

**Examination of Faculty Members' Multicultural Teaching Competencies
at a Four-Year Institution**

by

Sevgi Kucuktas

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Approved by

Maria M. Witte, Chair, Professor of Educational Foundations, Leadership and Technology
James E. Witte, Professor of Educational Foundations, Leadership and Technology
Leslie A. Cordie, Assistant Professor of Educational Foundation, Leadership and Technology
Joni M. Lakin, Assistant Professor of Educational Foundation, Leadership and Technology

Abstract

The demographic diversification of the student body and the cultural mismatch between the students and their educators have impacted both the academic achievement of the students and the faculty and graduate-level educators by adding complexity into their teaching and urging them to become more culturally responsive to the learning requirements of students from diverse backgrounds. The multicultural teaching competence has now become a professional imperative for faculty members in order to address diversity issues in multicultural classrooms and better serve a broader range of students from diverse backgrounds. A growing body of research has illuminated the beneficial effects of diversity and supported the need for educators to be multiculturally competent. However, not enough research has investigated higher educators' abilities to teach in a culturally competent way to provide a global education for all of the students. To address this shortcoming, the present study examined faculty members' multicultural teaching competencies at a four year public institution. The study also investigated relationships between faculty members' multicultural teaching competence and their biographical characteristics and multicultural experiences.

Using a quantitative research design, this study consisted of an online survey of 268 faculty members at a four-year higher education institution. The data was gathered through a two-part questionnaire which consisted of demographic questions about the faculty members' biographical characteristics and their multicultural experiences and the Multicultural Teaching Competence Scale (MTCS) to assess their multicultural teaching competence.

Participants of the study rated themselves as being multiculturally competent in the areas multicultural knowledge and multicultural skill. Results from the statistical analysis indicated that there was a statistically significant difference in the overall MTCS scores of faculty members based on both their number of involvements in multicultural activities and type of multicultural activities participated. A linear multiple regression analysis of the data also revealed that the number of involvements in multicultural activities and the certain academic areas of teaching made a significant, unique contribution while other areas of teaching and teaching experience made less of a unique contribution to the prediction of the perceived multicultural teaching competence of the faculty members. The findings of the study indicated that multicultural teaching competence can be learned through multicultural activities. The numbers of involvements in multicultural activities and the type of multicultural activities enhanced the multicultural teaching competence of faculty members.

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Dedication

This dissertation is dedicated to the memory of a great mother, Hatice Özbaşı, my mother and very first teacher who I miss incredibly and my father, Ali Özbaşı who taught me the value of education and hard work. Thank you both for encouraging and helping to be the kind of person I wanted to be.

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List of Abbreviations

AAUP	American Association of University Professors
ANOVA	Analysis of Variance
ICC	Intercultural Competence
IRB	Institutional Review Board
MPQ	Multicultural Personality Questionnaire
MTCI	Multicultural Teaching Competencies Inventory
MTCS	Multicultural Teaching Competence Scale
MTCS-P	Multicultural Teaching Competence Scale - Preliminary
MTK	Multicultural Teaching Knowledge
MTS	Multicultural Teaching Skill
NAME	National Association for Multicultural Education
NCATE	National Council for Accreditation of Teacher Education
NEA	National Education Association
OIRA	Office of Institutional Research and Assessment
SEVIS	Student and Exchange Visitor Information System
SPSS	Statistical Package for the Social Sciences
3C	Cross-Cultural Competence

CHAPTER I

INTRODUCTION

The United States of America has been hailed as the land of immigrants, the Great Melting Pot where cultures, languages, and religions from all across the globe come together in all facets of the American way of life. People cross oceans to be able to live the American Dream and provide better opportunities for their children. This pattern does not only characterize the previous era of Ellis Island but is an ongoing aspect of modern America. The immigrant phenomenon manifests itself among the populace in a multitude of ways including the changes it has brought about in mainstream American culture and especially the diversity it has created in the schools, workplaces, higher education institutions, and neighborhoods of America.

The United States education system has been attracting international students for decades. American colleges are still the preferred institution of choice for higher education. According to the Open Doors Report published by the The Institute of International Education (2015), the number of international students on U.S. campuses increased by ten percent to a record high of 974,926 students in the 2014-2015 academic year, confirming that the demographic diversification of the student body in higher education has become inevitable. This strong growth confirms that the United States remains the destination of choice in higher education. According to U. S. Immigration and Customs Enforcement's SEVIS by the Numbers (2015), a quarterly report on international students studying in the United States, the top 10 countries of citizenship for international students are China, India, South Korea, Saudi Arabia, Canada, Japan, Vietnam, Taiwan, Mexico and Brazil. The University of Southern California, Purdue University, Columbia

University, the University of Illinois and New York University ranked one through five among U.S. schools with the most international students. More than 10,000 international students were enrolled at each of these schools.

In this changing trend, the student body in higher education has changed greatly, “adding significant complexity to the work of teaching and obliging teachers to "differentiate" their skills in order to serve a broader range of students” (Stevens & Miretzky, 2014, p. 31). College students become increasingly culturally diverse across the last several decades (Prieto, 2012). Diversity is not about just race, class, gender, and sexual orientation. Students bring different backgrounds, sets of experiences, cultural contexts, and different world views to these classrooms. Prieto (2012) indicated that “this demographic diversification of the student body has and will continue to affect collegiate and graduate-level educators” (p. 50). Demographic changes in the student body urged faculty to learn more about students from different cultural backgrounds. Higher education faculty must possess the necessary multicultural competencies to address the diversity issues in classrooms and best serve the unique needs of diverse student population. Pratt-Johnson (2006) agreed that the need for educators to become cross-culturally competent is unquestionable. According to Banks et al. (2001), “continuing education about diversity is deemed especially important for teachers because of the increasing cultural and ethnic gap that exists between the nation’s teachers and students” (p. 197). The same scholars stated that "if teachers are to increase learning opportunities for all students, they must be knowledgeable about the social and cultural contexts of teaching and learning" (Banks et al., 2001, p. 197). Cultural competency is considered as a key factor in an effort to enable educators to be effective with students from other cultures (The National Education Association (NEA),

2015). The importance of cultural competence for educators to nurture the academic achievement of all students were endorsed by the same association as follows:

Cultural competence is having an awareness of one's own cultural identity and views about difference, and the ability to learn and build on the varying cultural and community norms of students and their families. It is the ability to understand the within-group differences that make each student unique, while celebrating the between-group variations that make our country a tapestry. This understanding informs and expands teaching practices in the culturally competent educator's classroom. Cultural competency is considered the key factor in the effort to enable educators to be effective with students from cultures other than their own. (para. 2-3)

Statement of the Problem

As a result of rapidly changing ethnic and cultural demographics of the United States, the makeup of the college student population changed over the past several decades. The issues and challenges these diverse students face changed as well. In this trend, faculty members of higher education institutions are under increased pressure to become culturally competent due in part to the growing ethnic, racial, and linguistic diversity in student body. Faculty members of higher education institutions are expected to address diversity issues in multicultural classrooms and have the multicultural teaching competencies in order to meet the academic needs of diverse student population. Educators are now obligated to know their students' cultures and work with students from different ethnicities and beliefs (D'Andrea, Daniels, & Noonan, 2003; Pratt-Johnson, 2006; Prieto, 2012). The need for cross-cultural competency of educators has been recognized and well-studied in education overall (Marina, 2004; McAllister & Irvine, 2000; Pratt-Johnson, 2006; Prieto, 2012; Spanierman et al., 2011). Even though the importance of

multicultural awareness, knowledge, and skills has been argued for preservice teachers (Ketterer, Phillips, King, & Hilber, 2009; Milner, 2006; Ming & Dukes, 2006; Skepple, 2014; Sleeter, 2001; Sue et al., 1982; Téllez, 2008), little has been done to examine multicultural teaching competencies for faculty members in higher education. Prieto (2012) agreed that “unfortunately not enough research has dealt with higher educators’ abilities to teach in a culturally competent way with an increasingly culturally diverse student body” (p. 50).

This study was designed to contribute to the body of existing research knowledge on general multicultural competence as well as to provide information about the perceived multicultural teaching competence among the faculty members. The findings of this study may be used to identify areas of multicultural teaching competence that may need improvement via training programs and/or professional development. The study also provides information and a data analysis framework to examine the relationship between faculty members’ levels of multicultural teaching competence measured by **The Multicultural Teaching Competency Scale** (MTCS) and predetermined biographical characteristics and experience variables.

Conceptual/Theoretical Framework

The current study seeks to build on previous literature to assess multicultural teaching competence based on the work of Blooms’ taxonomy and the tripartite model of multicultural counseling competence developed by Sue et al. (1982). Bloom, Englehart, Furst, Hill, and Krathwohl (1956) discussed the three types of learning domains: cognitive, affective, and psychomotor for an effective training needs assessment and measuring learning outcomes. Kirkpatrick (1994) referred to psychomotor domain of learning as behavioral learning accentuating behavioral change as a result of learning and he focused on assessing if they do it, in addition to assessing whether or not trainees can do it. Beebe, Mottet, and Roach (2004) stated

that “the cognitive domain of learning refers to trainer’s ability to understand knowledge and facts” (p. 242). It focuses on whether or not the trainer learned the material. Beebe et al. (2004) defined the affective domain of learning as changing attitudes and feelings and enhancing motivation. Did the trainee like the material being taught and found it valuable? “The affective domain of learning refers to the amount of liking, appreciation, respect, or value that a person has for something” (Beebe et al., 2004, p. 246). Teaching someone to value cultural diversity is related to affective domain. According to Beebe et al. (2004), the psychomotor domain focuses on skills and behaviors. Can the trainees do what they have been trained to do?

Similar to Bloom et al. (1956), Beebe et al. (2004), and Sue et al. (1982) highlighted three competency domains for helping professionals: multicultural awareness, knowledge and skills. Yang and Montgomery (2011) mentioned that the concept of cultural competency was first originated from the tripartite model of multicultural counseling competence developed by Sue and colleagues to benefit counselling psychologists and healthcare professionals. This study used a previously established linkage between Sue et al.’s (1982) model and multicultural teaching competency. The two-factor model of the MTCS (Spanierman et al., 2011) was utilized to measure faculty members’ self-reported multicultural teaching knowledge and multicultural teaching skills at a four-year institution. The MTCS had a multidimensional factor structure that was conceptually related to the tripartite model of multicultural competence (Sue et al., 1982) to comprehensively assess multicultural teaching competence.

Purpose of the Study

The purpose of this quantitative, descriptive study was to (a) examine the multicultural teaching competencies of faculty members with regard to their multicultural teaching knowledge and skills, and (b) to examine the relationships between multicultural teaching competence and

selected demographic and experiential characteristics of a sample of faculty members. Selected demographic and experiential characteristics of a sample of faculty members included: biographical characteristics such as age, gender, race, years of teaching experience, the name of affiliated college, level of teaching and multicultural experiences such as the number and type of multicultural activities. The incorporation of multicultural teaching knowledge as well as exploration of multicultural teaching skills are vital to the development of faculty members to work ethically and effectively with all students.

Research Questions

The present study was undertaken to address the following research questions:

1. What are the faculty members' perceptions on their knowledge levels of multicultural teaching competence?
2. What are the faculty members' perceptions of their skill levels of multicultural teaching competence?
3. What is the relationship between faculty members' multicultural teaching competence scores and multicultural experiences?
4. What is the relationship between faculty members' multicultural teaching competence scores, multicultural experiences, and demographics?

Significance of the Study

This study provides college and university level administrators, faculty members, and academicians with information and insight regarding the multicultural teaching competence of faculty members at higher education institutions. The results of this study will have implications for academic search committees, and faculty services and programs on campuses as well as the faculty members, contributing to their professional developments. The information provided by

the study can be useful to faculty members by leading them to an introspection of their own multicultural teaching competence. The findings of this study may be used to identify areas of multicultural teaching competence that may need improvement via professional development and training programs. The study also provides information and a data analysis frame work to examine the relationship between faculty members' levels of multicultural teaching competence measured by The MTCS and predetermined demographic variables. The findings of this study will contribute to the body of research knowledge that currently exists on this topic.

Limitations

1. The major limitation of this study is related to the nature of the self-report measure. The influence of social desirability bias is of particular concern when utilizing these self-report measures, especially when measuring sensitive topics such as race, ethnicity and culture (Debnam, Pas, Bottiani, Cash, & Bradshaw, 2015; Leung, Ang, & Tan, 2014). Same scholars expressed concern about these measures not accurately reflecting teachers' actual classroom behaviors because of the social desirability bias or the possibility of limited self-reflection. The participants may have selected responses that are socially acceptable.
2. One must use caution in generalizing the results of this study because of the response bias. Those faculty members who chose to participate may have had a particular interest in the research topic and may potentially be different from those who did not choose to participate. They may have interpreted the item on the instrument differently than it was intended.
3. All of the faculty members were given an opportunity to participate in this study. However, their participation was voluntary. Therefore, the participants of this study may

not represent faculty members at other institutions of higher education across the U.S.

Any assumptions, conclusions, or applications outside of this study should be made with caution.

Assumptions

The following assumptions were made when beginning this research and or when collecting information:

1. Faculty will understand the self-report instrument and their responses will be honest.
2. Faculty's responses to questions about their knowledge, and skill levels reflect their own perception of multicultural teaching competence.
3. Faculty's responses to questions about their demographic characteristics, and multicultural experiences reflect their own experiences.

Definition of Terms

Culture —Ingraham and Meyers (2000) defined culture broadly as organized set of thoughts, beliefs and norms for interaction and communication among people, which may influence cognitions, behaviors and perceptions. It may be influenced by a combination of race, ethnicity, language, socioeconomic status, age, gender, educational attainment, sexual orientation, spirituality, professional role, level of acculturation, and/or his or her frame of reference. Cultural differences may exist among individuals, communities, institutions, and/or professions.

Cultural Competence — Diller and Moule (2005) defined cultural competence as “the ability to successfully teach students who come from different cultures other than your own. It entails mastering certain personal and interpersonal awareness and sensitivities, learning specific

bodies of cultural knowledge, and mastering a set of skills that, taken together, underlie effective cross-cultural teaching” (p. 11).

Cultural Diversity — refers to array of differences that exist among groups of people with definable and unique cultural backgrounds (e.g., age, gender, sexual orientation, religion, physical ability or disability and other characteristics) that people may prefer to self-define (Arredondo et al., 1996).

Global Education —the study of cultures, institutions and interconnectedness of nations outside of the United States. Global education often is confused with multicultural education. Global education deals with issues, problems, and developments outside a particular nation, e.g., United States (Banks 1994).

Intercultural Competence —Deardorff (2004) defined intercultural competence as knowledge of others; knowledge of self; skills to interpret and relate; skills to discover and/or to interact; valuing others’ values, beliefs, and behaviors; and relativizing oneself.

Multicultural Competence — Pope, Reynolds, and Mueller (2004) define multicultural competence as the awareness, knowledge, and skills needed to work with others who are culturally different from self in meaningful, relevant, and productive ways” (p. 13).

Multicultural Awareness — “Multicultural Awareness constitutes those values, attitudes, and assumptions essential to working with students who are culturally different from a particular student affairs professional” (Pope et al., 2004, p. 14).

Multicultural Knowledge — “Multicultural Knowledge consists of the content knowledge about various cultural groups that is typically not taught in many preparation programs” (Pope et al., 2004, pp. 14-15).

Multicultural Skills — “Multicultural skills consists of those behaviors that allow us to effectively apply the multicultural awareness and knowledge we have internalized” (Pope et al., 2004, pp. 14-15).

Multicultural Teaching Competence — Multicultural teaching competence “is an iterative process in which teachers continuously (a) explore their attitudes and beliefs about multicultural issues, (b) increase their understanding of specific populations, and (c) examine the impact this awareness and knowledge has on what and how they teach as well as how they interact with students and their families” (Spanierman et al., 2011, p. 444).

Organization of the Study

Chapter I introduces the study by presenting the problem statement, the conceptual/theoretical framework, the purpose of the study, the research questions, the significance of the study, the limitations of the study, the assumptions about the study, the definition of terms, and the organizational structure of the study. Chapter II contains a review of related literature about multicultural education, culturally competent teaching in higher education, the educational benefits of diversity, the educational impact of diverse faculty and the assessment of multicultural competence. Literature review includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to the factors that contribute to the multicultural teaching competency. Chapter III addresses the research procedures employed in this study, including the sample population, instrumentation, the stages of data collection, and the data analysis. Chapter IV presents and details of the findings of this study and the examination of the data. Chapter V provides the summary of the major findings, limitations, implications, recommendations for future research and conclusions pertaining to the research topic.

CHAPTER II

LITERATURE REVIEW

Introduction

Chapter I provided the background information for this study, the statement of the research problem, the conceptual/ theoretical framework, the purpose of the study, the research questions, the significance of the study, the limitations of the study, the assumptions of the study, the definition of terms and the organizational structure of the study. Chapter II provides a review of literature and research on the demographic diversification of the student body in higher education, the definition of intercultural competence, multicultural education, culturally competent teaching in higher education, multicultural education as a component of teacher education programs, the educational benefits of diversity, disparity in academic achievement, the educational impact of diverse faculty, assessment of multicultural competence, the Sue model of cultural competencies and the information about the Multicultural Teaching Competence Scale.

The Purpose of the Study

The purpose of this quantitative, descriptive study was to (a) examine the multicultural teaching competencies of faculty members with regard to their multicultural teaching knowledge and skills, and (b) to examine the relationships between multicultural teaching competence and selected demographic and experiential characteristics of a sample of faculty members. Selected demographic and experiential characteristics of a sample of faculty members included: biographical characteristics such as age, gender, race, years of teaching experience, the name of affiliated college, level of teaching and multicultural experiences such as the number and type of

multicultural activities. The incorporation of multicultural teaching knowledge as well as exploration of multicultural teaching skills are vital to the development of faculty members to work ethically and effectively with all students.

Research Questions

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4. What is the relationship between faculty members' multicultural teaching competence scores, multicultural experiences, and demographics?

