>
</table>
A MANOVA was conducted to determine starting and graduating cohort differences in cultural beliefs and motivation (CMB), cultural skills (CS), and cultural knowledge (CK). MANOVA results revealed significant differences among the starting and graduating cohorts, where the graduating cohort scored higher than the starting cohort, on the combined DVs: Wilks’ Lambda = .883, $F(3, 240) = 10.580, p < .001$, partial $\eta^2 = .117$. Partial $\eta^2$ of .117 is considered to be a medium to large effect size (Cohen, 1988; see Table 26). Univariate analysis were conducted on each dependent variable as a follow-up test to MANOVA: Cohort differences were significant, with graduating cohorts higher than starting cohort, for cultural beliefs and motivation, $F(1, 242) = 26.405, p < 0.001$, partial $\eta^2 = 0.098$ (medium effect size), and cultural knowledge, $F(1, 244) = 8.388, p = 0.004$, partial $\eta^2 = 0.034$ (small effect size). Cohort differences were not significant for cultural skills, $F(1, 244) = 0.841, p = 0.360$, partial $\eta^2 = 0.003$ (see Table 27). The mean of cultural skills for the graduating cohort was higher than that of the starting group; however, the increase was not statistically significant. Table 25 presents means and standard deviations for CMB, CS and CK per cohort category.

It is difficult to conclude that the increase in cultural competence of the graduating cohort is a result of going through the preparation program, because the student, the programs and the
social context are intertwined and affect and are affected by one another (Powson & Tilley, 1997). However, the results of this analysis suggest that going through the principal preparation programs seem to have a positive effect on the compiled construct of cultural competence as well as on the sub-constructs of cultural beliefs and motivation, and cultural knowledge of students. This confirms the conceptual framework of the study. More thorough interpretation of the results will be presented in chapter five.

**Research Question 3**

To address the third research question, “Do certain personal attributes and experiences have an effect on cultural competence of students in educational leadership preparation programs?” the following sub-questions were posed:

a. Does gender have an effect on cultural competence of students in educational leadership preparation programs?

b. Does race have an effect on cultural competence of students in educational leadership preparation programs?

c. Does age have an effect on cultural competence of students in educational leadership preparation programs?

d. Does perception of belonging to historically marginalized group have an effect on cultural competence of students in educational leadership preparation programs?

e. Do years of experience have an effect on cultural competence of students in educational leadership preparation programs?

f. Do travel abroad experiences have an effect on cultural competence of students in educational leadership preparation programs?
I looked at descriptive statistics such as means and standard deviations, and conducted multiple one-way ANOVAs to determine whether statistically significant differences existed in cultural competence, in relation to different demographic and experiential aspects of students of educational leadership preparation program. I wanted to discover the effect of personal attributes and experiences on the overall cultural competence of participants. In future research the effect of these personal attributes and experiences on the different sub-constructs of cultural competence could be investigated. To control for the family-wise type I error rate, a simple Bonferroni correction was used, testing each ANOVA at the alpha/p, per ANOVA level (where p is the number of tests) (Huberty & Morris, 1989). So I used $\alpha = \frac{0.05}{6}$ (number of ANOVA tests to run), or $\alpha = 0.008$.

Mean scores on the six independent variables are presented in Table 28. To determine whether statistically significant differences existed in cultural competence of students in relation to the six independent variables, six one-way ANOVAs were conducted. Levene’s Test of Equality of Error Variances was run for all six one-way ANOVAs, assumption of equal variance was violated for only one variable: belonging to a historically marginalized group. Even though one-way analysis of variance is robust to violations of homogeneity and normality of variance analysis (Harris, 1998; Mertler & Vannatta, 2010), a special F-test called the Welch test was run for this variable, which confirmed the results of the one-way ANOVA.
Table 28

Means, Standard Deviations, and One-Way Analysis of Variance for the Effects of Gender, Race, Age, Belonging to Marginalized Group, Years of Experience, and Travel Abroad on Cultural Competence

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>Sig.</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>152</td>
<td>3.9</td>
<td>.40</td>
<td>F(1, 236) = 9.180</td>
<td><strong>0.003</strong></td>
<td><strong>0.037</strong></td>
</tr>
<tr>
<td>Male</td>
<td>86</td>
<td>3.7</td>
<td>.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>103</td>
<td>3.8</td>
<td>.41</td>
<td>F(1, 237) = 5.784</td>
<td>0.017</td>
<td>0.024</td>
</tr>
<tr>
<td>Nonwhite</td>
<td>36</td>
<td>4.0</td>
<td>.43</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>20–30</td>
<td>91</td>
<td>3.8</td>
<td>.42</td>
<td>F(4, 231) = 0.313</td>
<td>0.869</td>
<td>0.005</td>
</tr>
<tr>
<td>31–40</td>
<td>102</td>
<td>3.8</td>
<td>.39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41–50</td>
<td>32</td>
<td>3.9</td>
<td>.51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51–60+</td>
<td>11</td>
<td>4.0</td>
<td>.41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marginalized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not marginalized</td>
<td>173</td>
<td>3.8</td>
<td>.39</td>
<td>F(1, 245) = 20.857</td>
<td><strong>&lt;0.001</strong></td>
<td><strong>0.078</strong></td>
</tr>
<tr>
<td>Marginalized</td>
<td>77</td>
<td>4.0</td>
<td>.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–5</td>
<td>60</td>
<td>3.8</td>
<td>.42</td>
<td>F(5, 230) = 0.478</td>
<td>0.793</td>
<td>0.010</td>
</tr>
<tr>
<td>6–10</td>
<td>95</td>
<td>3.9</td>
<td>.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11–15</td>
<td>50</td>
<td>3.8</td>
<td>.45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16–20</td>
<td>20</td>
<td>3.9</td>
<td>.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21–25</td>
<td>8</td>
<td>3.9</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 +</td>
<td>3</td>
<td>3.8</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel abroad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No travel</td>
<td>96</td>
<td>3.7</td>
<td>.44</td>
<td>F(1, 245) = 8.945</td>
<td><strong>0.003</strong></td>
<td><strong>0.035</strong></td>
</tr>
<tr>
<td>Yes travel</td>
<td>154</td>
<td>3.9</td>
<td>.40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Computed using Bonferroni family wise, alpha = 0.008
Results presented in Table 28 show a significant main effect for gender on cultural competence, where females scored higher than male participants, $F(1, 236) = 9.180$, $P = 0.003 < 0.008$, $\eta^2 = 0.037$, the calculated effect size indicates a small variance in cultural competence is accounted for by gender. A significant main effect for perception of belonging to a historically marginalized group on cultural competence was found, where participants who felt they belonged to a marginalized group scored higher on cultural competence, $F(1, 245) = 20.857$, $P = 0.000 < 0.008$, $\eta^2 = 0.078$, where the effect size indicates a medium variance in cultural competence is accounted for by perception of belonging to a historically marginalized group.

Results also show a significant main effect for travel abroad on cultural competence, where participants who had travel abroad experiences scored higher on cultural competence, $F(1, 245)= 8.945$, $P = 0.003 < 0.008$, $\eta^2 = 0.035$, where the calculated effect size indicates a small variance in cultural competence is accounted for by travel abroad.

Results presented in Table 28 show non-significant main effect for race on cultural competence, $F(1, 237) = 5.784$, $P = 0.017 > 0.008$, $\eta^2 = 0.037$; however, the mean differences were in the expected directions and the results likely reflect lack of statistical power. A non-significant main effect for age on cultural competence, $F(4, 231) = 0.313$, $P = 0.869 > 0.008$, $\eta^2 = 0.005$, was also found; however, the mean of cultural competence increased with age (see Figure 5). There was also a non-significant main effect for years of experience on cultural competence, $F(5, 230) = 0.478$, $P = 0.793 > 0.008$, $\eta^2 = 0.010$, looking at means of cultural competence in relation to years of experience, no pattern emerged (see Figure 6).

Gender, perception of belonging to marginalized group and travel abroad experiences had an effect on cultural competence of participants. Where female participants scored higher on cultural competence than male participants, participants who believed that they belonged to a
marginalized group had higher cultural than non-marginalized and participants who had travel abroad experiences had higher cultural competence than participants with no travel abroad experience. These findings are supported by literature and have important implications for practice in principal preparation programs.

Results of the second and third research questions confirmed the conceptual framework of the study (see Figure 1). Cultural competence of educational leaders is affected by personal attributes such as gender and perception of belonging to marginalized groups, experiences such as travel abroad and professional training represented by preparation programs. The confirmation of this model has multiple implications on the practice of preparation programs and educational leadership which will be further discussed in detail in chapter five.
CHAPTER FIVE. DISCUSSION

Introduction

In today’s changing world, cultural competence has become a necessary attribute of educational leaders, as they need to support the development and achievement of an increasingly diverse student population. The researcher-developed the CCEL questionnaire to measure cultural competence of students of educational leaders’ preparation programs to examine the difference in cultural competence between starting and graduating cohorts of educational leaders’ preparation programs; and the correlation between cultural competence and personal and experiential attributes of participants.

This chapter discusses the findings of the study. It is divided into four sections. The first section presents demographic observations and interpretations; the second section offers a summary of the study’s major findings and interpretation. In the third section the implications of the findings and recommendations for the practice of educational leadership preparation are outlined. The chapter concludes with future research and limitations of the study.

Demographic Observations and Interpretations

Purposeful sampling was used and master’s principal licensure programs with institutional membership in UCEA were targeted and asked to participate. Institutional membership in UCEA was an indicator of the program’s commitment to social justice and diversity issues, integral elements of UCEA’s mission.
Description of Participating Programs

Sixteen programs participated in the study, eight from the Southern region of the US, six from the Midwest, and two from the Northeast (see Figure 3). The most participation came from the Southern region which was also the region with the most institutional membership in UCEA. The pattern of program participation frequency in the study per region was compatible with the pattern of institutional membership frequency in UCEA (see Figure 4). Institutional membership in UCEA in the western region was limited. The low UCEA institutional membership participation rate in the west needs further investigation.

The programs in the study sample showed variations in their design and delivery. The reasons for this variation were explained in the literature. Behar-Horenstein (1995) suggested that in some cases the program design was influenced by the State mandates or by major universities, while other scholars proposed that State licensure and certification requirements were the main influence on program development (Gorgan & Robertson, 2002; Harle, 2000). Levine (2005) argued that the market was another driving force which affected the development of preparation programs. Multiple factors and interest groups influence program development and structure, which lead to variations in program design and delivery (Preis, Gorgan, Sherman & Beaty, 2007).

These variations are typically reflected in the participating programs of this study. The literature suggested that most educational leader’s preparation programs vary in length between one and three years and require between 18 and 36 credit hours (Goldring & Sims, 2005; Hess & Kelly, 2005; Jackson & Kelly, 2002; Preis et al., 2007). The programs in this research study also varied in length and requirements, between 30 and 42 credit hours. The requirements of this study’s participating programs were more demanding than what was stated in the literature as
none of the programs required less than 30 credit hours; there was also a variation in the beginning and ending dates of the programs.

The methods of delivery in participating programs varied between strictly face-to-face, fully online, and a combination of both face-to-face and online formats. This too was in line with the literature which recognized the presence of non-conventional delivery methods in educational leader’s preparation programs, such as online courses and web-assisted delivery (Goldring & Sims, 2005; Jackson & Kelly, 2002; Preis et al., 2007).

The literature showed that most educational leader’s preparation programs used the cohort model (Barnett et al., 2000; Preis et al., 2007). McCarthy (1999) stated that, “In 1995, the Center for the Study of Preparation Programs reported that half of the UCEA units used cohorts at the master’s level” (p. 128). Using the cohort model was echoed in the study sample as most of the participating programs utilized the cohort model. Fourteen out of the 16 participating programs (87.5%) used the cohort model. The impact of using the cohort model with educational leadership preparation programs should be further investigated as well as its impact on cultural competence of students.

Almost all participating programs (93.7%) had an internship element, thus confirming what was suggested by Hess and Kelly (2005), Jackson and Kelly (2002), and Preis et al. (2007), that most leadership preparation programs included some sort of field-based learning experience or internship. However, the length and context of the internship varied within the study sample programs, which was also consistent with what Jackson (2001) stated:

Questions about the nature of the internship, the tasks to be learned, the nature of the supervision, mentoring, placement, reflection, full or part time, and location (more than one site), are only some of the questions that need to be answered. (p. 18)
The internship experiences can provide students of educational leadership preparation programs the opportunity to practice their social justice advocacy skills in real-life situations (McKenzie et al., 2008). Therefore additional examination of the internship element in educational leadership preparation programs and its effect on students’ cultural competence is needed in the literature.

In this study, 12 programs (75%) required their students to register for a course on diversity. The percentage of programs which require their students to take a course on diversity as part of their preparation could not be found in the literature. Within the participating programs which required their students to register for a course on diversity, there were variations in the content. The literature is conflicting about the effect of diversity courses on students’ beliefs and attitudes towards issues of racial and cultural diversity. Some scholars suggest that diversity courses positively impact students’ beliefs and attitudes (Bondy, Schmitz, & Johnson, 1993; Delany-Barmann & Minner, 1997; Tran, Young, & Di Lella, 1994), while others found that courses on diversity only confirmed rather than confronted student’s beliefs on issues of diversity (Garmon, 1996; Kagan, 1992). More investigation is needed regarding the effect of going through a diversity course on students’ cultural competence.

Elements encompassed within the participating programs in this study seem to be in accordance with the general description of preparation programs found in the literature. Examining the effect of program elements such as cohort model, internship and special course on diversity, on the students’ cultural competence will be an important part of future research recommendations.

**Description and Demographic Profile of Participants**

Purposeful sampling resulted in the participation of two hundred and fifty one (251) students in master’s principal certification programs. Participants were students in institutions
with UCEA membership, as one of this study’s assumptions was that these participating students would represent a community of learners that expresses values and goals associated with social justice and cultural competence because of their programs’ affiliation with UCEA. Following is a summary of their demographic profile.

**Gender.** The demographic profile of participants showed that approximately 64% of students were female and 36% were male. The ratio of female participants to male participants was higher in this sample, which was in line with demographic trends in the field of education (Ross, 2008; Sleeter, 2001). According to the Schools and Staffing Survey (SASS) of 2011–2012, public schools had 76% female teachers and only 24% male teachers (Goldring, Gray & Bitterman, 2013). However, the percentage of “public school principals who were female was 52% (Bitterman, Goldring, & Gray, 2013, p. 3).

Scholars in the field of education have reported and expressed concern that the percentage of female principals is relatively lower than that of female teachers (Bell & Chase, 1993; Gates, Ringel & Santibañez, 2003; Joy, 1998; Riehl & Byrd, 1997). In the UCEA-sponsored National Commission on Excellence in Educational Administration in 1978, preparation programs were criticized for the lack of women in the field of educational leadership (Jackson, 2001). There are two explanations for having sixty four percent (64%) women in this study. The first explanation is that preparation programs were making an effort to recruit more women into their programs, to prepare and mentor them into school leadership positions, and close the gap between the number of female teachers and that of female school leaders. The second explanation is that it is just a reflection of the ratio of female teachers and that it will not necessarily translate into more female representation is school leadership. Riehl and Byrd (1997) revealed that woman educators were more likely to have advanced degrees than men; however,
that did not translate into having more female school principals. The percentage of female students in principal preparation programs and how these percentages are reflected in their acquisition of school principal positions need further investigation.

**Race.** The majority of participants, 176 (70.7 %) self-identified as White, 36 (14.3%) self-identified as African American, and ten (4%) self-identified as Hispanic. The percentage of racial minorities who participated in the study (29%) was higher than the percentage of minorities among school principals (20%) in public schools (Bitterman, Goldring, & Gray, 2013, p. 3). Also this was higher than the percentage of minorities among school teachers (18%) in public schools (Goldring, Gray & Bitterman, 2013). The higher percentage of racial minorities in this study’s participants could be an indication of an increase in the representation of minorities in principal preparation programs, or could be specific to this study.