The Change in Demographics

The demographic profile of the United States is changing (Merriam, Caffarella, & Baumgartner, 2007; Shrestha & Heisler, 2011; Umbach, 2006). "The U.S. is getting bigger, older, and more diverse" (Shrestha & Heisler, 2011, p. 1). Keengwe (2010) agreed that "the number of immigrants and incoming international students have increased tremendously contributing to the growth of the nation's student diversity. There is no doubt that the demographic landscape of America has changed tremendously and will continue to be so" (p. 198). "Immigration has a significant impact on many aspects of life in the United States, from the workforce and the classroom to communities across the country" (Zong & Batalova, 2015, para.1). Furthermore, international student enrollments at 4-year institutions of higher education

have increased regularly over the last decade (Ngo & Lumadue, 2014). According to the Institute of International Education's (2015), Open Doors Report on International Educational Exchange released on November 16, 2015, the number of international students at U.S. colleges and universities had the highest rate of growth in 35 years, increasing by ten percent to a record high of 974,926 students in the 2014-2015 academic year. The Association of International Educators (2016) announced that international students studying at U.S. colleges and universities contributed \$30.5 billion and supported more than 373,000 jobs in the U.S. economy during the 2014-2015 academic year.

The immigrant phenomenon has manifested itself in a multitude of ways, including the changes it has brought to mainstream American culture and especially the diversity it has created in the schools, healthcare, workplaces, higher education institutions, and neighborhoods of America. Understanding cultures other than one's own has become necessary not just for personal improvement but also for a multitude of other reasons. American schools and institutions of higher education are currently housing the most culturally diverse group of students in the history of American education (Ameny-Dixon, 2004; DeJaeghere & Cao, 2009; Gollnick & Chinn, 2013; Hikido & Murray, 2015; Keengwe, 2010; Quaye & Harper, 2009; Spanierman et al., 2011). "As the racial composition of the US diversifies and access to secondary education for minority groups improves, more universities enroll an increasingly diverse student population" (Debnam et al., 2015, p. 1). The age and racial diversity of the typical college student have changed greatly since the 1970s (Prieto, 2012). Colleges and Universities are currently offering courses and degrees to many more international students, students of color, and adult students.

“This demographic diversification of the student body has and will continue to affect collegiate and graduate-level educators. These demographic changes in the student body create a mandate for faculty to learn more about students from non-majority cultures” (Prieto, 2012, p. 50). According to Marina (2004), these demographic implications strongly suggest that many American universities will undergo a transformation. Chisholm (1994) acknowledged the value of diversity early on and implied the need to prepare teachers for diversity in classrooms by stating that:

The nature of our national composition demands the multicultural preparation of teachers. Our nation is not a melting pot wherein human diversity fuses into a uniform America. On the contrary, ours is a mosaic of vibrant, diverse colors in which a cultural medley forms a variegated whole called the American culture. Within this national mosaic, each component culture retains its uniqueness while adding to the composition of the whole. (p. 43)

“As colleges and universities have recognized and responded to these trends, their mission statements have undergone a process of rather dramatic transformation” (Milem, 2003, p. 1). Once not a remarkable feature, diversity now embellishes college marketing materials and mission statements (Osei-Kofi, Torres, & Lui, 2013). As Cole (1994), noted, the main responsibility of institutions of higher education is to train students to function more effectively in our integrated world system. Institutions attempt to prepare college graduates to function effectively in a diverse society by providing an appropriate education. Hurtado (2001) admitted that sustaining this responsibility will require college and university decision makers’ realization of diversity as a prerequisite for such education. Deardorff (2011a) contended that “this brings intercultural competence and diversity to the fore of what needs to be addressed within students

learning” (p. 65). Prieto (2012) confirmed regrettably that “not enough research has dealt with higher educators’ abilities to teach in a culturally competent way with an increasingly culturally diverse student body” (p. 50).

“Intercultural competence development is playing, and will continue to play, an ever-increasing role in the future, given the growing diversity of American society” (Deardorff, 2011a, p. 65). Many colleges today have already recognized diversity as “an educational policy or goal that is consistent with the overall objectives of the institution to equip graduates with the appropriate technical skills, human relation skills, and ways of thinking that will be useful in a complex and diverse society” (Hurtado, 2001, p. 188). Similarly, Hikido and Murray (2015) pointed out that higher education institutions have increasingly declared their commitment to all students regardless of their cultural or ethnic backgrounds, encouraged the establishment of cultural centers and ethnic organizations, and included a diversity course requirement. (Hikido & Murray, 2015) also asserted that “students encounter an organic, compositional diversity accompanied by a commoditized and institutionally sanctioned diversity ideal” (p. 2).

In this changing landscape, it is now necessary for the skills and competencies of helping professionals such as school psychologists, student affair professionals, future educators, therapists, counselors and health professionals to grow and change in order to effectively address the unique needs of a heterogeneous population. Clearly, it is becoming more significant that tomorrow’s teachers be prepared to deal responsibly with the needs of a diverse student body and the challenges raised by diversity in classrooms (Villegas & Lucas, 2002). Many scholars (Ameny-Dixon, 2004; Marina, 2004; Miranda, 2002; Pratt-Johnson, 2006; Yang & Montgomery, 2011) agreed that the need for educators to become cross-culturally competent was vital in order to meet the requirements of increasingly culturally diverse classrooms. It is no longer merely a

choice for educators to know how to address diversity in multicultural classrooms: it has become a de-facto requirement.

Lee and Janda (2006) emphasized that “the faculty of formerly predominantly White colleges throughout the country have become more diverse and it is no longer unusual to find either foreign-born or minority professors in most departments” (p. 27). As a result, promoting the development of intercultural awareness and competency became crucial for colleges and universities (Harper & Antonio, 2008). Specific core multicultural competencies for higher education still have not been specified, despite the fact that their importance and necessity has been realized (Marina, 2004). In the foreword statement of *The Sage Handbook of Intercultural Competence* by Darla K. Deardorff (2009), Derek Bok of Harvard University emphasized the need for multicultural competence in educators and educational institutions:

Nowhere is this need felt more keenly than in educational institutions, which must play a central role in helping prepare younger generations for the cosmopolitan world that awaits them, a world in which they are bound to interaction with foreign nationals and different ethnic groups and feel the influence of different values and cultures on a scale unequalled in previous generations. (p. x)

Defining Intercultural Competence

The current lack of conceptual consensus for cultural competence was recognized by many scholars in the field. Deardorff (2011b) admitted that “there is no consensus on the terminology of intercultural competence” (p. 65), confirming the complexity of the issue of defining intercultural competence, even though consensus on 22 dimensions of intercultural competence was reported early on (Deardorff, 2006). Knight (2012) defined intercultural competence as an important outcome of internationalization efforts in higher education. Fantini

(2009) referred to a variety of terms within the literature to describe this concept, such as multicultural competence, cross-cultural awareness, global competence, and intercultural sensitivity. The term intercultural competence and intercultural communication awareness are used interchangeably to refer to the same concept (Krajewski, 2011). Deardorff (2009) mentioned certain constructs such as “understanding of both cultural general and cultural specific knowledge, psychological differentiation, categorization width or the ability to expand or broaden how information is construed, openness, and respect in the form of transcultural ethnic validity” (p. 312).

Deardorff (2011b) mentioned more than five decades of significant effort in developing the concept of intercultural competence. Each discipline chose to use one of the above terms to refer to the concept of intercultural competence. The term cultural competence is used by those in social work while those in the engineering field prefer to use global competence. The term multicultural competence is preferred by researchers in the diversity field. Even though there are many different terms, there seems to be a general consensus on the overall definition of multicultural competency among different scholars reflecting standpoints of specific disciplines or outlooks of different professional organizations.

Howard (2010) defined cultural competence in a broader sense that can be applied to various cross-cultural situations. In his view, cultural competence is a set of behaviors, attitudes, and policies that allow for effective work in cross-cultural situations. He pointed out five key concepts of cultural competence: (1) valuing diversity, (2) conducting ongoing assessment, (3) managing the dynamics of difference, (4) willingness to acquire cultural knowledge, and (5) ability to adapt to diversity. Ameny-Dixon (2004) defined multicultural competence as a process:

...in which a person develops competencies in multiple ways of perceiving, evaluating, believing, and solving problems. The purpose is to focus on understanding and learning to negotiate cultural diversity among nations as well as within a single nation by becoming aware of one's own perspectives as well as becoming conscious of other cultural perspectives as a foundation of informed cross-cultural interaction. (p.6)

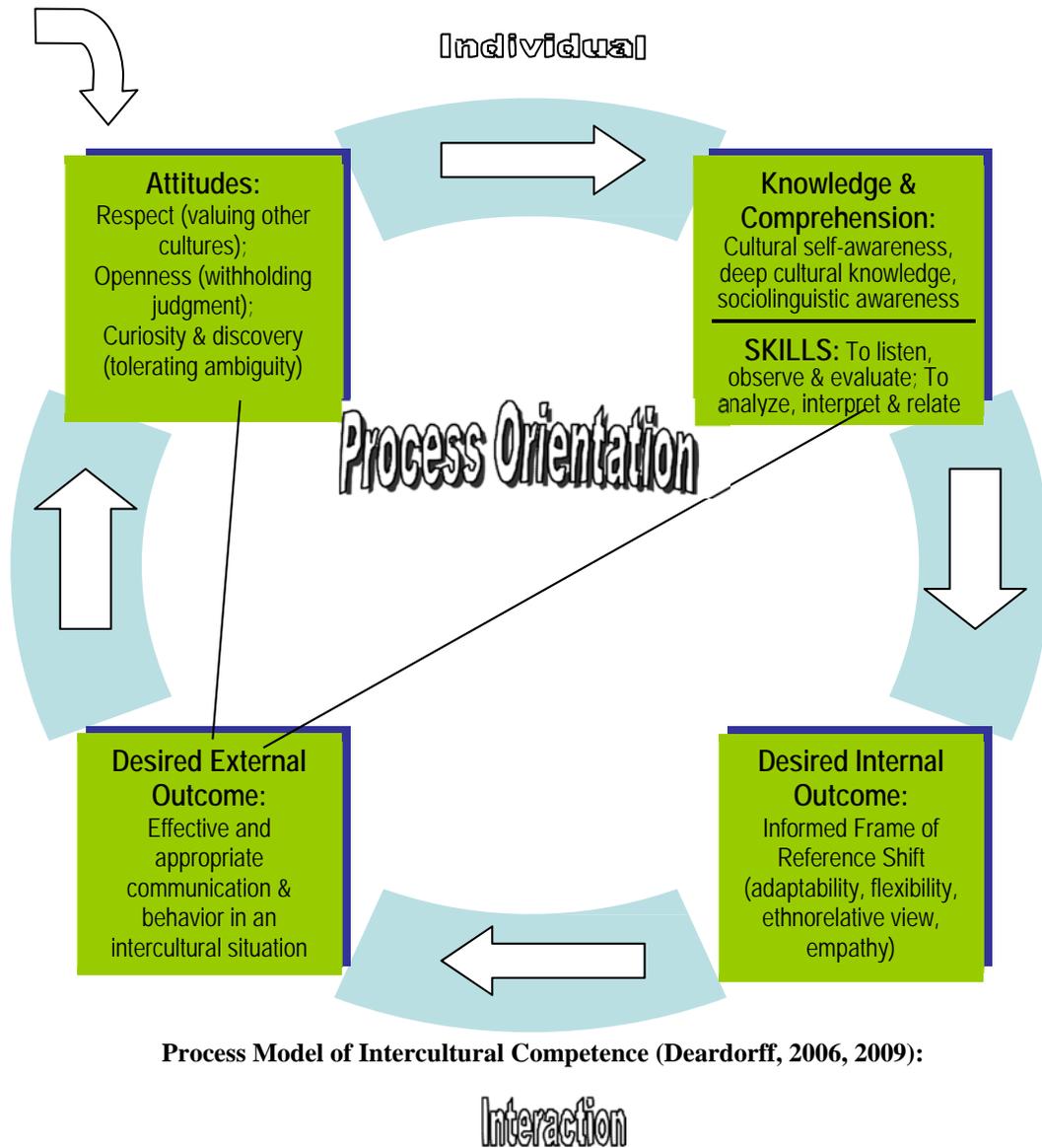
The National Association for Multicultural Education (NAME) (2015) defines cultural competence in educational context as the educators' ability to successfully teach all of the students regardless of their cultural backgrounds. Cultural competence in the classroom includes knowledge of students' cultures, awareness, and ability to adapt to different learning styles, all the while valuing diversity and allowing students to maintain their own identity. Pope et al. (2004) defined multicultural competence as "the awareness, knowledge, and skills needed to work with others who are culturally different from self in meaningful, relevant, and productive ways" (p.13). Deardorff's (2009) definition brought out the importance of seeing from each other's perspective as a key aspect of intercultural competence, referring to the inclusion and understanding of other cultural perspectives as a way of comprehending what it means to relate successfully with individuals from different cultures.

Deardorff (2006) developed the following model (Figure 1) that lent itself to the assessment of intercultural competence and emphasized the lifelong process of developing multicultural competency.

INTERCULTURAL COMPETENCE MODEL

From “The Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United States”

by Dr. Darla K. Deardorff in *Journal of Studies in International Education*, Fall 2006, 10, p. 241-266 and in the *SAGE Handbook of Intercultural Competence*, 2009 (Thousand Oaks: Sage)



Process Model of Intercultural Competence (Deardorff, 2006, 2009):

Notes:

- Begin with attitudes; Move from individual level (attitudes) to interaction level (outcomes)
- Degree of intercultural competence depends on acquired degree of attitudes, knowledge/ comprehension, and skills

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Figure 1. Deardorff's (2006) Intercultural Competence Model

Deardorff (2011b) mentioned several key points in this model that can help in the assessment of intercultural competence:

1. Intercultural competence development is an ongoing process, making it important to assess the development of individuals' intercultural competence over time, possibly throughout targeted interventions.
2. Critical-thinking skills is deemed important for individual's ability to acquire and evaluate knowledge, meaning that "critical-thinking assessment could also be an appropriate part of intercultural competence assessment
3. Attitudes such as respect, openness, and curiosity serve as the basis of this model and have an impact on all other aspects of intercultural competence. Addressing attitudinal assessment becomes an important consideration
4. Assessing global perspective becomes an important consideration, meaning that being culturally competent is not only having the ability to see from others' perspectives, but also having the ability to understand other worldviews. (p. 68)

According to Deardorff's (2006) research-based model above, intercultural competence is about behaving appropriately and communicating effectively in cross-cultural situations.

Deardorff (2011a) also asserted that cultural competence assessments should consider more than mere surface-level awareness or knowledge about other nations. Rather it should search for the skills necessary for the development of intercultural thinking, which will lead to appropriate behavior and navigation in cross-cultural situations.

Lester (1998) agreed that developing cultural competence is a process of learning to work with people from diverse cultural backgrounds, using interpersonal communication, relationship skills, and behavioral flexibility (as cited in Rew, Becker, Cookston, Khosropour, & Martinez,

2003). Therefore, cultural competence can be defined as consisting of the following four components:

- Cultural awareness (i.e., the affective dimension)
- Cultural sensitivity(i.e., the attitudinal dimension)
- Cultural knowledge (i.e., the cognitive dimension)
- Cultural skills (i.e., the behavioral dimension)

Based on the above definitions and other definitions, Gregersen-Hermans and Pusch (2012) stated that intercultural competence:

- a) requires a combination of specific knowledge, skills, and attitudes that lead to successful interactions;
- b) is developmental in nature (Bennett, 1998), which means individuals and organizations may progress from a more ethnocentric world-view toward a more global mind-set; and
- c) requires a process of learning. To progress in their ability to handle intercultural incidents, participants need to go through several cycles of learning that include actual experience, reflection, conceptualization, and experimentation (Kolb, 1984).
(pp. 23-24)

The fact that the development of cultural competence is a gradual, ongoing process has been acknowledged by several scholars (Berardo & Deardorff, 2012; Deardorff, 2011a, 2011b; Pratt-Johnson, 2006). Educators become culturally competent over time. The developing of certain personal and interpersonal awareness, the understanding of certain bodies of cultural knowledge, and mastering a set of skills are required for effective, culturally responsive teaching (NEA, 2015). Furthermore, Berardo and Deardorff (2012) stated that the development of cultural

competence and the acquisition of key intercultural skills does not just happen unintentionally. “Rather, this cultural competence must be intentionally developed over time through effective learning experiences” (Berardo & Deardorff, 2012, p. 1). However, it should be noted that learning from experience requires more than just being in the vicinity of individuals from different backgrounds. Pratt-Johnson (2006) agreed that cultural competence is a gradual process achieved only after many observations, experiences, and interactions in the classroom. Deardorff (2011a) similarly contended that “intercultural competence development is an ongoing process, and thus it becomes important for individuals to be given opportunities to reflect on and assess the development of their own intercultural competence over time” (p. 68). Intercultural competence does not occur naturally, so special attention must be given to the development process curricular and co-curricular efforts (Deardorff, 2008). Bennett (2012) came up with the idea that intercultural learning is a combination of the experience and cultural mentors to support the intercultural learning. On the other hand, the same author questioned experiential learning as an only way to achieve intercultural competence and pointed out the importance of transformative learning happening readily when a qualified facilitator is present.

Howard (2010) deemed cultural competence important because cultural differences between educators and students contribute to poor academic performance and cultural competence is essential for earning the trust of students and making them feel safe and comfortable in schools.

Multicultural Education

The NAME (2015) affirmed numerous definitions of multicultural education espoused by scholars, researchers and organizations over the past 30 years. In addition, an existing plethora of terminology was reported in education such as multicultural education, global or international

education, peace education and culturally relevant or responsive education (Cushner & Mahon, 2009), but the same scholars admitted that “multicultural education is by far the most prevalent” (p. 305).

Scholars described multicultural education differently, emphasizing different perspectives and unique standpoints of specific disciplines. For example, according to Sleeter and Grant (1987), multicultural education referred to changes in education that are supposed to benefit people of color. (Banks, 2001; Banks et al., 2001) definition related to multicultural education as a transformative movement that produced critical thinking and socially active members of society and not simply a change of curriculum in schools. However, Bennett (1999) stated that “multicultural education is an approach to teaching and learning that...is based on the assumption that the primary goal of public education is to foster the intellectual, social, and personal development of virtually all students to their highest potential” (p. 11). Later, Bennett (2003) described multicultural education as including the need to provide educational excellence for all students. Gay (2000) defined culturally responsive teaching as;

... using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them. It teaches to and through the strengths of these students... it builds bridges of meaningfulness between home and school experiences as well as between academic abstractions and lived sociocultural realities; it uses a wide variety of instructional strategies that are connected to different learning styles; it incorporates multicultural information, resources, and materials in all the subjects and skills routinely taught in schools. (p. 29)

Halvorsen and Wilson (2010) and Schugurensky (2011) considered multicultural education an area of study with the goal of helping all students develop the knowledge and skills necessary to participate effectively in a democratic society. On the same note, Gorski (2010) agreed with previous scholars by asserting that multicultural education is designed to develop citizens of a democratic society. According to these scholars multicultural education reduced ethnocentric attitudes and stereotypes by creating equal education opportunities for all students regardless of racial, ethnic, class, and cultural backgrounds, effectively relating social issues of race, ethnicity, and culture to the educational process.

The NAME (2015) fostered multicultural education as a foundational knowledge in an increasingly globalized community. In other words, multicultural education promotes equity for all regardless of culture, ethnicity, race, class, language, age, gender, sexual orientation, disabilities, or religion. Ameny-Dixon (2004) adverted to multicultural education as “an approach to teaching and learning that is based on democratic values that affirm cultural pluralism within culturally diverse societies in an interdependent world” (p. 1) and listed the previously identified long-term benefits of multicultural education as follows:

1. Multicultural education increases productivity because a variety of mental resources are available for completing the same tasks and it promotes cognitive and moral growth among all people.
2. Multicultural education increases creative problem-solving skills through the different perspectives applied to same problems to reach solutions.
3. Multicultural education increases positive relationships through achievement of common goals, respect, appreciation, and commitment to equality among the intellectuals at institutions of higher education.

4. Multicultural education decreases stereotyping and prejudice through direct contact and interactions among diverse individuals.

5. Multicultural education renews vitality of society through the richness of the different cultures of its members and fosters development of a broader and more sophisticated view of the world. (p.2)

Global Perspective of Multicultural Education

Widespread cultural competence does not just make for a better domestic sphere, it also increases overall competence on a more global scale. This is crucial if students are to successfully integrate into a modern, globalized world. According to Banks (2001), citizens in this century need the knowledge, attitudes, and skills required to function in their cultural communities as well as beyond their cultural borders. Banks (2001) suggested altering citizenship education “in substantial ways to prepare students to function effectively in the 21st century” (p. 6). Culturally diverse students and faculty in higher education also lead to “the application of the core principles of the global perspective of multicultural education in the teaching and learning practices among diverse populations at these institutions” (Ameny-Dixon, 2004, p. 8). Embracing the global perspectives of multicultural education ought to be considered the duty of colleges and universities (Locks, Hurtado, Bowman, & Oseguera, 2008). Ameny-Dixon (2004) called for four major interactive principles of the global perspective of multicultural education: multicultural competence, curriculum reform, equity pedagogy, and teaching for social justice. Thus, institutions of higher education can fully benefit from multicultural education and “also become pillars for academic excellence, models for democratic pluralistic societies, and attractions for international economic and human resources as they

promote good human relations within their own nation and with other nations in today's increasingly interdependent world" (Ameny-Dixon, 2004, p. 11).

Culturally Competent Teaching in Higher Education

Multicultural competence does not occur naturally at institutions. Deliberate curricular and co-curricular efforts are needed to address this issue (Deardorff, 2008). In order to foster the growth of multicultural competence, more comprehensive and integrated approaches are suggested as opposed to random, natural progressions that take place spontaneously. Some scholar suggested that intentional development of intercultural competence should start at the post-secondary level for domestic and international students through various programs, orientations, experiences, and courses. Efforts to ensure more comprehensive and integrated approaches to develop intercultural competence in students, as suggested by Deardorff (2008) supported the significance of having both culturally competent educators and culturally competent teaching in higher education. As a result, the professoriate has begun to respond to the call for educators to become more culturally responsive to the learning requirements of their increasingly diverse students (Prieto et al., 2009). This highlighted interest in multiculturalism in higher education prompted universities and colleges to recruit faculty with diverse cultural backgrounds in order to increase the racial, ethnic, and linguistic diversity among professors (Lee & Janda, 2006).

Culturally competent teaching can be summarized as blending academic knowledge and skills within the particular cultural frameworks of students for the purpose of improving their learning experience (Gay, 2000). This definition entails the building of diversity awareness, developing a knowledge base about cultural diversity, acquiring communication skills, and

responding relevantly to diverse students. More particularly, Spanierman et al. (2011) defined multicultural teaching competency as following:

...an iterative process in which teachers continuously (a) increase their attitudes and beliefs about multicultural issues, (b) increase their understanding of specific populations, and (c) examine the impact this awareness and knowledge has on what and how they teach as well as how they interact with students and their families. This dynamic process involves complex interaction among micro-level systems or proximal factors (e.g., teachers and other educational personnel, students and their families, and so forth) and macro-level systems or more distal factors (e.g., political economy, race relations, public policy, and so forth). (p. 444)

Schuerholz-Lehr (2007) reported that a large number of studies have examined the impact of several factors on the level of faculty's intercultural competence and/or world-mindedness. However, it is still a challenge for researchers to determine how levels of intercultural competence and world-mindedness among faculty translate into culturally appropriate teaching approach in higher education. Johnson and Inoue's (2003) revealed a prevalent pattern of willingness and openness among many faculty members to the idea of diversity and multiculturalism. Despite this, many still struggle to devise proper strategies to effectively incorporate those attitudes into their teaching and classrooms. Although the majority of participants in this study ranked high on knowledge and awareness about issues of multiculturalism and diversity, a significant number reported that they rarely incorporate multicultural instructional materials in their teaching.

Schuerholz-Lehr (2007) referred to an international survey of 20,000 academic staff in 14 countries conducted by the Carnegie Foundation for the Advancement of Teaching to investigate

several indicators of internationalization. This study indicated a pattern of active discrimination against faculty women with respect to opportunities to travel and study abroad. More faculty members in the fields of computer science, physics, humanities, and social sciences gained their highest degree internationally than their counterparts in business, health, technical fields, and education. According to the same study, senior academic staff were more likely to be internationally minded than those with less international experience, and faculty members with an international background favored research over teaching in terms of their primary academic interest. This shows that those with international experience are not the ones teaching in the classrooms.

Schuerholz-Lehr (2007) cited Khishtan's (1990), Helms' (2004), and Hosseinali's (1995) studies on cultural competence and world-mindedness among university faculty in the United States. Khishtan's (1990) study included 485 full-time faculty members from the schools of education, engineering, and business administration at three U.S. institutions. He collected data on the participants' personal and professional backgrounds including travel abroad, study abroad, employment in foreign countries, participation in international conferences, their use of teaching to convey the concept of world-mindedness, educational background, major field of study, teaching experience, age, and academic area. To measure world-mindedness in faculty, Khishtan (1990) utilized Sampson and Smith's scale (the World-Mindedness Scale), which assesses participants on religion, immigration, government, economics, patriotism, race, education, and war. Khishtan (1990) found that the faculty with the most positive attitudes toward world-mindedness were frequently those who had traveled abroad, been employed in foreign countries, and participated in international conferences.

Helms (2004) investigated levels of cultural sensitivity and exhibition of cultural competence among faculty at three U.S. liberal arts institutions. Nationality/ethnic background, gender, age, educational level, graduate professional preparation, work and life experiences, cultural awareness, contact with persons from various cultures, and location during formative years were used as independent variables. In this study, both the multicultural competence questionnaire for a qualitative perspective through eight open-ended questions and the intercultural development inventory were used. Helms (2004) reported that coursework and immersion in other cultures have the greatest impact on the development of intercultural competence during graduate professional preparation. According to study results, travel was the most prevalent response with respect to faculty's enhancement of their level of intercultural competence. Participants also identified living in another country as having a considerable impact on one's own cultural perspectives. Helms (2004) concluded that "no faculty in any particular discipline demonstrated greater intercultural sensitivity, thereby the potential to exercise greater cultural competence" (p. 107). Congruent with Helm's (2004) findings, "high levels of personal capacity and experiences with other cultures and languages apparently do not automatically provide faculty with the competence to carry out the intellectual processes necessary to deliver interculturally sensitive/competent curricula" (Schuerholz-Lehr, 2007, p. 193). According to Green and Olson (2008), for faculty to apply such knowledge and international experiences to their teaching requires a mindset or an intentional effort because faculty might not see the immediate connections and relevance between their international experiences and their teaching practice.

Hosseinali (1995) used both Sampson and Smith's World-Mindedness Scale as well as the Acceptance of Global Education Scale. This study included 48 respondents from the College

of Education at the University of Arkansas. In this study, gender, teaching experience abroad, and living outside the United States were all found to be significant predictors of world-mindedness. All professors who were interviewed expressed that travel had affected their teaching style. They adopted different pedagogic approaches in the classroom that they would not have thought to apply if they had not had the experience of interacting with people abroad.

Another study by Olson and Kroeger (2001) using Bennett (1993) developmental model of intercultural sensitivity was conducted among 52 New Jersey City University faculty and staff. The study examined the relationships between the participants' training and experiences and their levels of global competence and intercultural sensitivity. Olson and Kroeger (2001) found that (1) speaking one or more languages other than English with advanced proficiency increases the likelihood that someone will be globally competent, and that (2) substantive experience abroad increases the likelihood that someone will have more developed intercultural communication skills.

Multicultural Education as a Component of Teacher Preparation Programs

Educational institutions across the U.S. are serving increasingly diverse students and the need for future teachers to understand how to work with diverse groups is inevitable. Given that teachers have the responsibility of ensuring that all of the students have an equal opportunity to achieve to the best of their ability, they should be prepared to provide quality education for all of the students. Unfortunately, "cultural diversity poses a pedagogical and social challenge to educators." (Chisholm, 1994, p. 43). The need for teachers to be culturally responsive and competent has been discussed by Pratt-Johnson (2006) as schools and classrooms become increasingly culturally diverse. McAllister and Irvine (2000) pointed out the support teachers need "as they face the challenge of effectively teaching diverse students in their classrooms" (p.

3). As Chisholm (1994) stated, preservice multicultural education should be a necessity, not just an individual preference, curricular appendage, or pedagogical whim. Skepple (2014) adhered to the fact that “teacher education programs have a growing responsibility to prepare teachers for working with culturally and linguistically diverse students” (p. 57). Teacher education programs are deemed successful in preparing culturally competent teachers if they (a) facilitate increased cultural self-awareness, (b) cultivate appreciation of diversity, (c) increase cultural competency, and (d) prepare teachers to work effectively with a variety of students and parents (Chisholm, 1994).

Despite the fact that diversity in public schools in the United States continues to increase and today’s classrooms require teachers to teach students with different heritages (Gollnick & Chinn, 2002), the teaching force is becoming less diverse (Nieto & Bode, 2011) and the population of prospective teachers remains predominantly White, non-Hispanic and female (Saluja, Early, & Clifford, 2002). On top of this disparity, many teachers also begin their career without the requisite competencies to “provide students with skills to succeed in an increasingly culturally diverse world” (Cushner & Mahon, 2009, p. 307). They are struggling to teach students with backgrounds different from their own (Sadker, Sadker, & Zittleman, 2008).

Contrary to the increasing cultural, racial, and ethnic diversity in American classrooms, many education students have little to no exposure to people of other cultures (Chisholm, 1994). Gay (2002) admitted that “too many teachers are inadequately prepared to teach ethnically diverse students” (p. 106). Supportively, Ladson-Billings (2001) agreed on the notion that many preservice teachers who wished to teach in diverse racial, ethnic, and socioeconomic settings were unprepared for the cultural diversity in those schools. Keengwe (2010) suggested that most teacher education faculty are ill prepared to train preservice teachers for the challenges of

twenty-first century diversity. As Howard (1999) so readily stated, “We can’t teach what we don’t know” referring to the knowledge of both student populations and subject matter. Despite the growing numbers of students of color and their disproportionately poor performance, some professional programs are still hesitant about including multicultural education (Gay, 2002).

Cushner and Mahon (2009) described the adversity of developing intercultural competence in young people with teachers and teacher educators who have not attained the necessary knowledge and skills of multicultural competence themselves. Noordhoff and Kleinfeld (1993) examined issues in teaching culturally diverse students and noted the insufficiency of any standard approach to multicultural teacher education. An alternative approach to preparing teachers for multicultural classrooms was teachers’ “attending to multicultural classroom and community context, designing instruction to make connections between academic subject matter and diverse students’ backgrounds, and learning how to learn from students, communities and practical experience” (p. 27).

According to Kena et al. (2015), educators both in elementary and secondary schools and degree-granting institutions are not diversifying at the same rate as student populations. Out of 3.1 million elementary and secondary teachers in public schools, 82 percent are White, while only 18 percent of teachers belong to black, Hispanic or other racial and ethnic groups. Similarly, out of 791,391 full-time faculty in degree granting post-secondary institutions, 89% are White, while 21% belong to other race and ethnicity groups. Consequently, the cultural mismatch between students’ increasing diversity and educators’ backgrounds and perspectives could significantly impact student achievement (Au, 1993).

Many researchers in the past several decades have been concerned with the academic achievement gap among low income students and students of color (Au, 1993; Gay, 2002).

Skepple (2014) recognized scholars' current efforts to examine ways that teaching can better match the home and community cultures of students of color who have previously not had academic success in schools.

Ming and Dukes (2006) agreed on "the mismatch between culturally and linguistically diverse students and the teachers who teach them in schools today" (p. 47). The same scholars indicated the current demographic characteristics of schools which demanded that educators be culturally competent in order to understand and appropriately interact with students from diverse cultural backgrounds. The recent increase in diverse student populations lead to the mismatch between the cultural backgrounds of the teaching force and the students they serve, which in turn was a factor in the achievement gaps between Caucasian and minority groups (Barakat, 2014; Garmon, 2004; Ming & Dukes, 2006). For all those reasons, multicultural education is frequently cited as an answer to mitigate the achievement gap and promote the success of all students. That is why multicultural education has been an important component of teacher preparation programs in the U.S. for nearly four decades to address the need for teachers to be culturally competent (Gay, 2002, 2005; Gay & Howard, 2000; Seeberg & Minick, 2012; Yang & Montgomery, 2011).

Townsend (2002) argued for "mandatory teacher certification in culturally responsive pedagogy" (p. 727). Olstad, Foster, and Wyman Jr (1984) pointed out the importance of preparing teachers for the reality of a pluralistic society. On the other hand, Cushner and Mahon (2009) cautioned scholars against the lack of interdisciplinary structure in most teacher education programs in the Unites States to properly prepare teachers to address intercultural concepts. McAllister and Irvine (2000) were similarly concerned that existing teacher training and professional development models do not develop the type of cross-cultural competence deemed essential for teachers of diverse students. To improve the effectiveness of multicultural

education, Banks (2004) suggested that preservice teachers need to achieve cultural competence that is composed of content integration, knowledge construction process, prejudice reduction, equity pedagogy, and empowering school culture and social structure. Content integration refers to the extent teachers incorporate diversity issues in their subject areas or disciplines. This step is essentially important since too many teachers and teacher educators think that their subject (particularly math and science) is incompatible with cultural diversity (Gay, 2002). The knowledge construction process points out a need for preservice teachers themselves to learn and help students to understand how knowledge is constructed within academic biases and perspectives, consequently reducing prejudice toward diverse groups. Equity pedagogy is what encourages preservice teachers to modify their teaching methods to ensure that all of the students can learn. Preservice teachers who acquired cultural competence to this satisfactory level are ready to empower school culture and social structure, namely by contributing to help transform schools and society to achieve educational equity. Based on Banks' (2004) model, (Yang & Montgomery, 2011) examined two primary components of cultural competence, knowledge and praxis of 600 students from two universities in the Midwest U.S. The research results revealed that preservice teachers may actually acquire the knowledge of diversity and multicultural issues, but fail to apply this component to their curriculum or pedagogy.

Ming and Dukes (2006) cited that Banks (2001) and Banks et al. (2001) defined the purpose of multicultural education in threefold:

- (1) prepare all students for the responsibility of citizenship, (2) prepare all students for the responsibility of citizenship by valuing and considering the cultural background of all students in the learning process, and (3) reform schools to ensure all students, regardless

of background (e.g., race, ethnicity, gender, socioeconomic status, etc.) will experience educational success. (p. 42)

The task of delivering multicultural education belongs to faculty. Faculty members' awareness of their own cultures and knowing their students and their needs played an important role on how well the delivery of multicultural education was carried out. Thus, Marchesani and Adams (1992) suggested the following four dimensions of multicultural education: (1) awareness of one's cultural background and experiences that play role in forming beliefs, attitudes, and behaviors, (2) knowledge and understanding of how students from different cultural or ethnic backgrounds may experience the classroom differently, (3) incorporation of diverse cultural and social perspectives in the curriculum, and (4) use of a variety of teaching methods to more effectively accommodate learning styles of students from different backgrounds. Similarly, Gay (2010) suggested that in preparing teacher candidates to effectively teach students from culturally diverse backgrounds, teacher education programs should (1) transform pre-service teacher candidates' multicultural attitudes, (2) increase their culturally diverse knowledge base, and (3) equip them with the skills needed to effectively teach culturally diverse students.