This increase may perhaps be a result of the ongoing efforts, which started in the sixties, to expand the recruitment of minority group members, these efforts were initiated by some educational institutions and organizations like UCEA (Farquhar & Piele, 1972). In 1978 during the UCEA-sponsored National Commission on Excellence in Educational Administration, recommendations for programs included providing “scholarships and other incentives to recruit able students, particularly those from ethnic minority groups” (Jackson, 2001, p. 4). With the persisting cultural mismatch, recruiting and preparing a more diverse body of students is important and urgent; examining program’s efforts, recruitment strategies and admission procedures will be an important future research recommendation.

**Age and Years of Experience**

The demographic data showed that 38.6% were between the ages of 21 and 30 while 43.2% were between the ages of 31 and 40. Thirteen percent were between the ages 41and 50,
and 4.2% were between the ages 51 and 60. Only one participant (.4%) reported she or he was 61 or older. So participants between the ages of 31–40 comprised almost half the sample, which suggests that this age category is the one when most prospective school leaders pursue principal preparation degrees and certification. This could be confirmed by current age demographics of school principals where the average age of public school principal is 48 years, and 40% of all public school principals are under the age of 45. Within the 41–50 age category, there were fewer participants; the reason could be because educators within this age category are near the end of their careers and have little interest in a master’s degree. Another possibility for this low enrollment from educators between the ages of 41–50 could be specific to this study sample. The percentage of participants between the ages of 21 and 30 was higher in the starting cohort than the graduating one. An explanation for this decrease could be that younger students dropped out as they went thru the program. Or the age demographics of the starting and graduating cohorts could be different to start with.

Both cohorts’ members had experience as educators, where the majority of participants had over five years of experience and almost half of the participants had over six years of experience. In average the graduating cohort members had more years of experience than the starting cohort which is in accordance with the age demographic data. Patterns of age and experience of students in preparation programs and its relationship to completion of programs need more examination.

Perception of Membership in Marginalized Group

The demographic data showed that 40 (16.2%) of the participants felt that they were marginalized because of race and 34 (13.7%) felt that they were marginalized because of ethnicity. Twenty-one (8.5%) felt that they were marginalized because of their socioeconomic
status while 39 (15.7%) thought that they were marginalized because of gender. Only two (0.8%) participants chose sexual orientation as the reason for their marginalization and only three (1.2%) chose disability as the reason for their marginalization. Fifteen (6%) of the participants felt that they were marginalized because of religion and four (1.6%) felt that they were marginalized because of their national origin. Nine (3.6%) participants felt that they were marginalized because of age while four (1.6%) felt marginalized because of other reasons than the ones listed.

Perception of marginalization within this study’s participants did not match the researcher’s expectation. Out of the 152 women in the study only 37 (24%) felt marginalized because of gender. Most of the women who felt marginalized because of gender belonged to a racial or ethnic minority or came from low socioeconomic background. Only 11 White women felt marginalized just based on gender. Two African American male participants felt marginalized because of gender combined with young age. Young age was viewed as a reason for marginalization by a few participants across races and gender, which is in line with what was suggested by Browne-Ferrigno (2003) that “age was an expressed concern about opportunities for being hired or accepted as a school principal” for both female and male educators alike. Two White male participants felt marginalized because of their gender and race. One participant added obesity as a reason for marginalization; another participant stated that language was the reason for their marginalization. Perception of marginalization and the reason behind that perception needs more examination.

**Sexual orientation.** Among the participants only two (0.8%) chose sexual orientation as the reason for feeling marginalized. This is a low ratio in comparison to the ratio of LGBT population in the US. According to Gates (2011), “there are more than 8 million adults in the US
who are lesbian, gay, or bisexual, comprising 3.5% of the adult population” (p. i). Having only 0.8% of the participants self-identify as LGBT could mean that this population is underrepresented in this study’s sample. Another explanation may possibly be that more LGBT participants chose not to declare their orientation because they felt threatened or uncomfortable. This confirms what the literature reports about educators choosing not to reveal their orientation (Griffin, 1992; Jennings, 2005; Smith, Wright, Reilly & Esposito, 2008). A group of LGBT educators who participated in a study conducted by Smith et al. (2008) perceived their “workplace climate as troubling, unsafe and unsupportive. They perceived the climate in their workplace as homophobic, racist, sexist and transphobic.” Faculty of principal preparation programs need to examine their admission and recruitment strategies to ensure higher participation of LGBT students. The low percentage of participants who choose sexual orientation as the reason for their marginalization needs further investigation.

**Major Findings and Interpretations**

The first step in the research process was the development and initial validation of the CCEL questionnaire which was designed to measure the cultural competence of educational leaders. After a rigorous review of the literature, the development of a conceptual framework and blue print which was based on research literature. Content validity was examined by utilizing think-aloud sessions, experts’ feedback and a pilot study with participants who represented the target population. The final version of the CCEL was then sent electronically and in hard-copy to students of master’s principal certification programs and 251 participants completed the survey.
Research Question 1: Instrument Validation

Exploratory factor analysis of the data revealed three factors of cultural competence; cultural beliefs and motivation (CMB), cultural skills (CS) and cultural knowledge (CK). Four factors were expected to emerge according to the research literature which informed the survey’s conceptual framework and blueprint (see Figure 2 and Table 2). This section will explain these findings. According to the original hypothesis, cultural competence comprises of four sub-constructs: cultural knowledge (CK), cultural beliefs (CB), cultural skills (CS), and cultural motivation (CM); however, when a four factor solution was run, CM items loaded to the CB factor and a three factor solution was chosen where cultural beliefs and motivation were combined into one construct (CMB).

Two explanations for the unexpected result are (1) inadequacy of items as developed for the CCEL and used in the present study or, (2) the use of a conceptual framework not previously explored empirically. To determine the adequacy of the instrument, the explained total variance, items loading to factors, and internal consistency were discussed. Only 34% of the variance was explained by the three emergent factors. This is an indication that there may be other variables not accounted for. These unexplained variables could be a result of having a multi-dimensional framework, where the three factors altogether only represent one dimension of the framework (see Figure 2). Using exploratory factor analysis only allowed for the examination of one dimension of the framework which was considered a limitation, confirmatory factor analysis with a new set of data needs to be conducted in future research. The unaccounted for variance could also be the result of having items which elicited strong and different responses. The questionnaire had items tackling issues like affirmative action, poverty and LGBT rights, all of
which stir strong feeling and responses from participants which may have diminished the effect of domains.

Analysis of item loading to two of the three factors (CMB & CS), showed a pattern of strong coefficients and little cross loading (see Table 23). Internal consistency measure of the entire instrument and CMB were very good, internal consistency of CS was good. The third factor (CK) had the weakest item loading coefficients and low internal consistency; this factor needs further development and item revision. The first explanation (inadequacy of the items as developed) could be contended by the above discussion. The CCEL had a factor that needed strengthening but the overall instrument seemed to be promising. Developing the CCEL will continue to be an ongoing process and further analysis and modifications of the instrument are needed.

The second explanation, a conceptual framework not previously explored empirically, was more likely to be true. The psychological framework for the development of CCEL was influenced by the framework for developing the Cultural Intelligence instrument (CQ) (Ang & Van Dyne, 2008), and also by the framework for developing the Cross Cultural Inventory (CCI) (Kohli et al., 2009). The three factor solution which emerged is more in line with the framework suggested by Kohli and the components of cultural competence framework suggested by Sue (2001). The psychological framework of the CCEL was modified accordingly (see Figure 5). In the modified conceptual framework beliefs and motivations are combined into one factor. This is in agreement with the theory of reasoned action which suggested a high correlation of beliefs to motivation (Sheppard, Hartwick & Warshaw, 1988)
Validity evidence must be continually improved and expanded for any instrument. Efforts to further improve the instrument and strengthen its factors, especially cultural knowledge sub-construct, will continue. Future research to ensure the adequacy of the CCEL instrument for reflecting changes in cultural competence among educational leadership graduate students will continue to be an ongoing endeavor.