The National Council for Accreditation of Teacher Education (2008) provided Standard 4 addressing the essential requirements regarding diversity in classrooms:

The unit designs, implements, and evaluates curriculum and experiences for candidates to acquire and apply the knowledge, skills, and dispositions necessary to help all students learn. These experiences include working with diverse higher education and school faculty, diverse candidates, and diverse students in P-12 schools. (p. 12)

Cushner and Mahon (2009) contended that because of these standards, states require teacher education programs to have a diversity component. However, Peterman (2005) argued

that none of the NCATE standards were extensive enough to ensure that teachers would be competent enough to meet the needs of students from culturally diverse backgrounds. At the same time, many teacher programs were facing challenges in better preparing preservice teacher to respond to the diversity in the classrooms (Jones, 2004). Consequently, “there is growing pressure on teacher educators to provide diversity experiences for their students to help them develop cultural skills as well as cultural knowledge and understanding of similarities and differences between/ among cultures” (Keengwe, 2010, p. 197).

The educational benefits of teacher cultural competence have been well documented (Au & Kawakami, 1994; Ladson-Billings, 2009) and preparing culturally responsive teachers is deemed urgent in teacher education (Villegas & Lucas, 2002). Ameny-Dixon (2004) listed many scholars (Banks, 2009; Clark & Gorski, 2002; Duhon, Mundy, Leder, LeBert, & Ameny-Dixon, 2002; Gollnick & Chinn, 2002; Larson & Ovando, 2001) who identified several long-term benefits of the global perspective of multicultural education. These long-term benefits are listed as follows:

1. Multicultural education increases productivity because a variety of mental resources are available for completing the same tasks. It promotes cognitive and moral growth among all people.
2. Multicultural education increases creative problem-solving skills through using different perspectives applied to the same problems to reach solutions.
3. Multicultural education increases positive relationships through achievement of common goals, respect, appreciation, and commitment to equality. This may be especially the case among the intellectuals at institutions of higher education.
4. Multicultural education decreases stereotyping and prejudice through direct contact

and interactions among diverse individuals.

5. Multicultural education renews vitality of a society through the richness of the different cultures of its members. It fosters development of a broader and more sophisticated view of the world. (p. 2)

The focus on cultural diversity is essential in dealing with various misconceptions that preservice teachers might possess about minorities (Vaughan, 2005). For example, a teacher's lower expectations for a particular set of students may influence student achievement in a negative way. Furthermore, the focus on cultural diversity also helps students to develop the ability to communicate with and relate to others from diverse backgrounds (Keengwe, 2010). When teachers are unaware of or simply ignore the development of different cultural expressions, conflicts can occur which may lead to student academic stagnation (Nieto & Bode, 2011). Further, the students learn to apply the knowledge, skills, and attitudes that foster cultural competence if their teachers are able to demonstrate these themselves. Diller and Moule (2005) considered culturally competent teachers as successful teachers who mastered "complex awareness and sensitivities, various bodies of knowledge, and a set of skills that taken together, underlie effective cross cultural teaching" (p. 5).

Gay (2002) asserted that multicultural teaching is based on "the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively" (p. 106) and suggested that teaching students effectively requires teachers to be willing to learn about the cultural particularities of the ethnic groups within their classroom. Gay (2002) further acknowledged:

Too many teachers and teacher educators think that their subject (particularly math and science) and cultural diversity are incompatible, or that combining them is too much of

conceptual and substantive stretch for their subject to maintain disciplinary integrity. This is simply not true. There is a place for cultural diversity in every subject taught in schools. (p. 107)

Culturally responsive teaching is not only about using multicultural instructional strategies in classroom, but also adding multicultural content to the curriculum as well. Misconceptions like these prove that teachers either do not know about the contributions different ethnic groups to their subject areas or simply are not familiar with culturally responsive teaching (Gay, 2002). This scholar summarized that culturally responsive teaching is not only the acquirement of a knowledge base about ethnic and cultural diversity, but also the ability to convert it into culturally responsive curriculum designs and instructional strategies to create classroom climates that are conducive to learning for ethnically diverse students.

In a study conducted by Debnam et al. (2015), the association between observed and self-reported culturally proficient teaching practices were examined. These authors referred to disturbing disparities in academic outcomes of young people in spite of recent efforts to overcome these very same disparities. Griner and Stewart (2013) considered cultural and ecological discontinuities between schools and their students to be the cause of these disparities. Teachers are aware of the potential of culturally responsive teaching strategies in classrooms through access to available research, but progress towards effective teacher education have been slow (Bottiani et al., 2012; Griner & Stewart, 2013). Villegas and Lucas (2007) asserted that successfully teaching students from culturally and linguistically diverse backgrounds requires much more than simply co-existing and applying specialized teaching techniques. They suggested six basic qualities essential for teachers to possess in order to respond effectively to an increasingly diverse student population: understand how learners construct knowledge, learning

about students' lives, being socially conscious, holding affirming views about diversity, using appropriate instructional strategies, and advocating for all students. The same scholars suggested that teachers can enhance their success with students from diverse backgrounds by working on their own to cultivate these qualities of responsive teaching.

Educational Benefits of Diversity in Higher Education

Previous research on the educational benefits of diversity focused on two different aspects of diversity: student diversity and faculty diversity. A large portion of the literature examined the benefits of racially/ethnically diverse college campuses on students' educational gains. Milem (2003) pointed out, to a similar end, an emerging body of research that helps us to understand the ways in which a more diverse faculty in colleges and universities influence the educational endeavor. Gurin, Dey, Hurtado, and Gurin (2002) explained that diversity helps create positive outcomes in higher education in several ways: it reinforces cultural awareness, encourages a better understanding of self, encourages intellectual growth, reduces racial stereotyping and prejudice, and furthers the state of equality and leadership. Conversely, Hurtado (2001) stated that "the impact of diversity on the intellectual environment is actually quite broad" (p. 191), but cautioned about the complicity of measuring the effects of diversity because the effects can be indirect and may not be readily visible until long-term outcomes such as career choices, personal beliefs, and friendship patterns are examined.

Alger (1997) stated long before that institutional mission statements at colleges and universities across the country increasingly affirm the role that diversity has in enhancing teaching and learning in higher education. The presence of diverse students on campus is evident, but certainly not enough for diversity to work in a positive manner. Locks et al. (2008), reported that positive interactions with diverse peers result in a greater sense of belonging to the

campus community for all students. Even though diversity, multiculturalism, and inclusion are in general values accepted by most colleges and universities, many educators still expect students to interact with peers from different cultural backgrounds on their own. It is important for educators to reconsider ways in which they prepare students for participation in educationally meaningful ways in the diversity that exists on campuses across the nation (Harper & Antonio, 2008).

Gurin et al. (2002) agreed that “educational benefits of diversity depend on curricular and co-curricular experience with diverse peers, not merely on their co-existence in the same institution” (p. 17). Similarly, examined the potential impact and promise of diversity experiences through curricular and co-curricular activities taking place in higher education. Gurin, Nagda, and Lopez (2004) demonstrated positive effects of diversity in a curricular diversity program with 174 students in a matched control group, and longitudinal study of 1,670 University of Michigan students. In this study, they supported the notion that for “diverse students to learn from each other and become culturally competent citizens and leaders of a diverse democracy, institutions of higher education have to go beyond simply increasing enrollment of students of different racial and ethnic backgrounds” (Gurin et al., 2004, p. 32). This is not to say that institutions should not monitor compositional diversity because such diversity not only reflects equity within institutions, but also affects how individuals perceive and experience the work and learning environment (Hurdato, Alvarez, Guillermo-Wann, Cuellar, & Arellano, 2012). That is, institutions should not only attend to the quality of the campus racial climate but the actual interactions among diverse students as well. Gurin et al. (2004) emphasized “the importance of actual experiences with diversity through cross-racial interaction

in classrooms, intergroup dialogues that bring students from diverse backgrounds together to discuss racial issues, and participation in multicultural campus events” (p. 18).

Milem, Chang, and Antonio (2005) and Hurtado (2001) pointed out the educational value of both student and faculty diversity. A diverse student body provides students with opportunities to study and interact with diverse peer, and learn from each other as well as build the skills necessary for coping with cultural differences. On the other hand, “the presence of a diverse faculty helps to ensure that students take full advantage of the benefits that diversity offers” (Hurtado, 2001, p. 189). Quarterman (2008) referred to the correlation between a culturally diverse college and university faculty and student retention and progression. Moreover, non-native English speaking faculty members make up a vital part of the faculties at US colleges and universities. Dedoussis (2007) investigated faculty diversity from a higher education management perspective and pointed out that faculty diversity in terms of international and intercultural background was considered an organizational strength. Marvasti (2005) contended that foreign-born faculty outperformed their native counterparts in research to compensate for the somewhat negative self-perception of their own teaching, in order to retain competitiveness in the job market.

Milem (2003) used three dimensional frameworks in an effort to find the ways in which diversity benefits: (1) individuals, (2) institutions, and (3) society. Individual benefits are the most obvious when considering the value of diversity in institutions of higher education. It refers to “the ways in which the educational experiences and outcomes of individual students are enhanced by the presence of diversity on campus” (p. 3). Institutional benefits of diversity enhance the effectiveness of an organization or institution. Societal benefits refer to “the ways in which diversity in colleges and universities impact quality of life issues in the larger society” (p.

3). The educational benefits of diverse college and university campuses points to diversity as a compelling interest not only for institutions of higher education, but also for the members of an increasingly heterogeneous society (Milem, 2003). (see Table 1)

Table 1

Educational Benefits of Diverse College and University Campuses

Summary of the Educational Benefits of Diverse College and University Campuses

Types of Benefit		
Individual Benefits	Institutional Benefits	Societal Benefits
	Benefits to Private Enterprise	
Improved racial and cultural awareness	Cultivation of workforce with greater levels of crosscultural competence	More research on the effects of affirmative action in the workplace
Enhanced openness to diversity and challenge	Attraction of best available talent pool	Higher levels of service to community/civic organizations
Greater commitment to increasing racial understanding	Enhanced marketing efforts	Medical service by physicians of color to underserved communities
More occupational and residential desegregation later in life	Higher levels of creativity and innovation	Greater equity in society
Enhanced critical thinking ability	Better problem-solving abilities	A more educated citizenry
Greater satisfaction with the college experience	Greater organization flexibility	
Perceptions of a more supportive campus racial climate	Benefits to Higher Education of Faculty Diversity	
Increased wages for men who graduate from higher “quality” institutions	More student-centered approaches to teaching and learning	
	More diverse curricular offerings	
	More research focused on issues of race/ethnicity and gender	
	More women and faculty of color involved in community and volunteer service	

Furthermore, the effects of diversity on students' educational gains were examined to identify the benefits of racial/ethnic diversity to college campuses by Gurin et al. (2002). The same scholars referred to three ways of exposing students to diversity in higher education institutions: "structural diversity, informal interactional diversity, and classroom diversity" (Gurin et al., 2002, p. 252). Student engagement with diverse peers was used to examine the effects of racial/ethnic diversity on students' educational outcome. Gurin et al. (2002) found that a racially and ethnically diverse campus enhances students' intellectual development and learning outcomes, confirming the benefits of racial/ethnic diversity to college campuses. Similarly, the results of research conducted by Cole (2007) found that even though "interracial interactions were not directly related to students' intellectual self-concept, the race/ethnicity or structural diversity of the college campus also matters" (p. 277) in developing student-faculty interactions which leads to greater educational gains and sensitivity to racial issues.

Wood and Sherman (2001) provided the opposing claim that diversity does not necessarily lead to a free exchange of ideas and positive diversity outcomes. Pike and Kuh (2006) designed their study to examine the relationships between the diversity of the student body (i.e., structural diversity), interactions among diverse groups of students (i.e., informal interactional diversity), and perceptions of the campus environment. The results of their study indicated that the diversity of an institution's student population created more opportunities for interactions among students from different backgrounds, but didn't necessarily create a positive, affirming campus environment. "The effects on the campus environment of interactions among diverse groups seem to depend on the nature and quality of the interactions, rather than on their quantity" (Pike & Kuh, 2006, p. 445). This confirms that campus diversity alone is not the only factor needed for positive diversity outcomes. Institutional leaders needed to commit to creating

the ideal conditions for positive and productive interactions among diverse groups of students, faculty, and staff (Pike & Kuh, 2006).

As Gurin et al. (2004) stated creating a racially integrated learning environment goes far beyond simply putting diverse students together in the same classroom. According to Hurdato et al. (2012), positive campus racial climate is also an important factor to consider in pursuing the benefits of diversity on campus. Results from a 10-year, longitudinal, large-scale national study by Jayakumar (2008) indicated that acquiring a positive racial climate depends on the presence of students of color in the student body. However, simply increasing the number of students of color on campus does not guarantee the educational benefits of diversity. Same author also reported that meaningful interaction and the subsequent long-term benefits only happen when numeric diversity is combined with a positive campus racial climate. “Given that learning from and through diversity requires cross-racial interaction and participation” (Jayakumar, 2008, p. 118), and the presence of diverse students on campus is now evident, a negative racial climate can still inhibit desired benefits.

Higher education institutions as well as K-12 public education must create curricular and co-curricular opportunities for students as well as a racially integrated learning environment (Gurin et al., 2004). Education institutions need to create opportunities for students to interact in meaningful ways and learn from each other for the express purpose of attaining the positive educational impact and reaping the full benefits of campus diversity. As mentioned above, the mere co-existence of diverse peers in the same institution is not sufficient to produce the full educational benefits of diversity (Zirkel & Cantor, 2004). Rather, whether these benefits are experienced depends on the actual curricular and co-curricular experience that students have with diverse peers (Gurin et al., 2004). “Higher education has to make use of racial and ethnic

diversity by creating educational programs that bring diverse students together in meaningful, civil discourse to learn from each other” (Gurin et al., 2004, p. 22).

Quaye and Harper (2007) examined “the concerns of diverse student populations and encouraged faculty to intentionally incorporate cultural inclusion into their pedagogy and their courses” (p. 19). The same researchers stated that if students are to benefit from classroom diversity, faculty must offer culturally inclusive pedagogy and curricula. Cognitive development, perspective-taking, critical thinking skills, academic achievement, and problem solving skills are listed as the outcomes of inclusive pedagogy and curricula (Quaye & Harper, 2007). The same researchers clarified that students learn from and about their peers of diverse backgrounds if faculty interlaces multicultural perspective into classroom discussions.

While some institutions have assessed faculty to find their perceptions on faculty diversity (Hurtado, Griffin, Arellano, & Cuellar, 2008), student perceptions of faculty diversity have not yet been investigated (Turner, 2002). Lee (2009) examined the differences between Caucasian and non-Caucasian students’ perception about faculty diversity and found that Caucasians students, compared to non-Caucasian students, agreed more strongly that faculty respected student diversity and they were satisfied with the level of diversity among faculty. However, non-Caucasian students were more likely to report that faculty diversity contributed to their experiences.

Villalpando’s (2002) study with 15,600 undergraduate students from 365 postsecondary institutions explained the effects of diversity on student learning. According to this scholar, “students reported that they were most satisfied with faculty who employed methodologies that were respectful and inclusive of cultural differences; constructed welcoming environments for

sharing cultural perspectives; and required writing assignments that challenged students to think critically about diversity and equity issues” (p. 35).

In their study of the educational benefits of diversity within higher education, Gurin et al. (2002) established curricula that enhanced intellectual engagement and active thinking skills by exposing students to racial and ethnic diversity. “The success of these curricular initiatives is facilitated by the presence of diverse students and pedagogy that facilitates learning in a diverse environment and education is enhanced by extensive and meaningful informal interracial interaction” (p. 359). Skepple’s (2014) research also resulted in similar practical implications for teacher educators to modify their curricula to include sociocultural consciousness awareness, modeling culturally responsive pedagogical skills, increasing dialogue among pre-service teachers on diversity topics, and exposing teacher candidates to diverse students, teachers, administrators, and teacher educators throughout the teacher education program. Hurtado (2001) summarized that “the educational benefits of diversity may accrue as a result of a combination of opportunities to engage in a diverse curriculum introduced by a diverse faculty and to study and interact with racial/ethnically diverse students inside and outside of the classroom” (p. 200).

Disparity in Academic Achievement in Higher Education

In spite of efforts to make campuses more diverse and more inclusive, the gaps in college participation and completion between whites and African Americans as well as between whites and Latino grew (Quaye & Harper, 2007). According to the same scholars, there has been a noticeable disparity reported in academic achievement across racial/ethnic groups. This achievement gap is expected to continue to widen unless campus leaders recognize that diversity and equity are different goals requiring different strategies.

Quaye and Harper (2007) pointed out that “despite the abundance of evidence showing the positive effects of diversity on student learning, most college and university instructors continue to teach in culturally neutral ways” (p. 34), or as Garcia and Smith (1996) stated, monoculturally rather than multiculturally. Most professors make their own decision regarding what and how they teach, and thus “it is difficult to require these educators, especially with tenure, to purposefully weave diverse content into their courses (Quaye & Harper, 2007, p. 37). These same scholars asserted that faculty members conveniently ignored diversity because they were either not trained in or simply chose not to apply diverse readings and pedagogical methods into their courses. There are several plausible reasons for this. Faculty members were basically imitating what they had learned from their former professors by “recycling the content, knowledge, and teaching behaviors of their former professors” (Quaye & Harper, 2007, p. 36). Faculty members themselves probably did not have professors who would model multiculturalism, use multicultural pedagogical practices, and emphasize cultural inclusiveness in their classrooms. Quaye and Harper (2007) suggested that department chairs and deans engage faculty in dialogues and exercises that clarified the urgent need to diversify curricula within their departments and schools. In addition, providing faculty with the evidence of improved student learning outcomes achieved in culturally inclusive classrooms might motivate them to rethink their pedagogical philosophies and practices (Quaye & Harper, 2007).

The commitment to multicultural education in higher education might be a solution for some of the aforementioned disparities in academic achievement. As Sleeter and Grant (2009) suggested, the principles and tenets of multicultural education make it possible to promote excellence in the performance of all students. Supporting the same solution to disparity in academic achievement, Gollnick and Chinn (2002) listed the following fundamental principles of

the global perspectives of multicultural education that make it possible to increase academic excellence among diverse groups of students on many campuses in the nation:

1. Cultural differences have strength and value.
2. School and institutions of higher learning should be models for the community in reflecting respect for cultural differences and expression of human rights.
3. Social justice and equality for all people should be of paramount importance in the design and delivery of curricula.
4. Attitudes and values necessary for the continuation of a democratic society can be promoted in schools and institutions of higher learning.
5. Schooling can provide the knowledge, skills, and dispositions for redistribution of power and income among diverse groups of people.
6. Educators at institutions of higher learning work with local communities to create an environment that is supportive of respect for diversity and multiculturalism. (p. 9)

The Educational Impact of Diverse Faculty

As higher education institutions are increasing academic excellence among diverse groups of students on many campuses in the nation (Gollnick & Chinn, 2002) and preparing students to live and work in today's increasingly diverse society (Gurin, 1999; Milem & Hakuta, 2000), the diversification of college faculty is undoubtedly contributing to the mission. "Faculty diversity appears to have several positive impacts on students" (Umbach, 2006, p. 319). Similarly, Milem (2003) stated that "more diverse faculty in colleges and universities influence the educational endeavor" (p. 17) in positive ways. Smith (1989) agreed that diversification of faculty increases the variation of perspectives and approaches creating an overall richer learning

environment for students. Hurtado (2001) asserted the existence of a significant relationship between student growth in various educational outcomes and activities and a diverse student body and faculty.

Deardorff (2011b) pointed out the importance of the integral involvement of faculty in shaping the student experience and how they become more effective in ensuring that students are well prepared to live in a global society. Deardorff (2011b) defined interculturally competent faculty as follows:

- Understand the complexity of intercultural competence (ICC);
- Design their courses to go beyond knowledge transmission and address intercultural learning as an outcome;
- Can successfully teach students from a wide variety of backgrounds; and
- Are well prepared to provide feedback to students in their intercultural journeys.

Faculty background characteristics influence the overall learning process and the types of teaching methods that are utilized (Easton & Guskey, 1983). According to Hurtado (2001), faculty gender distinctly impacted students in terms of how classes were taught and actual course content. Faculty gender and race both were found to be positive predictors of student-centered teaching practices (Milem & Astin, 1992; Milem & Wakai, 1996). The researchers found that female science faculty were more likely to use active learning techniques such as class discussion, student-selected topics, and student-developed learning when compared to male faculty in the field. Female, African American, Native American, Mexican American, and Puerto Rican faculty, were more likely than their colleagues to be more attentive to peer status differences in the classroom and be more likely to employ feminist pedagogy in the classroom. In a related study, Milem and Berger (1997) found a similar pattern between race and gender and

teaching related outcomes. Women and faculty of color were more likely to use active learning pedagogies in the classroom, to include the perspectives of women and racial/ethnic minorities in the curriculum, to engage in research on issues of race/ethnicity, and to attend workshops designed to help them incorporate the perspectives of women and race/ethnic minorities in the curriculum of their courses (Milem, 2003).

Milem (2003) referred to academic rank and social status as additional faculty characteristics that influence teaching methods. Statham, Richardson, and Cook (1991) found that assistant professors were more likely than full professors to adopt participatory teaching practices. According to Mulkey (1972), low status or young scientists were more likely to be academically innovative since deviation from social norms didn't pose a big threat to their careers.

Umbach (2006) divided the impact of faculty of color into two categories: benefits to students and benefits to institutions. Faculty of color generally creates a comfortable environment and provides support and mentoring for students of color (Smith, 1989). Academic performance and career aspirations are enhanced when minority faculty serve as role models for students of color (Hurtado, Milem, Clayton-Pedersen, & Allen, 1999; Smith, 1989). Using data from a national study of 13,499 faculty at 134 colleges and universities, Umbach (2006) explored the impact of faculty of color on undergraduate education and found that faculty of color employ a broader range of pedagogical techniques and interact more frequently with students than their White counterparts. On the same note, greater structural diversity among faculty leads to an increased use of effective educational practices. From the institutional perspective, faculty diversity demonstrates the institution's commitment to diversity, which in turn has an impact on student satisfaction with the overall college experience.

Assessment of Multicultural Competence

Given the complexity of the concept of multicultural competence, there is much debate regarding the topic of effectively assessing the multicultural competence of students and educators. Klemp (1979) asserted that “competence can be measured, but its measurement depends first on its definition” (p. 41). Krajewski (2011) stated that “assuming that intercultural competence is a skill, it should be possible to assess it and to document its existence and progress” (p. 13). However, “there is no silver bullet regarding an assessment tool, it is challenging for one tool to measure an individual’s intercultural competence. The tool being used in one course or program may not be appropriate for another course or program if the goals differ” (Deardorff, 2011b, p. 74). Similarly, Padilla (2004) called for special attention to the instruments used in research for quantitative research and the data gathered with these instruments.

The scholars have frequently suggested greater methodological diversity in the measurement of intercultural competence and formulated a wide range of constructs, but not many approaches to measure intercultural competence. Deardorff (2004) explained some of the issues the scholars encountered in the measurement of intercultural competence as follows:

There is little agreement, however, as to specifically what constitutes intercultural competence. For example, if intercultural competence comprises knowledge, skills, attitudes, and awareness to enable a person to interact effectively with those from other cultures, what actually comprises intercultural knowledge? Intercultural skills? Intercultural attitudes? Intercultural awareness? While there has been some effort to research and write about this in the field, there has been no real agreement on the specifics. (p. 14)

Deardorff (2006) suggested that intercultural competence assessments should include a “mix of quantitative and qualitative methods...including interviews, observations, and judgment by self and others” (p. 241). Similarly, Gelfand, Imai, and Fehr (2008) stated that future research on cultural competence “would benefit from having methodological diversity in assessing such a complex construct” (p. 384). In response to these calls, the methodological diversity of intercultural competence assessment has increased in recent years (Leung et al., 2014).

Leung et al. (2014) identified three broad approaches that intercultural competence researchers utilize to measure intercultural competence: self-reported, informant based, and performance based. According to Leung et al. (2014) and Debnam et al. (2015) self-reported measures are used traditionally to measure culturally responsive teaching, even though providing self-reports is complex and many factors may influence the accuracy of self-reports (Dunning, Heath, & Suls, 2004). “The influence of social desirability bias may be of particular concern when utilizing these self-report measures (Debnam et al., 2015; Leung et al., 2014), especially when measuring sensitive topics such as race, ethnicity and culture. However, Morgeson et al. (2007) stated that the impact of the influence of social desirability on the predictive validity of self-report measures was minimal in the context of domestic selection.

Informant and performance-based measures are considered alternatives to self-reports, but not commonly used (Leung et al., 2014). In informant-based measures, informants observe and report on a person’s intercultural competence, creating the possibility of multitudes of biasing influences. An informant’s background with intercultural competence and the opportunities to observe the person’s behavior plays an important role regarding how well the assessment was done. Leung et al. (2014) suggested that informant and performance-based assessments should be integrated with self-reports to provide a comprehensive assessment of

intercultural competence. Debnam et al. (2015) stated that there is a growing interest in observational tools because they may be less vulnerable to the factor of social desirability.

McAllister and Irvine (2000) examined some of the process-oriented models that are recommended in the teacher education field to assist teachers in becoming multiculturally competent in order to work with their diverse learners. These process-oriented models are: Helms's Racial Identity Theory, Banks's Typology of Ethnicity, and Milton Bennett's Developmental Model of Intercultural Sensitivity. They are "used in the fields of counseling and intercultural relations to describe the cognitive, behavioral and affective changes related to how adults develop cross-cultural competence" (McAllister & Irvine, 2000, p. 4). Process-oriented models describe how people develop in terms of their cultural identities or worldviews, assist educators in understanding teachers' behaviors, sequencing course content, and creating conducive learning environments for students.

McAllister and Irvine (2000) criticized these process-oriented models for several reasons such as lacking empirical evidence, oversimplifying complex problems, and generalizing across race and gender. Some scholars (Jones, 1990; Taylor, 1994) claimed that some models simplify the cross-cultural learning and the concept of identity by focusing only on a single factor such as race instead of considering it as a complex process that is related to many factors such as age, gender, ethnicity, race, social-class, and sexual orientation. Their generalization of other minority and majority groups and lack of personal agency (meaning the lack of an individual's ability to control his or her responses to the environment) (Meyer & Allen, 1991) have been criticized by other researchers.

Deardorff (2011a) pointed out the necessity of assessing the intercultural competence of students. Deardorff (2011a) suggested that intercultural competence assessment should start with

a clear definition and framework derived from the literature, identifying specific goals and measurable student learning outcomes. Matsumoto and Hwang (2013) agreed that researchers should start the process of creating a test of cross-cultural competence with the identification of the desirable outcomes to be predicted, the target cultures within which competence is to be demonstrated, and the knowledge, skills, abilities, and other factors that are necessary to demonstrate competence. These prioritized learning outcomes are then assessed through both direct and indirect measures. Indirect evidence of student learning around intercultural competence is gathered primarily through surveys or inventories from the learner-perspective.

Several instruments have been developed and validated to measure the cross cultural competence of respondents in different disciplines. Still, the types of tests and survey instruments used in multicultural research have been an area of concern (Pope, Mueller, & Reynolds, 2009) because of content, internal consistency, and selection bias. Fantini (2009) acknowledged the availability of more than one hundred such instruments, some with more evidence of reliability and validity than others. Harrison, Carson, and Burden (2010) also acknowledged the abundance of cultural competency instruments in clinical psychology, but expressed the difficulty of locating an instrument designed for teachers.

Debnam et al. (2015) examined several self-report measures of teacher cultural responsiveness and their reliance on teacher self-reporting. They were concerned about these measures not accurately reflecting teachers' actual classroom behaviors because of the social desirability bias or the possibility of limited self-reflection. In an effort to improve the measurement of cultural responsiveness, the same scholars suggested a multi-informant approach to examine "the convergence between teacher-report measures and classroom observations" (Debnam et al., 2015, p. 534). The result of this study showed that "average scores on all three

self-report cultural responsiveness scales were toward the high end of the scale, whereas the observational data suggested low rates of culturally responsive teaching strategies” (Debnam et al., 2015, p. 542). High scores on the self-report measures drew attention, suggesting a need for the use of observational measures to address gaps regarding measurement of culturally responsive teaching.

Prieto (2012) was concerned that the lack of validated instruments would lead in turn to a lack of research about higher educators’ abilities to teach in a culturally competent way with an increasingly culturally diverse student. Prieto (2012) developed the Multicultural Teaching Competencies Inventory (MTCI) “to assess the Knowledge, and Skills and Awareness of higher education faculty in terms of dealing with culturally diverse students” (p. 50). The MTCI contained items based on the tri-partite model of cultural competencies established by Sue and associates. Five hundred sixty two college instructors from all members of the American Psychological Association (APA) participated in Prieto’s study of initial factor analysis and cross-validation of MTCI. The exploratory factor analysis of the MTCI items failed to confirm three-factor solution in line with Sue et al.’s model. Instead, Prieto (2012) suggested “a two-factor model in conceptualizing educator cultural competencies: Acquired Cultural Knowledge and Sensitivity to Student Culture” (p. 50).

Matsumoto and Hwang (2013) reviewed some of the available tests of cross-cultural competence (3C). Researchers selected several qualifying tests for review. These are the Cross-Cultural Adaptability Inventory, Cross-Cultural Sensitivity Scale, Cultural Intelligence Scale, Intercultural Behavioral Assessment, Behavioral Assessment Scale for Intercultural Communication Effectiveness, Intercultural Adjustment Potential Scale, Intercultural Communication Competence, Intercultural Development Inventory, Intercultural Sensitivity

Scale, and Multicultural Personality Inventory. They concluded that “the Cultural Intelligence Scale, Intercultural Adjustment Potential Scale, and Multicultural Personality Inventory have the most promising evidence for assessing 3C” (Matsumoto & Hwang, 2013, p. 867). During the evaluation of assessments of 3C, Matsumoto and Hwang (2013) realized that quantitative methods were used most in the development and validation of 3C tests. The researchers suggested the additional use of qualitative methodologies in the development of 3C tests for better results.

De Beuckelaer, Lievens, and Bücken (2012) used the 91- item Multicultural Personality Questionnaire (MPQ), a self-report instrument to measure five important dimensions of cross-cultural competence among faculty members from several higher education institutions. Van Der Zee and Van Oudenhoven (2000) stated “The MPQ includes the following scales to measure these dimensions: cultural empathy (18 items), open-mindedness (18 items), emotional stability (20 items), social initiative (17 items), and flexibility (18 items)” (p. 228). This study revealed that cultural empathy and open-mindedness are the most important dimensions of a cross-culturally competent faculty members (p. 241). In other words, a cross-culturally competent faculty members display a high level of cultural empathy combined with a high degree of open-mindedness (De Beuckelaer et al., 2012).

Continuing psychometric investigations were deemed necessary by Prieto (2012) for the instruments that were developed and validated to measure effectively the cultural competence of respondents in different disciplines. The researcher suggested that evidence of additional validity and reliability should be gathered, and that instruments should be used across various samples of educators to assess the factor invariance in instrument scales.

The Sue Model of Cultural Competencies

Sue et al. (1982) outlined multicultural awareness, multicultural knowledge and multicultural skills as the three areas that counselors need to be competent in as they deal with culturally different clientele. Multicultural awareness focuses on individuals being aware of their own cultural heritage, while multicultural knowledge focuses on individuals possessing specific and fact-based knowledge of their own and others' cultural heritages. Multicultural skill, on the other hand, is more concerned with the application of the first two competency areas, that is, individuals developing and practicing verbal and nonverbal behaviors that are culturally congruent and sensitive to the cultures of others. Spanierman et al. (2011) based the development of the MTCS on the same conceptual framework. Furthermore, Prieto (2012) applied Sue et al.'s (1982) three competency areas to the classroom as follows:

...these cultural competencies would give information about educators' levels of biases and beliefs, and how these can affect their teaching and view of diverse students (awareness); their level of knowledge concerning factual details about diverse, non-majority cultures and the effect that students' culture-based worldviews can bring to teaching and learning processes (Knowledge); and, instructors' ability to teach, communicate, and behave in the classroom with diverse students in a culturally congruent fashion (Skills).

Multicultural Teaching Competence Scale

Spanierman et al. (2011) developed and validated the MTCS. The MTCS originated from the tripartite model of multicultural competence developed by Sue and colleagues (1982) to benefit counseling psychologists and healthcare professionals (Yang & Montgomery, 2011). The tripartite model of multicultural competence introduced "three competence domains for helping

professionals: multicultural awareness (i.e., awareness of own cultural socialization and biases), knowledge (i.e., knowledge of the worldviews and sociopolitical realities of diverse populations), and skills (i.e., skills for effective interventions with diverse populations)” (Spanierman et al., 2011, p. 443). Principles from Sue et al.’s (1982) model were applied to multicultural teaching competence (Constantine & Sue, 2006). Research clearly showed a correlation between teacher competence and the knowledge and skill elements of the multicultural competence (Taylor & Quintana, 2003; Washington, 2003). Furthermore, Prieto (2012) asserted that “these three domains of cultural competency are applicable and generalizable to the culturally competent pedagogic practices of higher education faculty” (p. 51). Sue et al.’s (1982) same tri-partite model has already been used to help assess culturally competent teaching in certain educator groups in efforts to develop assessment instruments.

Spanierman et al. (2011) identified multicultural teaching competence as a multidimensional construct and suggested a number of methods to comprehensively assess the multicultural teaching competence, such as observations of classroom teaching, parent and student ratings of teachers, and examination of curricula and lesson plans. Researchers also stated that “a survey instrument grounded in the extant literature that measures teachers’ self-reported multicultural teaching competence would provide an efficient method of assessment to understand which approach works for whom under what circumstances”(p. 442). Spanierman et al.’s (2011) study proved that the final 16-item MTCS reflected (a) self-reported skills or behaviors in implementing culturally sensitive teaching practices and (b) self-reported knowledge of culturally responsive theories, resources, and classroom strategies. The psychometric properties of the MTCS were deemed adequate. The MTCS also had acceptable internal consistency and validity estimates. The multicultural teaching awareness domain was not

a viable factor in the MTCS. Thus, the MTCS included only two dimensions of the tripartite model of multicultural competence: the knowledge and skill aspects.

Spanierman et al. (2011) suggested using the MTCS as an efficient method of assessing teachers' multicultural competency. The scholars pointed out a number of ways that MTCS can be used: to assess pre- and in-service teachers, to determine the effectiveness of teacher preparation programs, to provide baseline data regarding teachers for administrators to use to increase multicultural teaching competency in their schools, to evaluate multicultural training in teacher preparation programs, and to inform curricula development in teacher preparation programs. Furthermore, more research was suggested to find out whether "multicultural teaching skills and knowledge actually translate to performance" (Spanierman et al., 2011, p. 458) and whether or not findings could be generalized to other samples.

CHAPTER III

METHODS

Introduction

Chapter I provided an introduction and theoretical framework for this study, statement of the research problem, purpose of the study, research questions, hypothesis, definition of terms, significance, limitations and assumptions of the study. The purpose of the study was to examine faculty members' levels of multicultural teaching competency with regard to multicultural teaching knowledge and multicultural teaching skills at a four-year institution based on participants' demographics characteristics and multicultural experiences. Chapter II presented a review of related literature relevant to multicultural education, multicultural teaching competencies, factors that affect multicultural teaching competency of higher education faculty. Chapter III discusses the purpose of the study, research questions, design of the study, participants, instrumentation, data collection procedures, and method of data analysis.

Purpose of Study

The purpose of this quantitative, descriptive study was to (a) examine the multicultural teaching competencies of faculty members with regard to their multicultural teaching knowledge and skills, and (b) to examine the relationships between multicultural teaching competence and selected demographic and experiential characteristics of a sample of faculty members. Selected demographic and experiential characteristics of a sample of faculty members included: the biographical characteristics such as age, gender, race, years of teaching experience, name of affiliated college, level of teaching and multicultural experiences such as the number of

involvements in multicultural activities and the type of multicultural activities. The incorporation of multicultural teaching knowledge as well as exploration of multicultural teaching skills are vital to the development of faculty members to work ethically and effectively with all students.