Research Question 2: Cultural Competence Difference between Cohorts

Is there a difference in (1) cultural beliefs and motivation, (2) cultural skills, and (3) cultural knowledge, between students beginning an educational leadership master’s program and students graduating? To address this question, multivariate analysis of variance (MANOVA) was conducted. MANOVA results revealed a medium to large effect size significant difference among the starting and graduating cohorts. The graduating cohort scored higher than the starting cohort on the combined dependent variables of cultural knowledge, cultural beliefs and
motivation, and cultural skills. Univariate analysis of variance (ANOVA) were then conducted on each dependent variable as a follow-up test: Cohort differences were significant, with a medium effect size on cultural beliefs and motivation, and a small effect size on cultural knowledge. The graduating cohorts scored higher on both dependent variables. The mean of cultural skills for the graduating cohort was higher than that of the starting cohort; however, it did not reach statistical significance.

As mentioned before it is difficult to conclude that any change manifested in individuals is solely the result of going through any specific program. Other factors such as individual differences and social context should also be taken into consideration. It could only be suggested that opportunities and ideas offered by a program, interacting with individuals within groups could lead to the program’s expected outcomes (Buessy, 2008; Pawson & Tilley, 1997; Weiss, 1998). Therefore, concluding that the increase in cultural competence of the graduating cohort was a result of going through the preparation program could only be suggested based on the results of the conducted analysis.

The results suggested that going through the principal preparation programs seemed to have a positive statistically significant effect on the compiled construct of cultural competence, as well as on the sub-constructs of cultural beliefs and motivation, and cultural knowledge of students, but no significant effect on cultural skills. This is in agreement with findings of another study conducted on an educational leadership preparation program in a Southern state. The study used the cultural intelligence instrument (CQ) and concluded that going through the preparation program seemed to have had a positive effect on cultural knowledge and beliefs of students; however, “there did not seem to be motivation to change behavior” (Barakat, Reames & Kensler, 2012, p. 253). This is also in line with Furman’s (2012) suggestion that most
preparation programs urged their students to challenge their mental models and develop critical consciousness about issues of cultural diversity and social justice but, the actual development of necessary skills was often ignored.

**Cultural knowledge.** The possibility that cultural knowledge (CK) of students participating in this study increased by going through the preparation programs is plausible, given the assumed focus of programs on social justice and cultural diversity, and the primary tools which are used by preparation programs to influence students. Preparation programs mainly utilize lectures, and reading and writing assignments to instruct students (Murphy, 2006). Engaging participating students in issues of social justice and cultural diversity through lectures, reading and writing activities might have resulted in “first order change” in their cultural competence, manifested by higher cultural knowledge. “First order change” is change that is “consistent with existing values and norms…build on established patterns, and utilize existing knowledge” (Waters, McNulty & Marzano, 2004, p. 7). To summarize, participating programs were assumed to embrace social justice issues and foster cultural diversity. Accordingly efforts were exerted by these programs to influence students’ cultural competence. It was a valid assumption to expect the first reform to happen, as a result of these efforts to be “first order change”, exhibited by higher cultural knowledge of the graduating cohort.

**Cultural beliefs and motivation.** Stressing the fact that the influence of preparation programs on students’ cultural beliefs and motivation (CMB) cannot be specifically measured because of additional complex influences on students (Pawson & Tilley, 1997; Weiss, 1998), the results of this study proposed that the graduating cohort had higher CMB than the starting cohort. The first explanation was that students’ CMB did develop by going through the programs. This would imply that the programs provided opportunities and ideas for students to “learn new
approaches” and “question their prevailing values and norms”, thus affecting second order change (Waters, McNulty & Marzano, 2004, p. 8). This would have been a fulfillment of the essential and difficult responsibility of educational leadership programs to prepare school leaders for cultural challenges in diverse environments (Barakat, Reames & Kensler, 2012; Horsford, Grosland & Gunn, 2011; Ingram & Walters, 2007).

Another probable argument was that if the change in CMB was not a result of true improvement, it could be the result of external pressure on participating programs. This pressure might have led participants to respond in a way that was socially desirable, which magnified the sense of increase in CMB in the graduating cohort. Programs which participated in this study had institutional membership at the UCEA; this meant that they were influenced by UCEA’s “emphasis on elevating the topic and practice of social justice in educational leadership preparation, practice, and research” (Bussey, 2008, p. 202). This emphasis could have imposed direct or indirect pressure on participants to say “the right thing”. No one wants to be the person who ignores historical injustices or the educator who sets low expectations for students.

The above two interpretations cannot assert the exact effect of going through a preparation program on students’ CMB. The results proposed a positive influence of the program resulting in higher cultural competence of the graduating cohort. Whether the change was “second order” or “first order” change needs further investigation. It is important to recognize that even with the assumption that the suggested change was an indication of “first order change” and was instigated by the need to give socially desirable answers it still marked a step in the right direction.

**Cultural skills.** The results of this study suggested that the mean of cultural skills (CS) for the graduating cohort was higher than that of the starting cohort; however, the difference
between the two cohorts did not reach statistical significance. This confirmed what was suggested in previous research that there was a need for preparation programs to help students develop the necessary skills for effective leadership (Davis, et al., 2005; Furman, 2012; Levine, 2005; Murphy, 2006; Murphy & Vriesenga, 2004). El Ganzoury (2012) stated that “more efforts are particularly needed to equip educational leaders with practical skills necessary to address diversity issues within their schools” (p. 134). This was confirmed by Furman (2012); preparation programs need to focus more on the actual development of necessary cultural competence skills.

Another presumption was that the statistically non-significance in CS between cohorts was a result of the starting cohort having high CS to start with, skills developed through years of experience as educators. This presumption was supported by the demographic profile of the cohort which showed that 40% of its participants had over 10 years of experience and 70% had over five years of experience. However, this was refuted because this study showed no relationship patterns between cultural competence and years of experience.

Preparation programs should not focus solely on awareness but rather develop school leaders’ ability to deal with real life diversity related conflicts (Young, Madsen & Young, 2010). Educational leadership preparation programs’ effect on students should be continually assessed and evaluated. Efforts to further investigate the development of students’ cultural competence, while going through their preparation programs and after graduating is a potentially fruitful line of research. Recommendations for future research on preparation programs and their effect on students’ cultural competence, as well as implications of the findings of this research question, will be further discussed in the following sections.
Research Question 3: Personal Attributes Affecting Cultural Competence

Research Question 3 asked, “Do certain personal attributes and experiences have an effect on cultural competence of students in educational leadership preparation programs?” The following sub-questions were posed:

i. Does gender have an effect on cultural competence of students in educational leadership preparation programs?

ii. Does race have an effect on cultural competence of students in educational leadership preparation programs?

iii. Does age have an effect on cultural competence of students in educational leadership preparation programs?

iv. Does perception of belonging to historically marginalized group have an effect on cultural competence of students in educational leadership preparation programs?

v. Do years of experience have an effect on cultural competence of students in educational leadership preparation programs?

vi. Do travel abroad experiences have an effect on cultural competence of students in educational leadership preparation programs?

To address research question 3, multiple one-way ANOVAs were conducted to determine the effect of personal attributes and experiences on the overall cultural competence of participants. Results showed that Gender had an effect on cultural competence of participants, where female participants scored higher on cultural competence than male participants.

Gender. There were two plausible explanations for women having higher cultural competence than men. The first reason was that women were a marginalized group, and some research suggested that belonging to a marginalized group was a reason for higher cultural
competence (Meier, Stewart, & England, 1989; Smith, Moallem & Sherrill, 1997). Even though many women who participated in this study did not perceive themselves as marginalized, it is safe to assume that they had personal experiences with prejudice and injustice which made them more able to identify and resist discriminatory practices (Meier, Stewart, & England, 1989).