Research Questions

The present study was undertaken to address the following research questions:

1. What are the faculty members' perceptions on their knowledge levels of multicultural teaching competence?
2. What are the faculty members' perceptions of their skill levels of multicultural teaching competence?
3. What is the relationship between faculty members' multicultural teaching competence scores and multicultural experiences?
4. What is the relationship between faculty members' multicultural teaching competence scores, multicultural experiences, and demographics?

Design of Study

Decision about the choice of a research approach is influenced by the nature of the research problems. Creswell (2013) explained that "if the problem calls for the identification of factors that influence an outcome, the utility of an intervention, and understanding the best predictor of outcome, then a quantitative approach is the best" (p. 20). "A substantial proportion of quantitative educational research is nonexperimental because many important variables of interest are nonmanipulable" (Johnson, 2001, p. 3).

In this study, a nonexperimental quantitative research design was used to identify the biographical characteristics and multicultural experiences associated with multicultural teaching competency of faculty members at a four-year higher education institution. The MTCS

questionnaire was used to measure multicultural teaching competency as a compiled construct of two sub-constructs: (1) multicultural teaching knowledge, and (2) multicultural teaching skill. In other words, random assignment of participants was not possible and variables were not manipulated, but observed as they occur naturalistically (Johnson, 2001). The underlying reason for choosing a quantitative method relates to a study design appropriate for education research that will provide information about characteristics within a specific area of study with no manipulation of variables.

This chapter discusses the research methods of this study including the research design, population and participants, the survey instrument, data collection, and data analysis procedures in order to address the research questions posed in this study. The approval was received from Auburn University Institutional Review Board (IRB) to conduct this study (see Appendix A).

Participants

The target population was faculty members who were employed by Auburn University on Fall 2014 census date of the institution. The Office of Institutional Research and Assessment (OIRA) (2015) reported 1,209 full time faculty members. That number included all main campus, Alabama Agricultural Experiment Station and Auburn University based Alabama Cooperative Extension System employees. The American Association of University Professors (AAUP) (2015) defined full-time instructional faculty as those members of the instructional-research staff whose major regular assignment is instruction, including those with released time for research.

The sampling approach involved the selection of the most accessible participants and participants who agree to take the survey may not always be representative of general faculty population (Sue & Ritter, 2012). “The size of the sample is determined by the optimum number

necessary to enable valid inferences to be made about the population” (Marshall, 1996, p. 522), since it is rarely practical, efficient or ethical to study whole populations.

Considering that “most of the online surveys achieved response rates that were much lower than the paper-based ones (on average, 33% compared with 56% = 23% lower)” (Nulty, 2008, p.302). An e-mail invitation including the URL link of the survey was sent to each potential participant. Follow-up reminder emails were also sent to participants two weeks after the initial e-mail request (Nulty, 2008). The survey yielded a response rate of 23%.

The survey for this study was distributed online to a total of 1,209 full time instructional faculty at Auburn University. Out of this number, 385 started, but 281 participants completed the survey. Data from thirteen respondents were omitted from the data analyses due to missing more than five data points. The final sample for this study consisted of two hundred and sixty-eight (N= 268) full-time instructional faculty members at Auburn University who agreed to participate in the study.

Instrumentation

Development and Initial Validation of Instrument

The MTCS was originally developed by Spanierman et al. (2011) as a multidimensional scale to assess multicultural teaching competence comprehensively based on a tripartite model of multicultural teaching competence developed by (Sue et al., 1982). The MTCS is “a survey instrument grounded in extant literature that measures teachers’ self-reported multicultural teaching competence” (Spanierman et al., 2011, p. 442). Spanierman’s research team defined multicultural teaching competence an ongoing process in which an educator develops competencies in multiple ways to successfully teach all of the students regardless of their cultural backgrounds. Educators use these competencies they acquire in culturally competent teaching by

blending their academic knowledge and skills within the cultural frameworks of students for the purpose of improving their learning experience.

Spanierman et al. (2011) conducted three interrelated studies and examined the initial factor structure of the MTCS through exploratory factor analysis in Study 1. In Study 2, the stability of the factor structure among an independent sample was tested with confirmatory factor analysis; and in Study 3, further validity estimates of the scale were provided. MTCS-P is intended to consist of three subscales: awareness, knowledge and skills. The exploratory and confirmatory factor analyses supported two subscales, knowledge and skills, that were consistent with the multicultural education literature (Spanierman et al., 2011). The authors found that multicultural teaching awareness was not a viable factor of the MTCS, and only two dimensions, knowledge and skills of the tripartite model of multicultural competence were included in the 16-item version of MTCS used in this study (Spanierman et al., 2011).

Description of Instrument

The Auburn University IRB for the Protection of Human Subjects in Research granted permission (see Appendix A) to collect data using the MTCS (see Appendix B) that was developed by Spanierman et al. (2011) along with a brief demographic questionnaire to survey faculty members at Auburn University.

Demographic Questionnaire. Part I consisted of eight demographic questions to collect information about demographic characteristics and multicultural experiences of the participating faculty members to help examine the possibility of relationship between specific demographic, experiential variables and multicultural teaching competence. The first 6 demographic questions were about age, gender, race, level of teaching, years of teaching experience, and name of the college while the last two questions addressed participants' multicultural experiences such as the

number of involvements in multicultural activities and type of multicultural activities. The seventh question asked participants; “How many times have you been involved in multicultural activities (cultural competence trainings, workshops, courses, serving in a diversity committee, participating in Study Abroad program or any other cultural programs which focused on multicultural competency or diversity) in the last 5 years”? This question had four response choices: (1) 0 times, (2) 1-5 times, (3) 6-10 times, and (4) more than 10 times. The eighth question requested participants; “Please list examples of multicultural activities you have been involved in (cultural competency trainings, workshops, courses, serving in a diversity committee, participating in Study Abroad program or any other cultural programs which focused on multicultural competency or diversity). This question was an open-ended question allowing participants to list examples of their multicultural activities, instead of specifying the type of information to be collected in advance of the study (Creswell, 2013).

The Multicultural Teaching Competence Scale. Part II consisted of the 16-item version of the MTCS to measure multicultural teaching knowledge and skills of faculty members. The 5-point Likert-type scale used in this study with options ranging from “strongly agree” to “strongly disagree” was identified as “one of the most widely used in all types of scales in the field of social sciences” (Lozano, García-Cueto, & Muñiz, 2008, p. 73). The authors indicated that the number of response alternatives affected the psychometric properties of the scale meaning as the number of response alternatives increases, both reliability and validity improved. They suggested that “the optimum number of alternatives is between four and seven” (p. 73). According to Andres (2012) 5-point scales have been shown to maximize reliable variance in responses.

The specific responses to the items were combined for knowledge and skills separately so that the participants with the most favorable attitudes had the highest scores while the others with

the least favorable attitudes had the lowest scores (Gliem & Gliem, 2003). The higher scores indicated higher levels of multicultural teaching competence. Six items assessed the participants' **multicultural teaching knowledge** (MTK). The items on the MTK assessed participants' perceived confidence in knowledge of concepts such as teaching strategies, ethnic identity theories, historical experiences of ethnic minorities, and community resources. Ten items assessed faculty members' **multicultural teaching skills** (MTS), which was their self-reported ability of using multicultural teaching methods. Items on the MTS assessed participants' perceived skills in planning activities that celebrate diversity, examining instructional materials for ethnic bias, integrating cultural values of ethnic minorities into their teaching, and providing equal opportunity for the success of all students. The multicultural teaching competence scores of the participants were the total composite score of the MTK and MTS items on the survey.

All the items in the original version of the MTCS were retained with slight verbal changes in the items in order to make them more applicable to higher education faculty. For example, item one of the MCTS was; "I plan many activities to celebrate diverse cultural practices in my classroom". The word celebrate has been changed to the word value such as "I plan to value diverse cultural practices in my classroom". One item (item number 12) was worded in the negative direction and reverse-scored to reduce bias and prevent the effects of a response set. Items in the MTCS were short statements and total time commitment was approximately 5 to 10 minutes.

Permission to Use the Instrument

The researcher obtained permission from Dr. Lisa B. Spanierman (Professor and Faculty Head of Counseling and Counseling Psychology at Arizona State University, Phoenix, AZ and Faculty Research Affiliate at the Southwest Interdisciplinary Research Center to conduct this

study using The MTCS on December 14th, 2014. A copy of the e-mail granting the researcher permission to use the MTCS is included in Appendix C.

Instrument Reliability Confirmation

Reliability of a scale indicates how free it is from random error. Pallant (2011) listed test-retest reliability and internal consistency as two frequently used indicators of a scale's reliability and defined internal consistency as "the degree to which the items that make up the scale are all measuring the same underlying attribute" (Pallant, 2011, p. 6). Cronbach's alpha is a measure of internal consistency among a group of items combined to form a single scale often used by researchers collecting survey data using Likert-type scales (Davenport & Shannon, 2000). Gay and Airasian (2000) discussed that "the reliability of scores from an instrument can vary based on sample characteristics (e.g., age, background) or environmental conditions (e.g., time of day, temperature)" (p. 242) and suggested to complete a reliability analysis for each sample or group that responds to the instrument. Similarly, Gliem and Gliem (2003) suggested calculating and reporting Cronbach's alpha coefficient for internal consistency reliability for any scales or subscales that are being used. Since an existing instrument was used in this study, both the reliability coefficient found in the literature and the reliability coefficient obtained from the sample were reported along with a Pearson correlation coefficient to assess the relationship between for two subscales of the instrument.

As a statistical measure of the internal consistency, the Cronbach's alpha was calculated for the total survey and each of the sub-scales separately in this study. Cronbach's alpha coefficient range from 0 to 1 with higher values indicating greater reliability, as a rule of thumb, a minimum level of 0.7 was recommended depending on the nature and purpose of the scale (George & Mallery, 2003; Nunnally, 1978). The Cronbach's alpha for the total survey, MTK and

MTS were 0.93, 0.86 and 0.89 respectively, indicating an adequate internal consistency.

Spanierman et al. (2011) reported that the total MTCS had a mean Cronbach's alpha of .88. The mean Cronbach's alpha for multicultural teaching skills and knowledge were .83 and .80 respectively, again indicating an adequate internal consistency.

The Pearson correlation coefficient was computed to assess the relationship between knowledge and skill domains of the MTCS. The knowledge and skill domains of the MTCS were positively correlated, Pearson's $r(268) = 0.76, p < .001$. Overall, there was a strong, positive correlation between knowledge and skill domains of the MTCS that the researcher comfortably analyzed the combined/total score in research questions three and four. Increases in multicultural teaching knowledge score were correlated with increases in multicultural teaching skill score.

Data Collection Procedures

Web-based surveys were preferred to collect a large number of data in a short period of time at a low cost (Lazar & Preece, 1999). A Pew Internet survey conducted on May, 2011 reported that "among online adults, 92% use email, with 61% using it on an average day" (Purcell, 2011, p. 2), making surveys delivered by e-mail a viable option for many current projects. Sue and Ritter (2012) deemed that email surveys were among the most common online surveys because they were fast, free or inexpensive, convenient, and easy to use. Finally, the rationale for using online surveys linked to a study conducted by Ammentorp, Rasmussen, Norgaard, Kirketerp, and Kofoed (2007) which suggested that "electronic surveys produce a satisfactory response rate" (p. 120). Electronic distribution provides convenience and flexibility for the participants and speed, ease of follow-up, data entry and analysis for the researcher (Andres, 2012).

In this study, the survey was designed using a web-based Qualtrics survey software that allowed the researcher to easily create the survey, collect and store data, and produce reports. The participants accessed the survey through the URL link sent in the e-mail invitation. The assistance of departmental chairs and Diversity Committee members was obtained in the distribution of the survey instrument. To maximize response rate, an e-mail invitation letter (see Appendix D) for online survey was drafted to encourage participation and assure participants of the anonymity of their responses. The letter included detailed information regarding the nature of the study, time that the survey would take to complete, and contact information for the principle researcher and faculty advisor.

An e-mail invitation including the IRB approved information letter and the URL link of the survey were e-mailed to faculty members on April 28, 2014. Participants completed the questionnaire by clicking on the link, responding to the questions and submitting the completed questionnaire by using a submit button on the final page. The data faculty members provided through online Qualtrics survey served as an agreement to participate in the study. Follow-up emails were also sent out two weeks after the initial request on May 12, 2014. Participants and data collected remained anonymous. Confidentiality was maintained for all responses. Participants could withdraw from the survey at any time by closing the browser window if they felt uncomfortable during the survey. Once submitted, the data could not be withdrawn since they would be unidentifiable.

Privacy and Confidentiality of Data

Proper steps were followed strictly to ensure the privacy and confidentiality of the data collected. The Auburn University IRB for the Protection of Human Subjects in Research granted permission to collect data using the above-mentioned instrument (see Appendix B). Data were

recorded and stored on an electronic database through Qualtrics which uses Transport Layer Security encryption for all transmitted data. Access to the data was password protected. All participants were informed through an IRB information letter that their identities and responses were anonymous and participation in the study was voluntary. A copy of IRB information letter is included in Appendix E. The data faculty members provided through online Qualtrics survey served as an agreement to participate in the study.

Data Analysis

Data from the survey were exported from Qualtrics into Excel and then coded to be analyzed using the Statistical Package for the Social Sciences (SPSS) software. The following research questions matrix was used as a tool to help organize the research into a coherent format and address the guiding questions of the study (see Table 2). Both the first and second research questions were analyzed by using descriptive statistics such as frequencies, percentages & standard deviation. The research question three was analyzed by using two one-way ANOVAs to determine whether the number of involvement in multicultural activities and the type of their multicultural activities had an effect on faculty members' multicultural teaching competence. In research question four the degree to which the eight independent variables predicted multicultural teaching competence was determined by using a linear multiple regression.

Table 2

Domains, Research, Survey Questions and Statistical Analysis

Research Questions Matrix			
Domain	Research Questions	Survey Questions	Statistical Analysis
Multicultural Teaching Knowledge	1. What are the faculty members' perceptions on their knowledge levels of multicultural teaching competence?	Multicultural Teaching Competence Scale 6 Questions (Likert Scale): 2, 4, 7, 9, 11, and 14	Descriptive statistics includes frequency distribution, percentages, mean, standard deviation for items and total score.
Multicultural Teaching Skill	2. What are the faculty members' perceptions on their skill levels of multicultural teaching competence?	Multicultural Teaching Competence Scale 10 Questions (Likert Scale): 1, 3, 5, 6, 8, 10, 12, 13, 15, 16	Descriptive statistics includes frequency distribution, percentages, mean, standard deviation for items and total score
Multicultural Experiences	3. What is the relationship between faculty members' multicultural teaching competence scores and multicultural experiences?	The Demographics Survey Number and type of multicultural activities Question # 7 and 8	Two one-way ANOVAs Determine whether or not statistically significant differences existed in the mean MTCS scores based on number of involvements and type of their multicultural activities.
Demographic Characteristics & Multicultural Experiences	4. What is the relationship between faculty members' multicultural teaching competence scores, multicultural experiences, and demographics?	The Demographics Survey age, gender, race, level of teaching, years of teaching experience, the name of the college, number of involvements and type of multicultural activities	Linear Multiple Regression Examine the degree to which the eight independent variables predict multicultural teaching competence.

Summary

American schools and institutions of higher education are currently housing the most culturally diverse group of students in the history of American education (Ameny-Dixon, 2004; Gollnick & Chinn, 2002). The literature has portrayed the growing interest in multicultural issues and the increasing need for higher education professionals to become multiculturally competent in order to serve unique needs of diverse student populations. The purpose of this study was to examine faculty members' levels of multicultural teaching competency with regard to multicultural teaching skills and multicultural teaching knowledge. This study also investigated personal and experiential factors influencing faculty members' multicultural teaching competence. The MTCS was used to collect data about (1) multicultural teaching knowledge, (2) multicultural teaching skills of faculty members. The letter of invitation with a link to survey, were e-mailed to faculty members. Participants completed the surveys electronically and the data were analyzed using SPSS to answer the study's research questions. The results of the data analysis of the study are presented in Chapter IV.

CHAPTER IV

RESULTS

Chapter IV focuses on the results of descriptive statistics to describe the research sample and presents the findings of the research questions undertaken to examine the faculty members' multicultural teaching competence at a four-year institution. The chapter is divided into two sections. The first section describes the demographic profile of the participants while the second section reports the results of statistical analyses to address the four research questions.

Purpose of the Study

The purpose of this quantitative, descriptive study was to (a) examine the multicultural teaching competencies of faculty members with regard to their multicultural teaching knowledge and skills, and (b) to examine the relationships between multicultural teaching competence and selected demographic and experiential characteristics of a sample of faculty members. Selected demographic and experiential characteristics: biographical characteristics such as age, gender, race, years of teaching experience, affiliated college, level of teaching and multicultural experiences such as the number of involvements in multicultural activities and type of multicultural activities. The incorporation of multicultural teaching knowledge as well as exploration of multicultural teaching skills are vital to the development of faculty members to work ethically and effectively with all students.

Research Questions

The present study was undertaken to address the following research questions:

1. What are the faculty members' perceptions on their knowledge levels of multicultural teaching competence?
2. What are the faculty members' perceptions of their skill levels of multicultural teaching competence?
3. What is the relationship between multicultural experiences and faculty members' multicultural teaching competence score measured by the MTCS?
4. What is the relationship between multicultural experiences, demographic characteristics, and faculty members' multicultural teaching competence score measured by the MTCS?

Description of the Sample

The participants answered eight demographic questions related to their age, gender, race, level of teaching, years of teaching experience, affiliated college, the number of involvements in multicultural activities, and the type of multicultural activities. Each of the colleges at Auburn University was represented in the sample. The demographic profile of the participants is presented below:

Age. Age data were categorized into five age intervals in this study (see Table 3). The percentage of each age interval was proportional to the age distribution data of the faculty population reported by the OIRA (2015) at Auburn University. A total of 35 participants (13.1%) were between the ages of 25 and 34 compared to 10.5% reported by the OIRA. Sixty-five participants (24.4%) were between the ages of 35 and 44 compared to 28.5% reported by the OIRA, while 62 participants (23.3%) were between the ages of 45 and 54 compared to 23.1% reported by the OIRA, and 77 participants (28.9%) were between the ages of 55 and 64 compared to 26.4% reported by the OIRA. The remaining 27 participants (10.2%) reported themselves as 65 or above compared to 11.6% reported by the OIRA.