The second possible reason for the higher cultural competence of women over men was that there were some shared leadership styles and practices that supported instructional leadership as well as culturally responsive leadership. Democratic or participative leadership is one of the practices which support both instructional leadership and culturally responsive leadership (Ylimaki & Jacobson, 2013). Research suggested that women tended to adopt a more democratic or participative approach to leadership than men (Eagly & Johnson, 1990). Women were also found to be more collaborative, less controlling and used problem solving strategies based on empathy and rationality (Loden, 1985). Women’s higher cultural competence could in part be a byproduct of possessing leadership styles that support instruction and school improvement. This explanation posed a question which could be worthwhile for future research, whether there are similarities between the characteristics and leadership styles of an effective school leader and those of a culturally competent leader.

**Belonging to a marginalized group.** Results showed that perception of belonging to a marginalized group had an effect on cultural competence of participants. Participants who believed that they belonged to a marginalized group had higher cultural competence than non-marginalized participants. This confirms what was found by previous researchers who indicated that marginalized minorities are more empathetic towards issues of social justice and cultural diversity, thus they have higher cultural competence (Meier, Stewart, & England, 1989; Smith, Moallem & Sherrill, 1997). Meyer (2003) stated that “Marginalized minorities are likely to be
subjected to conflicts because dominant culture, social structures and norms do not typically reflect those of the minority group” (p. 3); therefore they understand marginalization and exclusion and are more likely to recognize and resist discriminatory practice (Meier, Stewart, & England, 1989). Educators who belong to minority groups display cultural responsive practices, as they are more likely to use culturally relevant instructional strategies, create inclusive classrooms and foster critical thinking and civil consciousness (Darder, 1995; Dilworth, 1990; Irvine, 1989; Ladson-Billings, 1992).

**Travel abroad experience.** Results showed that travel abroad experiences had a positive effect on cultural competence of participants; participants who had travel abroad experiences had higher cultural competence than participants with no travel abroad experience. These findings were supported by literature as Smith, Moallem, and Sherrill (1997) suggested that travel abroad is one of the factors that positively affect cultural competence. A pre- and post-assessment of cultural competence of a group of educational leadership students showed that a travel abroad experience in Australia resulted in higher cultural competence of participants (Reames, Kaminsky, Downer & Barakat, 2013). Students who had travel abroad experiences increased their intercultural sensitivity, adaptability and communication skills (Williams, 2005).

Reflecting on the reasons that could explain the higher cultural competence associated with travel abroad experience, two rationalizations came to mind. The first is that travel abroad puts people in venerable positions where they get the opportunity to experience being a minority, looking and acting different, communicating in a different language, and having different cultural norms. The second rationalization was that travel abroad allowed exposure to other cultures and different word views thus adding to cultural knowledge, challenging cultural beliefs and developing cultural skills.
Summary of Findings and Interpretation

Results of this study confirmed the guiding conceptual framework (see Figure 1) and further identified its elements. Derived by the conceptual framework, this study started with the hypothesis that cultural competence of educational leaders was affected by personal attributes and preparation programs. The study concluded by confirming the conceptual framework and by identifying some personal attributes which affected cultural competence such as gender and perception of belonging to marginalized groups. One of the identified experiences to affect cultural competence was travel abroad experience. The confirmation of this model provided preparation programs with important information which held multiple implications for the programs’ future development.

Implications and Recommendations

Findings of this study were explained in the previous section. In this section implications of the study’s findings and the possible practical application of the added knowledge will be identified. Now that the guiding conceptual framework has been confirmed by the findings of this study, and personal attributes and experiences (gender, perception of belonging to a marginalized group, travel abroad) as well as going through preparation programs were believed to have a positive effect on students’ cultural competence, questions noted were, “What are the implications for educational leadership preparation programs?” and “How could this added knowledge be used by programs to further develop students’ cultural competence?”

The notion that certain personal attributes and experiences effected cultural competence implies that preparation programs should strive to recruit candidates who possess such attributes and experiences. This is especially important because there was evidence in the literature that students’ background, and preexisting negative attitudes and beliefs about cultural diversity can
hinder the efforts of programs and limit their effect to develop student’s cultural competence (Garmon, 2004; Ladson-Billings, 1997). According to Kagan (1992), students’ used preexisting beliefs to make sense of the new knowledge provided by programs and often confirmed rather confronted their mental models.

Accordingly, preparation programs’ admission strategies and processes need to focus on recruiting students who show a strong commitment to social justice and equity, or demonstrate a tendency to question social inequities (McKenzie et al., 2008). Preparation programs must focus on recruiting minority students since this study showed that students who belonged to marginalized groups showed higher cultural competence. Scholarships and other incentives need to be offered to students from ethnic minority groups (Jackson, 2001).

This study showed that female students had higher cultural competence than male students. In the previous section two interpretations were proposed for the higher cultural competence of women; one was that they were a minority and were subjected to marginalization which made them more sensitive towards discrimination and injustices. The other explanation was that women had specific leadership practices which were conducive to cultural competence. Whether there was a gender-specific leadership style or not has been an ongoing argument in the research literature. Some researchers rejected the concept of women and men having different leadership styles (Bartol & Martin, 1986; Bass, 1981; Kanter, 1977a; Nieva & Gutek, 1981). Others argued that women’s leadership style had certain characteristics: collaboration, delegation, shared decision and empathy (Loden, 1985). Eagly and Johnson (1990) added that women tended to adopt a more democratic or participative approach to leadership than men. Whether democratic leadership is more specific to women or not needs further investigation; however, it is safe to recommend that preparation programs should help students develop into
democratic leaders since “democratic leadership arises from research at the intersection of educational leadership, critical theory and critical multiculturalism” (Ylimaki & Jacobson, 2013, p. 15), which would help develop cultural competence as an integral part of educational leadership.

Another finding of the study was that travel abroad positively affected students’ cultural competence. The implications of this specific finding on preparation programs are substantial since adding a travel abroad program is relatively easy to do and would render immediate and positive results. There are many different formats for travel abroad programs; short term cultural-immersion programs or longer semester or year study-abroad programs. An added travel abroad component to preparation programs would provide students with an opportunity to step out of their comfort zone and grow personally and professionally. There might be some financial and logistic obstacles to adding a travel abroad element to preparation programs; another approach would be to recruit international students to the programs instead. Having international students could provide exposure to other cultures and different worldviews.

Going through preparation programs had a positive effect on the compiled construct of cultural competence, as well as on the sub-constructs of cultural beliefs and motivation, and cultural knowledge of students, but no significant effect on cultural skills. This implies that preparation programs are on the right track but need to devote more effort to developing students’ cultural skills. Developing skills take time and opportunities for practice and application. A more deliberate effort from preparation programs to develop students’ skills in general and cultural skills specifically is needed. Providing field-based experiences or internship opportunities in diverse contexts, where students can apply their cultural knowledge and become subjected to real life cultural-diversity conflicts would be a good way to develop cultural skills.
The conceptual framework which was confirmed in this study had personal attributes and experiences and preparation programs (formal education) as factors which positively affect cultural competence. It would be a plausible suggestion that formal education or training could also have a positive effect on student’s cultural competence. So adding multi-cultural training or a required course on cultural competence to preparation programs would be a suggestion for preparation programs to consider and evaluate.

**Recommendations for Future Research**

This study used the CCEL questionnaire to examine the cultural competence of students in master’s principal preparation programs and the findings indicated a positive significant relationship between going through the programs, some personal attributes and experiences, and students’ cultural competence. The results of this study point to opportunities of further research to better understand the above mentioned relationships by conducting a qualitative longitudinal study to follow the same group of students and shed more light on the findings of this study.

It might also be valuable to conduct the same study with participants from programs with no institutional membership in the UCEA to foster the further validation and development of the CCEL. Another purpose of such a study would be to determine whether there were differences in cultural competence between students in programs with UCEA institutional membership and cultural competence of students in programs with no institutional membership in the UCEA. Such a study would also be helpful in determining whether the attributes found to be related to cultural competency in this study were also found in this additional study.