Table 3

Age of Participants

Age Intervals	Frequency	Valid Percent
25-34	35	13.1%
35-44	65	24.4%
45-54	62	23.3%
55-64	77	28.9%
65+	27	10.2%
Not reported	2	.7%
Total	268	

Gender. Out of the 268 participants, 137 (51.1%) were female and 131 (48.9%) were male (see Table 4). The ratio of female participants to male participants was slightly higher in this sample, which is inconsistent with both the faculty demographic trends (36.56% of female versus 63.44% male) at Auburn University and also in the field of higher education. Marschke, Laursen, Nielsen, and Rankin (2007) stated that females “rarely make up more than 30% of faculty at Research Extensive universities” (p. 1 in abstract). The slightly higher percentage of female faculty participation in this study is most probably specific to the sample, certainly not an evidence for gender equity in academic employment.

Table 4

Gender of Participants

	Frequency	Percent
Female	137	51.1%
Male	131	48.9%
Total	268	

Race. The racial composition of the participants was found to be 74.7 % (n=145) White, 9.8% (n=19) Asian, 6.2% (n=12) African American, and 4.6% (n=9) Hispanic and Latino. The remaining 9 (4.6%) self-identified their racial identity as other (see Table 5).

Table 5

Race of Participants

Race of Participants	Frequency	Valid Percent
White	145	74.7%
Asian	19	9.8%
African American	12	6.2%
Hispanic and Latino	9	4.6%
Other	9	4.6%
Not Reported	74	27.6%
Total	268	

Years of experience. A review of data listed in Table 6 indicated that 52 participants (19.4%) had between 1 and 5 years of experience, 84 participants (31.3%) had between 6 and 15 years of experience, and remaining 132 participants (49.3%) reported that they had more than 16 years of experience.

Table 6

Years of Experience

Years of Experience	Frequency	Valid Percent
1-5	52	19.4%
6-15	84	31.3%
16+	132	49.3%
Total	268	

Level of teaching. The demographic data in Table 7 indicated that 77 participants (29.2%) are teaching undergraduate level, while 36 participants (13.6%) are teaching graduate level. The remaining 151 participants (57.2%) reported that they are teaching both undergraduate and graduate level.

Table 7

Level of Teaching

Level of Teaching	Frequency	Valid Percent
Undergraduate	77	29.2%
Graduate	36	13.6%
Both	151	57.2%
Not Reported	4	1.5%
Total	268	

Affiliated college of participants. Table 8 summarized the names of the affiliated colleges that the participants belong to: Twenty six participants (9.8%) were from The College of Agriculture, 8 (3.0%) from The College of Architecture, Design and Construction, 10 (3.8%) from The College of Business, 42 (15.8%) from The College of Education, 16 (6.0%) from The College of Engineering, 8 (3.0%) from The College of Forestry and Wildlife Sciences, 14 (5.3%) from The College of Human Sciences, 72 from (27.2%) from The College of Liberal Arts, 5 (1.9%) from The College of Nursing, 10 from (3.8%) from The College of Pharmacy, 25 (9.4%) from The College of Sciences and Mathematics, and 22 (8.3%) from The College of Veterinary Medicine. The remaining 7 participants (2.6%) reported the name of their affiliated college as other. Each of the colleges at Auburn University was represented in the sample.

Table 8

Affiliated College of Participants

Affiliated College	Frequency	Valid Percent
Agriculture	26	9.8%
Arch. Design & Const.	8	3.0%
Business	10	3.8%
Education	42	15.8%
Engineering	16	6.0%
Forestry & Wildlife	8	3.0%
Human Sciences	14	5.3%
Liberal Arts	72	27.2%
Nursing	5	1.9%
Pharmacy	10	3.8%
Sciences and Mathematics	25	9.4%
Veterinary Medicine	22	8.3%
Other	7	2.6%
Not reported	3	1.1%
Total	268	

Multicultural experiences. Multicultural experiences were evaluated as the number of involvements in multicultural activities and the type of multicultural activities in this study in order to assess both qualitative and quantitative aspects of multicultural experiences. The participants selected one of the options (0, 1-5 times, 6-10 times and 10+ times) to answer the question about the number of involvements in multicultural activities (cultural competence trainings, workshops, courses, conferences, etc.) and answered an open ended question to report the type of their multicultural activities.

The number of involvements in multicultural activities. The majority of participants, 117 (43.7%) reported having participated in multicultural activities 1 to 5 times in the last 5 years such as cultural competency training, workshops and conferences, serving in a diversity committee, and participation in Study Abroad program, while 86 of them (32.1%) reported not having participated in any of these multicultural activities. Thirty participants (11.2%) reported having between 6 and 10 while 35 of them (13.1%) reported having more than 10 multicultural activities. (see Table 9).

Table 9

Number of Involvements in Multicultural Activities

# of Involvements	Frequency	Valid Percent
0	86	32.1%
1-5	117	43.7%
6-10	30	11.2%
10+	35	13.1%
Total	268	

The type of multicultural activities. An open-ended question format was used to allow participants to list the types of their multicultural activities, instead of specifying the type of information to be collected in advance of the study (Creswell, 2013). Four categories (international experiences, real-life experiences, professional developments and multi involvements) emerged as a result of qualitative method of data analysis for this question (Strauss & Corbin, 1990). The demographic data indicated that 72 participants (46.5%) were involved in a category of multiple types of multicultural activities in the last 5 years, 32 participants (20.6%) were involved in a category of real-life experiences (e.g. teaching a

diversity/multicultural class in U.S. and/or abroad, having administrative or membership positions at an institutional multicultural diversity commission, committee, and council, mentoring international or American students, being active in groups and cultural activities, and coming from a diverse family), 29 participants (18.7%) were involved in a category professional developments (e.g. participation in workshops, trainings , international conferences, and presentations) and only 22 participants (14.2%) were involved in some type of international experiences (e.g. study abroad, travel abroad, research abroad, consulting abroad, living abroad, participation in scholar exchange programs, and faculty development at another university, and participation in development teams) (see Table 10).

Table 10

Type of Multicultural Activities

Type of Activities	Frequency	Valid Percent
International Experience	22	14.2%
Professional Development	29	18.7%
Real-life Experiences	32	20.6%
Multi Involvement	72	46.5%
Total	155	

In summary, the demographic profile of the participants was in the expected directions as reflected in the literature with the exception that the ratio of female participants to male participants was slightly high in this sample, which is inconsistent with 36.56% of female faculty compared to 63.44% male faculty members reported by the OIRA at Auburn University. The majority of participants (76.6%) were between the age of 35 and 64 years old with more than sixteen years of experience, and teaching both undergraduate and graduate level classes. The age

categories and their percentages are proportional to the age distribution data of the population reported by the OIRA at Auburn University. Each of the colleges was represented in the data. The sample was a good representative of Auburn University faculty members with regard to race with approximately 75% White, 10% Asian, 6% African American, and 5% Hispanic and Latino. Forty four percent of the participants were found to be involved in multicultural activities 1 to 5 times within the last five years compared to 32% who reported not having participated in any multicultural activities. Approximately half of the participants who responded were involved in multiple types of multicultural activities. The interpretation of the demographic profile of the participants will be further discussed in Chapter V.

Results

The results of descriptive data for research questions 1 and 2 such as frequencies, mean, and standard deviation for the MTCS are summarized in Table 11.

Table 11

Summary of Descriptive Data for MTCS, and Knowledge and Skill Sub-Scales

	MTCS Score	Knowledge	Skill
Mean	53.55	19.73	33.82
Std. Deviation	12.115	4.861	7.971
Minimum	16	6	10
Maximum	80	30	50
N	268	268	268

Research Question 1-What are the faculty members' perceptions on their knowledge level of multicultural teaching competence?

In order to answer the first research question, a pool of descriptive data such as frequency, mean, and standard deviation were calculated using the data from 6 statements in the survey assessing the MTK of the faculty members. Responses were rated on a 5-point Likert type scale with options ranging from “strongly agree” to “strongly disagree”. The participants responded to each of these six statements in terms of their own degree of agreement or disagreement. The percentage of the strongly agree and agree, and the strongly disagree and disagree responses to each of the six MTK statements were summed to determine the percentage of participants who reported having or not having MTK. The rest of the participant who rated neither agree nor disagree comprised the undecided group.

The percentages of individual responses to the statements measuring MTK ranged from 31% to 67% for agree to strongly agree compared to 13% to 37% for disagree to strongly disagree. The highest percentages were related to statements such as “I am knowledgeable of how historical experiences of various racial and ethnic minority groups may affect students’ learning” (67% agree and strongly agree), and “I understand the various communication styles among different racial and ethnic minority students in my classroom” (63% agree and strongly agree). The lowest percentage of responses belonged to the statements “I am knowledgeable about the particular teaching strategies that affirm the racial and ethnic identities of all students” (31% agree and strongly agree), and “I am knowledgeable about the various community resources within the city that I teach” (43% agree and strongly agree).

Out of 268 participants, 49% of them self-reported having multicultural teaching knowledge compared to 26% of the participants who perceived not having multicultural teaching

knowledge. The remaining 25% of the participants were ambivalent about their possession of multicultural teaching knowledge. The summated scores of MTK ranged from a low of 6 to a high of 30. The average MTK score of the total 268 participants was 19.73 out of 30 with a standard deviation of 4.861 ($M=19.73$, $SD=4.861$). The average MTCS scores ranged from a low of 16 to a high of 80. The average MTCS score was 53.55 out of 80 with a standard deviation of 12.11 ($M=53.55$, $SD=12.11$, $min=16$, $max=80$). Table 12 includes the frequency and percentage data of 6 statements measuring MTK of the participants.

Table 12

Items Frequency and Percentage of Responses to Knowledge Sub-scale

Multicultural Teaching Knowledge					
Questions	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
I understand the various communication styles among different racial and ethnic minority student.	7 (3%)	26 (10%)	65 (24%)	127 (47%)	43 (16%)
I have a clear understanding of culturally responsive pedagogy.	15 (6%)	60 (22%)	73 (27%)	92 (34%)	28 (10%)
I am knowledgeable about racial and ethnic identity theories.	23 (9%)	71 (27%)	53 (20%)	92 (34%)	29 (11%)
I am knowledgeable of how historical experiences of various racial and ethnic minority groups may affect students' learning.	9 (3%)	35 (13%)	44 (16%)	124 (46%)	56 (21%)
I am knowledgeable about the particular teaching strategies that affirm the racial and ethnic identities of all students.	23 (9%)	75 (28%)	87 (33%)	64 (24%)	19 (7%)
I am knowledgeable about the various community resources within the city that I teach.	18 (6%)	59 (22%)	77 (29%)	98(37%)	16 (6%)

Note: Percentages across the Likert scale may not add up to 100 due to number rounding.

Research Question 2- What are the faculty members' perceptions of their skill levels of multicultural teaching competence?

In order to answer the second research question, descriptive data such as frequency, mean, and standard deviation were calculated using data from ten statements in the MTCS assessing the MTS of faculty members. The participants responded to each of these ten statements by selecting one of five responses: strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree. The percentage of the strongly agree and agree, and the strongly disagree and disagree responses to each of the ten MTS statements were summed to determine the percentage of participants who reported having or not having multicultural teaching knowledge. The rest of the participant who rated neither agree nor disagree comprised the undecided group.

The percentages of individual responses to the statements assessing MTS ranged from 30% to 76% for agree to strongly agree. The highest percentages belonged to statements such as, "I establish strong, supportive relationships with racial and ethnic minority students" (76% agree and strongly agree), and "I often promote diversity by the behaviors I exhibit" (71% agree and strongly agree). The lowest percentages of responses were related to the statements such as "I consult regularly with other faculty members or administrators to help me understand multicultural issues related to instruction." (30% agree and strongly agree), and "I plan events to increase students' knowledge about cultural experiences of various racial and ethnic groups" (45% agree and strongly agree).

Out of 268 participants, 52% of them self-reported having multicultural teaching skills compared to 22% of the participants who perceived not having multicultural teaching skills. The remaining 26% of the participants were ambivalent about their possession of multicultural

teaching skills. The summated score of MTS ranged from a low of 10 to a high of 50. The average MTS score of the total 268 participants was 33.82 out of 50 with a standard deviation of 7.971 (M=33.82, SD=7.971). The average MTCS score was 53.55 out of 80 with a standard deviation of 12.11 (M=53.55, SD=12.11, min=16, max=80). The frequency and percentage of responses to MTS statements were reported in Table 13.

Table 13

Items Frequency and Percentage of Responses to Skill Sub-scale

Questions	Multicultural Teaching Skill				
	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
I plan many activities to value diverse cultural practices in my classroom.	20 (8%)	32 (12%)	91 (34%)	81 (30%)	44 (16%)
I consult regularly with other faculty members or administrators to help me understand multicultural issues related to instruction.	32 (12%)	78 (29%)	76 (28%)	68 (25%)	14 (5%)
I often include examples of the experiences and perspectives of racial and ethnic groups during my classroom lessons.	25 (9%)	45 (17%)	44 (16%)	93 (35%)	61 (23%)
I plan events to increase students' knowledge about cultural experiences of various racial and ethnic groups.	33 (12%)	54 (20%)	60 (22%)	78 (29%)	43 (16%)
My curricula integrate topics and events from racial and ethnic minority populations.	34 (13%)	40 (15%)	48 (18%)	98 (37%)	48 (18%)
I make changes within the general classroom environment so racial and	18 (7%)	28 (10%)	91 (34%)	87 (33%)	44 (16%)

Questions	Multicultural Teaching Skill				
	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
ethnic minority students will have an equal opportunity for success.					
I rarely examine the instructional materials I use in the classroom for racial and ethnic bias.	27 (10%)	50 (19%)	69 (26%)	82 (31%)	40 (15%)
I integrate the cultural values and lifestyles of racial and ethnic minority groups into my teaching.	27 (10%)	41 (15%)	80 (30%)	91 (34%)	29 (11%)
I often promote diversity by the behaviors I exhibit.	5 (2%)	7 (3%)	67 (25%)	125 (47%)	64 (24%)
I establish strong, supportive relationships with racial and ethnic minority students.	2 (.7%)	4 (2%)	59 (22%)	133 (50%)	70 (26%)

Note: Percentages across the Likert scale may not add up to 100 due to number rounding.

Research Question 3-What is the relationship between multicultural experiences and faculty members’ multicultural teaching competence score measured by the MTCS?

Research question 3 was answered by conducting two one-way ANOVAs to determine whether or not statistically significant differences existed in the mean MTCS scores of faculty members’ based on the number of involvements in multicultural activities and type of their multicultural activities. The following sub-questions were posed to discover the effect of multicultural experiences on the overall multicultural teaching competence score of the participants.

1. Does the number of involvements in multicultural activities have an effect on MTCS scores of faculty members?

2. Does the type of multicultural activities have an effect on MTCS scores of faculty members?

Results of two one-way ANOVAs are presented in Table 14.

Table 14

Means, Standard Deviations and One-Way Analysis of Variance for the Effects of the Number of Involvements in Multicultural Activities and the Type of Multicultural Activities

Multicultural Experience	N	M	SD	F	Sig	η^2
Number of Involvements						
0	86	45.79	11.74	F (3, 264) =36.5	P< .001	.3
1-5	117	54.03	9.96			
6-10	30	59.87	8.06			
10+	35	65.60	8.76			
Type of Activities						
International experience	22	49.50	12.29	F (3, 151) = 7.77	P< .001	.1
Professional development	29	56.17	10.99			
Real-life experiences	32	53.75	10.01			
Multiple multicultural activities	72	60.44	9.28			

The first one-way between groups ANOVA was conducted to evaluate the relationship between the number of involvement in multicultural activities and the faculty members' multicultural teaching competence. The independent variable, the number of involvements in multicultural activities, included four levels: no involvements, 1-5 times, 6-10 times, and over 10 times. The dependent variable was the total MTCS score of faculty members. Alpha level was set to .05. Levene's test of homogeneity indicated equal variances, ($F = 2.25$, $p = .082$). Analysis of variance showed a main effect of the number of involvements in multicultural activities on the faculty members' multicultural teaching competence, $F (3, 264) =36.5$, $p < .05$. There was

statistically significant difference between groups as determined by ANOVA, indicating that the number of involvements in multicultural activities had an effect on faculty members' multicultural teaching competence. Furthermore, large effect size assessed by η^2 of .3 indicated that the results were meaningfully different. Differences among groups had a practical significance. The post-hoc analyses using Tukey's HSD indicated that the participants who were involved in multicultural activities more than 10 times maintained a higher MTCS score ($M = 65.60$, $SD = 8.76$). The mean score for faculty members who did not participate any multicultural activities ($M = 45.79$, $SD = 11.74$) was significantly lower than those who participated in multicultural activities 1 to 5 times ($M = 54.03$, $SD = 9.96$), 6 to 10 times ($M = 59.87$, $SD = 8.06$), and more than 10 times ($M = 65.60$, $SD = 8.76$). The mean score for faculty members who participated in multicultural activities 1 to 5 times was also significantly lower than those who participated 6-10 times and more than 10 times. To summarize, the differences were between all groups of the number of involvements in multicultural activities except the top two categories, 6 to 10 times and more than 10 times.

The second one-way ANOVA was conducted to evaluate the relationship between the types of their multicultural activities and the faculty members' multicultural teaching competence. The independent variable, the type of multicultural activities, included four levels: international experience, professional development, real-life experiences, and multiple forms of multicultural activities. The dependent variable was the total MTCS score of faculty members. Levene's test showed no significance, supporting the homogeneity of variances, ($F = 1.27$, $p = .288$). Analysis of variance showed a main effect of the type of multicultural activities on the faculty members' multicultural teaching competence, ($F(3, 151) = 7.77$, $p < .05$). There was statistically significant difference between groups as determined by ANOVA, indicating that the

type of multicultural activities has an effect on faculty members' multicultural teaching competence. The large effect size assessed by η^2 of .1 using Cohen's (1988) criterion indicated that the differences among groups had a practical significance. The post-hoc analyses using Tukey's HSD indicated that the participants who were involved in multiple types of multicultural activities maintained a higher MTCS score. The mean score for multiple types of multicultural activities ($M = 60.44$, $SD = 9.28$) was higher than both international experience ($M = 49.50$, $SD = 12.29$) and real-life experiences ($M = 53.75$, $SD = 10.01$). Professional development ($M = 56.17$, $SD = 10.99$) was not significantly different from international experience, real-life experience, and multiple forms of multicultural activities.