Qualitative studies to look in depth at elements of preparation programs which help develop students’ cultural competence would be a logical procession from this study. The impact of using the cohort model and the effect of diversity courses on students’ cultural
competence, as well as a close examination of the internship element in educational leadership preparation programs and its effect on students’ cultural competence is lacking in the literature and are much needed.

The demographic profile of participants in preparation programs and the perception of marginalization among educational leaders who participated in this study was surprising and unexpected in many ways; some participants from dominant majorities feel marginalized, while participants from historically marginalized minorities did not feel marginalized. The issue of the impact of perception of marginalization on educational leaders is under researched and holds promise for fruitful future studies.

A final and general recommendation for research is that, because of the variability in the design, structure and delivery methods of preparation programs which added complexity and difficulty to the data collection endeavor for this study, conducting large scale research and evaluation of different aspects of preparation programs is lacking and needed. Developing a large data repository for educational leadership preparation program, to which researchers can have access, would revolutionize educational leadership research and evaluation.

**Final Thoughts and Conclusion**

The American society is rich with the variety of cultures which are manifested in multiple ways in everyday living within the United States. However, when students from different cultures are seen through the eyes of prejudice and stereotyping, this can deter their development, achievement and wellbeing. Incorporating cultural competencies within educational leadership preparation programs is necessary to develop educational leaders who are focused on social justice, multicultural diversity, and inclusion. This study was a response to the ongoing calls for leadership programs to prepare socially just leaders, and the emerging calls for
programs to prepare culturally competent leaders. Evaluating preparation programs as well as assessing students’ cultural competence and examining which personal attributes and experiences could affect the cultural competence of prospective school leaders seemed to be an essential step. This study’s main concern was to investigate what made a difference in the participants’ cultural competence? Whether going through educational leadership preparation programs made a difference in students’ cultural knowledge, beliefs and motivation, and skills. And whether having certain personal attributes and life experiences made a difference in students’ cultural competence.

The results of this study suggest that preparation programs have a positive effect on some factors of student’s cultural competence, and that students’ personal attributes and experience also have an effect on their cultural competence. These findings confirm the importance of preparation programs and offer many practical recommendations for improvement. Preparation programs need to devote more conscious effort towards the development of students’ cultural skills. Developing educational leaders’ cultural competence shifts the focus to a more interdependent approach to social justice where race, gender, socioeconomic states, religion, sexual orientation, ethnicity, national origin and their intersections are recognized, and all students are included and recognized.
REFERENCES


Jackson, B. (2001). *Exceptional and innovative programs in educational leadership*. Paper commissioned for the first meeting of the National Commission for the Advancement of Educational Leadership Preparation, Racine, WI.


Appendix A

Cultural Competence of Educational Leaders (CCEL) Questionnaire
Section I

1. In regards to cultural and social norms of students under my care, I am
   - very knowledgeable
   - knowledgeable
   - very aware
   - aware
   - not aware

2. In regards to the different religious beliefs of my students, I am
   - very knowledgeable
   - knowledgeable
   - aware
   - not aware
   - not at all aware

3. I know that an achievement gap exists in US public schools based on race, gender and Socioeconomic Status (SES).
   How large are these achievement gaps?

<table>
<thead>
<tr>
<th>How large are achievement gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>large gap</td>
</tr>
<tr>
<td>Race</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>SES</td>
</tr>
</tbody>
</table>

4. In regards to the history of oppression of marginalized students in American education, I am:
   - very knowledgeable
   - knowledgeable
   - aware
   - not aware
   - not at all aware
5. Students who belong to historically marginalized minorities are still subjected to injustices in US public education.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

6. Protecting lesbian, gay, bisexual and transgender (LGBT) students from bullying and creating a safe environment for them is my responsibility.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

Section II

7. The increase in foreign influence of immigrants threatens the US identity.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

8. The more I know about my students and their family's cultural norms, the better I can support their success.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree
9. Generally, girls can not do well in Math.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

10. Usually, parents of students from low socioeconomic status do not care about their children's academic success.
    - Strongly agree
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Strongly disagree

11. A (LGBT) teacher should be discreet about his/her private life in order to spare the school administration conflict with the community.
    - Strongly agree
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Strongly disagree

12. There are injustices in the US public education system in regards to students with special needs or disabilities.
    - Strongly agree
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Strongly disagree

Section III
13. I know how to incorporate a variety of Instructional materials and strategies in my school that are bias free and respectful of diverse groups.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

14. I know how to collaborate with parents and community members from cultures other than mine.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

15. I know how to assess students in multiple ways to accommodate the diversity of students under my care.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

16. I know how to apply disability laws within my school.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
17. I know how to use data driven (evidence informed) strategies to ensure the success of minority students and close the achievement gap.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

18. I know how to form partnerships with parents who are not native speakers of English.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

**Section IV**

19. I enjoy interacting with students, parents and colleagues from different cultures
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

20. I get frustrated with the over representation of minority students in discipline referral.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree
21. I feel deeply upset when I hear teachers or students make fun of or use offensive terms to describe LGBT individuals.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

22. I don't think it is necessary for women to still argue feminist ideas, now that they are treated equally.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

23. It is unfair when a Black student gets a White student's place in a prestigious university because of affirmative action.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

24. School leaders should set high expectations for minority and historically marginalized student.
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree
Appendix B

Auburn University Institutional Review Board (IRB) Approval
1. PROPOSED START DATE of STUDY: Feb 25, 2013

2. PROJECT TITLE: Educational Leadership preparation programs: Preparing culturally competent leaders

3. Barakat, Maya Y.  
   PRINCIPAL INVESTIGATOR  
   GTA  
   TITLE  
   EILT  
   DEPT  
   PHONE  
   AU E-MAIL  
   221 Harmon drive, Auburn, AL 36832  
   Mailing ADDRESS  
   AU E-MAIL  
   Fax  
   ALTERNATE E-MAIL

4. SOURCE OF FUNDING SUPPORT:  
   ✔ Not Applicable  
   Internal  
   External Agency:  
   Pending  
   Received

5. LIST ANY CONTRACTORS, SUB-CONTRACTORS, OTHER ENTITIES OR IRB: ASSOCIATED WITH THIS PROJECT:  
   N/A

6. GENERAL RESEARCH PROJECT CHARACTERISTICS

6A. Mandatory CITI Training

Names of key personnel who have completed CITI:

Mayas Barakat  
Ellen Reames

CITI group completed for this study:  
✔ Social/Behavioral  
Biomedical

PLEASE ATTACH TO HARD COPY ALL CITI CERTIFICATES FOR EACH KEY PERSONNEL

6B. Research Methodology

Please check all descriptors that best apply to the research methodology:

Data Sources:  
✔ New Data  
Existing Data

Will recorded data directly or indirectly identify participants:  
Yes  
✔ No

Data collection will involve the use of:  
Interview / Observation  
Physical / Physiological Measures or Specimens (see Section 6C)  
Surveys / Questionnaires  
Researcher Interactions  
Audio / Video / Photos  
Private records or files

6C. Participant Information

Please check all descriptors that apply to the participant population:

✔ Males  
✔ Females  
AU Students

Vulnerable Populations:  
Pregnant Women  
Prisoners  
Children and/or Adolescents (under age 19 in AL)

Persons with:  
Economic Disadvantages  
Physical Disabilities  
Educational Disadvantages  
Intellectual Disabilities

Do you plan to compensate your participants?  
Yes  
✔ No

Do you need IBC Approval for this study?  
Yes - BUA #  
No

6D. Risks to Participants

Please identify all risks that participants might encounter in this research:

Breach of Confidentiality  
Coercion  
Deception  
Psychological  
✔ None  
Social  
Other:

*Note that if the investigator is using or accessing confidential or identifiable data, breach of confidentiality is always a risk.

3. **FOR OHSR OFFICE USE ONLY**

DATE RECEIVED IN OHSR: 1-7-13  
DATE OF IRB REVIEW: 2-21-13  
DATE OF IRB APPROVAL: 3-21-13  
COMMENTS:  

PROTOCOL #: 0A - 32EX 1302  
APPROVAL CATEGORY: 45 CFR 46.101(b)(2)

INTERVAL FOR CONTINUING REVIEW: 3 years
7. PROJECT ASSURANCES

PROJECT TITLE: Educational Leadership preparation programs: Preparing culturally competent leaders

A. PRINCIPAL INVESTIGATOR'S ASSURANCES

1. I certify that all information provided in this application is complete and correct.
2. I understand that, as Principal Investigator, I have ultimate responsibility for the conduct of this study, the ethical performance this project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by the Auburn University IRB.
3. I certify that all individuals involved with the conduct of this project are qualified to carry out their specified roles and responsibilities and are in compliance with Auburn University policies regarding the collection and analysis of the research data.
4. I agree to comply with all Auburn policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of human subjects, including, but not limited to the following:
   a. Conducting the project by qualified personnel according to the approved protocol
   b. Implementing no changes in the approved protocol or consent form without prior approval from the Office of Human Subjects Research
   c. Obtaining the legally effective informed consent from each participant or their legally responsible representative prior to their participation in this project using only the currently approved, stamped consent form
   d. Promptly reporting significant adverse events and/or effects to the Office of Human Subjects Research in writing within 5 working days of the occurrence.
5. If I will be unavailable to direct this research personally, I will arrange for a co-investigator to assume direct responsibility in my absence. This person has been named as co-investigator in this application, or I will advise CHSR, by letter, in advance of such arrangements.
6. I agree to conduct this study only during the period approved by the Auburn University IRB.
7. I will prepare and submit a renewal request and all supporting documents to the Office of Human Subjects Research before the approval period has expired if it is necessary to continue the research project beyond the time period approved by the Auburn University IRB.
8. I will prepare and submit a final report upon completion of this research project.

My signature indicates that I have read, understand and agree to conduct this research project in accordance with the assurances listed above.

Mayssa Barakat

[Signature]
Jan 8, 2013

Printed name of Principal Investigator

B. FACULTY ADVISOR/SPONSOR'S ASSURANCES

1. By my signature as faculty advisor/sponsor on this research application, I certify that the student or guest investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
2. I certify that the project will be performed by qualified personnel according to the approved protocol using conventional or experimental methodology.
3. I agree to meet with the investigator on a regular basis to monitor study progress.
4. Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them.
5. I assure that the investigator will promptly report significant adverse events and/or effects to the CHSR in writing within 5 working days of the occurrence.
6. If I will be unavailable, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the CHSR by letter of such arrangements. If the investigator is unable to fulfill requirements for submission of renewals, modifications or the final report, I will assume that responsibility.
7. I have read the protocol submitted for this project for content, clarity, and methodology.

Ellen Reames

[Signature]
Jan 8, 2013

Printed name of Faculty Advisor / Sponsor

C. DEPARTMENT HEAD'S ASSURANCE

By my signature as department head, I certify that I will cooperate with the administration in the application and enforcement of all Auburn University policies and procedures, as well as all applicable federal, state, and local laws regarding the protection and ethical treatment of human participants by researchers in my department.

Sherry Downer

[Signature]
Jan 8, 2013

Printed name of Department Head

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8. PROJECT OVERVIEW: Prepare an abstract that includes:
(400 word maximum, in language understandable to someone who is not familiar with your area of study):

I.) A summary of relevant research findings leading to this research proposal:
(Cite sources; include a “Reference List” as Appendix A.)
II.) A brief description of the methodology,
III.) Expected and/or possible outcomes, and,
IV.) A statement regarding the potential significance of this research project.

I.) According to the National Center of Education Statistics (NCES, 2010) culturally diverse students comprise approximately 45% of public schools population as of 2009; therefore it is critical that the public education system addresses their needs (Taylor, 2010). This is not an easy tenant when eight out of ten teachers who work with these diverse students are White (NCES, 2009). This can create a „cultural mismatch“ (Honsford, Grosland & Gunn, 2011; Sirin, Roger-Sirin & Collins, 2010). Trying to diversify the teaching profession is a very important goal; however, it might not instantly eliminate such a mismatch, so the second urgent goal would be to increase educators' cultural competence (Sirin, Roger-Sirin & Collins, 2010).

Educational leadership programs carry the great responsibility for preparing school leaders to become agents of social justice in their schools and communities (American Association of Colleges for Teacher Education, 1988; Ingram & Walters, 2007; Styr& LeMire, 2009). Program evaluation and student assessment are lacking in research (Crow, Young, Murphy & Ogawa, 2009). Educational leadership programs have made isolated efforts to assess their success in preparing their candidates for leading in diverse contexts (Chan, 2006).

II.) In this study the researcher seeks to investigate, through using a quantitative cross sectional design, whether Master's students' cultural competence (as measured by a researcher developed survey) changes between students in the first semester and students in the last semester of educational leadership preparation programs at universities that are members of UCSEA. And to also explore which elements of these preparation programs (if any) have the most impact. The researcher aims to provide a snapshot of how instructional leaders' cultural competence, as measured by the Cultural competence of Educational Leaders (CCEL) survey changes for students attending Master's preparation programs. And to shed light on those elements of programs which more powerful affect that change. Through analyzing the demographic and experiential questions of the survey the researcher aims to identify the individual attributes and experiences which affect cultural competence.

III.) There is a difference in cultural competence (as measured by the researcher designed survey) between students starting Master's educational leadership preparation programs and students graduating those programs.

IV.) With this proposed study the researcher hopes to add to the ongoing efforts to build the literature on program evaluation and to specifically shed light on cultural competence preparation, predictors, and evaluation.

9. PURPOSE.
   a. Clearly state all of the objectives, goals, or aims of this project.

The purpose of this study is to investigate if there is a difference in Cultural competence between students beginning Education Leadership Master's programs and students graduating from them (as measured by a researcher developed survey). To examine if certain components of Education Leadership Master's programs predict the cultural competence of programs graduates. And to question which individual attributes and experiences are associated with cultural competence.

b. How will the results of this project be used? (e.g., Presentation? Publication? Thesis? Dissertation?)

The results of this study will fulfill the requirements of a dissertation study, may be used in journal articles, book chapters and academic presentations.
10a. KEY PERSONNEL. Describe responsibilities include information on research, training or certifications related to this project. CITI is required.
Be as specific as possible. (Attach extra page if needed) All non AU-affiliated key personnel must attach CITI certificates of completion.

Principle Investigator: Maysaa Barakat  
Dept / Affiliation: GTA  
E-mail address: myb0002@auburn.edu

Roles / Responsibilities:
Design and submit letters of participation and on-line cultural competence survey, collect, store and analyze data, report findings. ERMA 7200, ERMA 7300, ERMA 7310, ERMA 8200 & CITI Training

Individual: Ellen Reames  
Title: Assistant Professor  
Dept / Affiliation: EFLT Educational Foundations, Leadership & Technology  
E-mail address: reamseh@auburn.edu

Roles / Responsibilities:

Individual:  
Title:  
Dept / Affiliation:

Roles / Responsibilities:

Individual:  
Title:  
Dept / Affiliation:

Roles / Responsibilities:

Individual:  
Title:  
Dept / Affiliation:

Roles / Responsibilities:

11. LOCATION OF RESEARCH. List all locations where data collection will take place. (School systems, organizations, businesses, buildings and room numbers, servers for web surveys, etc.) Be as specific as possible. Attach permission letters in Appendix E.
(See sample letters at http://www.auburn.edu/research/irb/docs/sample.htm)

This study will include an online/electronic survey. Therefore the data collection will take place at the computer of choice of each participant. The survey data will be collected as anonymized. Results will be viewed and analyzed as collective group perceptions not as individuals.
12. PARTICIPANTS.
   a. Describe the participant population you have chosen for this project.
      Check here if there is existing data; describe the population from whom data was collected & include the # of data files.
      The accessible population is graduate students in educational leadership Master's programs in Universities that are members of the University Council for Educational Administration (UCEA) total of 92 Universities. http://curry.virginia.edu/uceamembership/
   
   b. Describe why this participant population is appropriate for inclusion in this research project. (Include criteria for selection.)
      Purposeful sampling, by targeting programs in Universities which are members at UCEA, I am choosing educational institutions which buy into the UCEA's purpose:
      - Promoting, sponsoring, and disseminating research on the essential problems of schooling and leadership practice;
      - Improving the preparation and professional development of educational leaders and professors; and,
      - Positively influencing local, state, and national educational policy.
      And whose programs should reflect these goals. For my research this means that their programs should have a focus on social justice and cultural relevance.
   
   c. Describe, step-by-step, all procedures you will use to recruit participants. Include in Appendix B a copy of all e-mails, flyers, advertisements, recruiting scripts, invitations, etc., that will be used to invite people to participate. (See sample documents at http://www.auburn.edu/research/vpr/cfs/sample.htm.)
      I will e-mail coordinators of target programs
      We will send a link to the electronic survey via e-mail accompanied by information letter instructions assuring anonymity to all target sample (Graduate students).
      Every participant will be given the opportunity to choose whether or not they choose to participate.
      I will send two reminders to weeks apart.

What is the minimum number of participants you need to validate the study? 100
Is there a limit on the number of participants you will recruit? □ No □ Yes – the number is □
Is there a limit on the number of participants you will include in the study? □ No □ Yes – the number is □

   d. Describe the type, amount and method of compensation and/or incentives for participants.
      (If no compensation will be given, check here ✓.)
      Select the type of compensation: □ Monetary □ Incentives
      □ Raffle or Drawing incentive (Include the chances of winning.)
      □ Extra Credit (State the value)
      □ Other
      Description:
13. PROJECT DESIGN & METHODS.

a. Describe, step-by-step, all procedures and methods that will be used to consent participants. (Check here if this is "not applicable": you are using existing data.)

The electronic survey will include an information letter which will request consent to participation and assure anonymity.

b. Describe the procedures you will use in order to address your purpose. Provide a step-by-step description of how you will carry out this research project. Include specific information about the participants' time and effort commitment. (NOTE: Use language that would be understandable to someone who is not familiar with your area of study. Without a complete description of all procedures, the Auburn University IRB will not be able to review this protocol. If additional space is needed for this section, save the information as a .PDF file and insert after page 6 of this form.)

Participants will complete the online survey and results (anonymous) will be analyzed. After completing surveys, data collected will be analyzed using ANOVA and regression analysis.
13c. List all data collection instruments used in this project, in the order they appear in Appendix C.
(e.g., surveys and questionnaires in the format that will be presented to participants, educational tests, data collection sheets, interview questions, audio/video taping methods etc.)

Cultural competence for Educational Leaders Survey will be used (researcher designed survey)
Demographic and experiential data will be collected as well as descriptive data about the participating programs.

d. Data analysis: Explain how the data will be analyzed.

Quantitative data will be analyzed using ANOVA and regression analysis
Descriptive statistic comparing means will be drawn from quantitative demographic and experiential data.

14. RISKS & DISCOMFORTS: List and describe all of the risks that participants might encounter in this research. If you are using deception in this study, please justify the use of deception and be sure to attach a copy of the debriefing form you plan to use in Appendix D. (Examples of possible risks are in section #8D on page 1.)

The study will engage willing participants only; however finding the time to respond to survey could present a minor discomfort to some students.
15. PRECAUTIONS. Identify and describe all precautions you have taken to eliminate or reduce risks as listed in 14. If the participants can be classified as a “vulnerable” population, please describe additional safeguards that you will use to assure the ethical treatment of these individuals. Provide a copy of any emergency plans/procedures and medical referral lists in Appendix D.

Participants can withdraw from the study at any point if they feel it was too demanding of their time.

If using the internet to collect data, what confidentiality or security precautions are in place to protect (or not collect) identifiable data? Include protections used during both the collection and transfer of data.
(These are likely listed on the server’s website.)

The researcher will collect data anonymously and will store data on a password secured computer.

16. BENEFITS.
   a. List all realistic direct benefits participants can expect by participating in this specific study.
      (Do not include “compensation” listed in 12d.) Check here if there are no direct benefits to participants.

      This study entails participants reflecting on their views, attitudes, motivation and skills in regards to diversity which could result in increased self awareness and reflection.

   b. List all realistic benefits for the general population that may be generated from this study.

      Once the findings of this study are publicly shared this could shed light on the importance of the ongoing development of preparation programs to prepare school leaders to become more culturally competent. It could also add to existing literature a new perspective.
17. PROTECTION OF DATA.

a. Will data be collected as anonymous? ☑ Yes ☐ No  If "YES", skip to part "g".
   ("Anonymous" means that you will not collect any identifiable data.)

b. Will data be collected as confidential? ☑ Yes ☐ No
   ("Confidential" means that you will collect and protect identifiable data.)

c. If data are collected as confidential, will the participants' data be coded or linked to identifying information?
   ☑ Yes (if so, describe how linked.) ☑ No  ☑

d. Justify your need to code participants' data or link the data with identifying information.

e. Where will code lists be stored? (Building, room number?)

f. Will data collected as "confidential" be recorded and analyzed as "anonymous"? ☑ Yes ☐ No
   (If you will maintain identifiable data, protections should have been described in #15.)

g. Describe how and where the data will be stored (e.g., hard copy, audio cassette, electronic data, etc.), and how the location where data is stored will be secured in your absence. For electronic data, describe security. If applicable, state specifically where any IRB-approved and participant-signed consent documents will be kept on campus for 3 years after the study ends.
   An electronic survey developed using Qualtrics will be used to gather data. No identifying data will be collected (direct or indirect) The researcher's computer is protected by a password.

h. Who will have access to participants' data?
   (The faculty advisor should have full access and be able to produce the data in the case of a federal or institutional audit.)
   Principal investigators will have access to all files.

i. When is the latest date that confidential data will be retained? (Check here if only anonymous data will be retained, ✓)

j. How will the confidential data be destroyed? (NOTE: Data recorded and analyzed as "anonymous" may be retained indefinitely.)
Appendix C

IRB Information Letter
For a Research Study entitled

“Education leadership preparation programs: Preparing culturally competent leaders”

You are invited to participate in a research study to determine the difference in cultural competence (as measured by a researcher designed survey) between graduate students starting Educational Leadership Master’s Programs and those graduating from the programs. The study is being conducted by Maysaa Barakat, under the direction of Dr. Ellen Reames, Dr. Fran Kochan, Dr. Lisa Kensler & Dr. Joni Lakin, Auburn University Department of Educational Foundations, Leadership and Technology. You were selected as a possible participant because you are a student in the first or last semester of an Educational leadership Master’s program, and are age 19 or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to complete an electronic survey which will take you about 20 minutes.

Are there any risks or discomforts? The risks associated with participating in this study are minimal and are limited to adding taking the survey to your schedule. However it is an electronic survey which you can complete at your convenience.

**All your responses will be kept anonymous.**

Are there any benefits to yourself or others? If you participate in this study, you can expect to reflect on your views, knowledge, motivation and skills in regards to your preparation for leadership within diverse and multicultural settings.

Will you receive compensation for participating? You will not receive any compensation for your participation.

Are there any costs? If you decide to participate, you will not incur any costs beyond your investment of time.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your decision about whether or not to participate or to stop participating will not jeopardize your future relations with
your graduate education institution, Auburn University, the Department of Educational Foundations, Leadership and Technology or the research team.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide. Information collected through your participation will be used in a dissertation study and may also be published as bases for a book chapter, journal article or presented at a professional meeting.

If you have questions about this study, please contact Maysaa Barakat at myb0002@tigermail.auburn.edu or Ellen Reames at reamseh@auburn.edu

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubject@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE Next Button

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Investigator Date

Co-Investigator Date

The Auburn University Institutional Review Board approved this document for use from XX/XX/211 TO XX/XX/2012. Protocol # XXXXX