Research Question 4-What is the relationship between multicultural experiences, demographic characteristics, and faculty members' multicultural teaching competence score measured by the MTCS?

In order to answer this research question, a linear multiple regression was calculated to predict the multicultural teaching competence of faculty members based on their age, gender, race, level of teaching, teaching experience, affiliated college, number of involvements in multicultural activities, and type of multicultural activities. Preliminary analyses were performed to ensure there was no violation of the assumption of normality, linearity and multicollinearity. The model summary and the ANOVA summary indicated that the overall model of the eight independent variables significantly predicted multicultural teaching competence, $R^2 = .491$, adjusted $R^2 = .4424$, $F(31, 236) = 7.331$, $p < .001$. The R^2 is .491, indicating that the eight independent variables account for 49.1% of the variation in multicultural teaching competence scores. A summary of regression coefficients is presented in Table 15.

Table 15

Summary of Regression Analyses for Variables Predicting Multicultural Teaching Competence

Variable	B	SE	β	t	p
Age					
(25-43) vs 65+	1.625	2.928	0.045	0.555	0.579
(35-44) vs 65+	1.508	2.517	0.053	0.599	0.550
(45-54) vs 65+	1.251	2.253	0.044	0.555	0.579
(55-64) vs 65+	-1.242	2.138	-0.046	-0.581	0.562
Gender					
Male vs Female	-.272	1.337	-0.011	-0.204	0.839
Race					
Asian versus White	3.453	2.316	0.073	1.490	0.137
African- American vs White	4.037	2.925	0.069	1.380	0.169
Other vs White	.287	2.388	0.006	0.120	0.904
Teaching Level					
Undergraduate vs Both	2.004	1.539	0.075	1.302	0.194
Graduate vs Both	-2.309	1.957	-0.065	-1.180	0.239
Teaching Experience					
(1-5 years) vs 16+	-4.365	2.126	-0.143*	-2.053	0.041
(6-15 years) vs 16+	-3.961	1.688	-0.152*	-2.346	0.020
The Affiliated College					
Architecture vs Agriculture	3.937	3.947	0.055	0.997	0.320
Business vs Agriculture	-2.729	3.511	-0.043	-0.777	0.438
Education vs Agriculture	6.750	2.401	0.203**	2.811	0.005
Engineering vs Agriculture	-.103	3.060	-0.002	-0.034	0.973
Forestry & Wildlife vs Agriculture	-4.816	3.793	-0.068	-1.270	0.205
Human Science vs Agriculture	4.093	3.294	0.075	1.243	0.215
Liberal Arts vs Agriculture	2.731	2.265	0.100	1.206	0.229
Nursing vs Agriculture	1.208	4.844	0.014	0.249	0.803
Pharmacy vs Agriculture	-7.893	3.859	-0.124*	-2.045	0.042

Variable	B	SE	β	t	p
Sciences & Math. vs Agriculture	-6.315	2.641	-0.152*	-2.391	0.018
Vet. Medicine vs Agriculture	-5.909	2.847	-0.134*	-2.075	0.039
Other vs Agriculture	.771	4.148	0.010	0.186	0.853
Number of Activities					
(1-5 times) vs 0	4.895	1.769	0.201**	2.767	0.006
(6-10 times) vs 0	9.904	2.424	0.258**	4.086	0.001
(10+ times) vs 0	12.981	2.375	0.362**	5.466	0.001
Type of Activities					
International Experiences vs No	-2.979	2.521	-0.068	-1.181	0.239
Professional Dev. vs No	1.632	2.303	0.042	0.709	0.479
Real Life Experiences vs No	2.664	2.152	0.071	1.238	0.217
Multiple Involvements vs No	2.907	1.869	0.107	1.555	0.121

Note: Eight variables were dummy coded with one level serving as the reference group.
*p < .05. **p < .01.

As can be seen in Table 15, the number of involvements in multicultural activities (1-5 times, 6-10 times, 10+ times) were statistically significant and the magnitude of β coefficients were .201, .258, and .362 respectively, indicating that the number of involvements in multicultural activities made the strongest unique contribution to the prediction of perceived multicultural teaching competence of the faculty members, when the variance explained by all other variables in the model was controlled for. The β weight for the College of Education (.203) was statistically significant indicating that belonging to the College of Education also made a unique contribution to the prediction of multicultural teaching competence of participants after accounting for all other variables in the model.

The standardized β weights for the College of Pharmacy (-.124), Sciences and Mathematics (-.152), and Veterinary Medicine (-.134) were also statistically significant, but these colleges made less of a unique contribution to the prediction of multicultural teaching

competence of faculty members. The categories of teaching experience, 1-5 years (-.143) and 6-15 years (-.152) predicted multicultural teaching competence at a statistically significant level. These two experience categories also made a less of a unique contribution to the prediction of perceived multicultural teaching competence of faculty members after accounting for all other variables in the model. The rest of the variables did not make statistically significant contribution to the prediction of perceived multicultural teaching competence of the participants.

Summary

This chapter discussed the results of the data analysis. The demographic profile of the faculty members who participated in this study were presented by using descriptive data. This chapter provided the results of the frequency and percentage of responses to the statements assessing the participants' perceptions of knowledge and skill levels of multicultural teaching competence. Two separate one-way ANOVAs were conducted to explore the impact of the number of involvements in multicultural activities and the type of multicultural activities on multicultural teaching competence of faculty members. The results of two of the one-way ANOVA were statistically significant for both the number of involvements in multicultural activities and the type of multicultural activities. Finally, this chapter provided the results for the linear multiple regression to determine the degree to which the independent variables predicted multicultural teaching competence of faculty members. The number of involvements in multicultural activities and being from the College of Education made a significant unique contribution to the prediction of perceived multicultural teaching competence of the participants. An overview of this study, summary of results, limitations, implications, conclusion, recommendations for practical applications, and summary are presented in Chapter V.

CHAPTER V
MAJOR FINDINGS, LIMITATIONS, IMPLICATIONS,
RECOMMENDATIONS FOR FUTURE RESEARCH, CONCLUSIONS

The demographic diversification of the student body and the cultural mismatch between students and educators has and will continue to significantly impact both students' academic achievement and also affect faculty and graduate-level educators by creating challenges, adding significant complexity in their teaching, and urging them to become more culturally responsive to the learning requirements of students from diverse backgrounds. The relevant research also emphasized the need for educators to become multiculturally competent. The multicultural teaching competence has become a necessary attribute and a professional imperative for faculty members in addressing diversity issues in multicultural classrooms and meeting the academic needs of diverse student population. All of these brought multicultural teaching competence of faculty members to fore of what needs to be addressed in higher education institutions.

Unfortunately, not enough research has dealt with higher educators' abilities to teach in a culturally competent way in classrooms which are full of diverse students. In order to assess faculty members' levels of multicultural teaching competence at a four-year institution, the MTCS was used as a self-report instrument.

This chapter discusses the findings of the study in 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 limitations and implications of

the findings for faculty and the practice of higher education are outlined. The chapter concludes with recommendations for future research and the final thoughts and conclusions.

The Purpose of the Study

The purpose of this quantitative, descriptive study was to (a) examine the multicultural teaching competencies of faculty members with regard to their multicultural teaching knowledge and skills, and (b) to examine the relationships between multicultural teaching competence and selected demographic and experiential characteristics of a sample of faculty members. Selected demographic and experiential characteristics of a sample of faculty members included: biographical characteristics such as age, gender, race, years of teaching experience, the name of affiliated college, level of teaching and multicultural experiences such as the number and type of multicultural activities. The incorporation of multicultural teaching knowledge as well as exploration of multicultural teaching skills are vital to the development of faculty members to work ethically and effectively with all students.

Research Questions

The present study was undertaken to address the following research questions:

1. What are the faculty members' perceptions on their knowledge levels of multicultural teaching competence?
2. What are the faculty members' perceptions of their skill levels of multicultural teaching competence?
3. What is the relationship between multicultural experiences and faculty members' multicultural teaching competence score measured by the MTCS?

4. What is the relationship between multicultural experiences, demographic characteristics, and faculty members' multicultural teaching competence score measured by the MTCS?

Demographic Observations and Interpretations

The participants for this study consisted of two hundred and sixty-eight (N= 268) full-time instructional faculty members who agreed to participate in the study at Auburn University. The following is a summary of the demographic profile of the participants.

Age. Approximately, 77% of the participants were between the ages of 35 and 64. The percentage for this age category was very similar to 78% reported by the OIRA at Auburn University. The participants between the ages of 25 and 34 were 13% compared to 10.5% reported for the same age category by the OIRA while only 10% of the participants reported their age 65 or older. Similarly, the OIRA reported that 11.6% of faculty members at Auburn University were 65 and older. Overall, the percentages of each age intervals were similar to the age distribution data of the faculty population reported by the OIRA at Auburn University.

Gender. The ratio of female participants to male participants (51.1% female versus 49% male) was slightly higher in study sample, which is inconsistent with both the faculty demographic trends (37% female versus 63% male) at Auburn University and in the field of higher education. According to DeAngelo, Franke, Hurtado, Pryor, and Tran (2011), 44% of women earn a degree after four years as compared to 33% of men. Even though women attain undergraduate degrees at higher rate than men, women “rarely make up more than 30% of faculty at Research Extensive universities” (Marschke et al., 2007, p. 1 in abstract). Progress toward gender equity among faculty members in higher education has been very slow. Curtis (2011), AAUP Director of Research and Public Policy, reported persisting gender inequities in

academic employment. The explanation for higher percentage of female faculty participation in this study was probably specific to this study sample, certainly not an evidence for gender equity in academic employment.

Race. The majority of participants (74.7%) self-identified themselves as White. The percentage of racial minorities who participated in the study was clearly lower compared to the percentage of White faculty, confirming the persistent gap between the number of minority and White faculty in predominantly white institutions. Whites were the largest racial group among the participants which was expected considering both the faculty demographic trends at Auburn University and the national profile of faculty diversity. A report from The National Center for Education Statistics (2015) confirmed that among full-time professors, 84 percent were White, 4 percent were Black, 3 percent were Hispanic, and 9 percent were Asian/Pacific Islander. Only less than 1 percent of each race categories were professors who were American Indian/Alaska Native and of two or more races.

These results continued to cause concern for “the numerical representation of various racial, ethnic, and gender groups” (Hurtado et al., 1999, p. 19) among student population and the lack of diversity among faculty members teaching them. With the mismatch between culturally and linguistically diverse student population and the educators who teach them (Ming & Dukes, 2006), the focus on establishing a growing diversity among faculty members that reflects the diversity of our national population appears to be very important; recruiting a more diverse body of faculty and integrating multicultural issues proactively in training programs will be an important recommendation for future research.

Years of Experience, Level of Teaching and the Affiliated College. Approximately half of the participants (49%) had more than 16 years of teaching experience while 31% had 6 to

15 years of teaching experience. In other words, 80% of the faculty members had 6 to 16 years of teaching experience, with 57% teaching both undergraduate and graduate level, while 29 % teaching undergraduate level classes, supporting the idea that acquiring multicultural teaching competence is an on-going process. Multicultural teaching competence is not acquired casually, but rather requires deliberate efforts and intentional change toward becoming more multiculturally competent. Twenty seven percent of the participants belonged to The College of Liberal Arts, while approximately 16% were from The College of Education. The participation rate for the College of Agriculture and the College of Sciences and Mathematics were similar, 9.8% and 9.4% respectively. Each of the colleges at Auburn University was represented in the sample.

Multicultural Experience: The number of involvements in multicultural activities and type of multicultural activities. The multicultural experiences were evaluated by the quantity of involvements and the types of multicultural activities in this study to assess both qualitative and quantitative aspects of multicultural experiences. A large number of participants (44%) were found to be involved in multicultural activities 1 to 5 times in the last 5 years compared to 32.1% who reported not being involved in any multicultural activities. The participants answered an open-ended question to report their types of multicultural activities. Approximately half of the participants (46.5%) who responded to this open-ended question reported being involved in a category of multiple types of multicultural activities. A notable number, 113 (42%) of the participants who participated in the study did not report any the type of multicultural activities. Approximately 21% of the participants who responded were somewhat involved in a category of real-life experiences (e.g. teaching a diversity/multicultural class in U.S. and/or abroad, having administrative or membership positions at an institutional

multicultural diversity commission, committee, and council, mentoring international or American students, being active in groups and cultural activities, and coming from a diverse family), while 19% of the participants who responded were involved in a category of professional developments (e.g. participation in workshops, trainings, international conferences, and presentations). Surprisingly, only 14% of the participants involved in a category of international experiences (e.g. study abroad, travel abroad, research abroad, consulting abroad, living abroad, participation in scholar exchange programs, and faculty development at another university, and participation in development teams). These four categories (international experiences, real-life experiences, professional developments and multi activities) emerged as a result of qualitative method of data analysis (Strauss & Corbin, 1990), were consistent with the educators' experiential characteristics examined by the previous researchers in the field.

Major Findings and Interpretations

Research Question 1: Multicultural teaching knowledge

Research question one addressed the faculty members' perceptions on their knowledge level of multicultural teaching competence. Out of 268 participants, 49% of them self-reported having MTK. Almost half of the participants perceived themselves having the knowledge of teaching strategies, identity theories, and historical experiences that are unique to various ethnic minority groups, making them more culturally competent educators. Twenty-six percent of the participants perceived themselves not having MTK while the remaining 25% of the participants were ambivalent about their possession of MTK.

Given that the majority of the participants in this study were White faculty members, the result was inconsistent with the assumption that "many White teachers, because of the possible lack of diversity in their backgrounds, do not have the necessary cultural competency to

effectively engage today's increasingly diverse populations" (Harrison et al., 2010, p. 187). However, the same researchers also stated that White teachers who were exposed to cultural diversity would develop increased cultural competency. This might be a true assumption for the sample in this study. This sample of faculty members, regardless of their racial backgrounds might be becoming increasingly culturally competent by teaching diverse group of students and being exposed to student cultural diversity over the years. These faculty members might also be benefitting from the current on-campus programs contributing to the development and increasing their multicultural teaching competence.

Research Question 2: Multicultural teaching skills

Research question two addressed the faculty members' perceptions on their skill levels of multicultural teaching competence. Out of 268 participants, 52% of them self-reported having multicultural teaching skills compared to 22% of the participants who perceived not having multicultural teaching skills. The remaining 26% of the participants were ambivalent about their possession of multicultural teaching skills.

The results indicated that slightly over half of the participants perceived themselves having multicultural teaching skills in providing students equal opportunity for success, planning activities that value diversity, examining instructional materials for ethnic bias, and most importantly integrating cultural values of ethnic minorities into their teaching. This result pointed out the contrary results between the years of experience and multicultural teaching competence of faculty members. Considering that 80% of the participants had 6 to 16 years of teaching experience with 57% of them teaching diverse group of undergraduate and graduate students, more than just the half of faculty members were expected to have multicultural knowledge and skills deemed necessary to meet the academic needs of diverse group of students. Pope et al.

(2009) mentioned the oft-cited increasingly changing demographic transformations at U.S. campuses: more than 1 in 5 undergraduates were students of color, 1 million international students enrolled in U.S. schools, other groups such as returning adult students, students with disabilities, students of different faiths, veterans, lesbian, gay, bisexual, and transgender students have also increased numerically. In such a diverse campus mentioned above, the underlying reasons behind only the half of the faculty members in the sample having multicultural teaching knowledge and skills were quite thought provoking. Faculty members' interest to enhance and improve their multicultural teaching competence calls for further investigation.

There were two contrarious explanations why only the half of the faculty members perceived themselves having multicultural teaching knowledge and skills. First, the faculty members naturally might assume that they were multiculturally competent and over-report their perceived level of MTK and MTS. Both of their MTK and MTS scores might have been inflated. The first explanation was in fact in agreement with findings of another study conducted by Helms (2004) explaining that the scores on the intercultural development inventory showed that the faculty perceived themselves in general to be much more interculturally sensitive than they were assessed to be by the instrument. Secondly, the result might be tied to the fact that 47% of the participants reported being involved in multiple types of multicultural activities. The results may be attributable to the ongoing feature of development of multicultural teaching competence and to the everlasting focus on diversity and commitment to preparing faculty members to interact successfully with diverse students. Perhaps, this was a fulfillment of faculty programs and services on campuses that are beginning to incorporate experiences with students from diverse backgrounds. In fact, intentions and efforts may be yielding positive outcomes in terms of the development of multicultural teaching competence. However, Schuerholz-Lehr (2007)

found that even though the faculty members who were involved in these programs gained personally and professionally from their involvement, they did not transfer their learning into classroom practice. The examination of the actual application of multicultural knowledge and skills in classrooms is recommended for future research.

Research Question 3: Multicultural experiences

The multicultural experiences of the participants were evaluated by the number of their involvements in multicultural activities and the types of multicultural activities they were involved in. Research question three investigated whether there was a statistically significant difference in faculty members' multicultural teaching competence score measured by the MTCS based on the participants' number of involvements in multicultural activities and the types of multicultural activities. The following null hypotheses were tested using two one-way ANOVA statistical procedures and both were supported:

1. There is not a statistically significant difference in faculty members' MTCS scores based on the number of their involvements in multicultural activities.
2. There is not a statistically significant difference in faculty members' MTCS score based on the type of their multicultural activities.

The results of the first one-way ANOVA showed that there is a statistically significant difference in faculty members' MTCS scores based on the number of their involvements of multicultural activities. The participants who were involved in multicultural activities more than 10 times maintained a higher MTCS score. In other words, the more they were involved in those multicultural activities, the higher their multicultural teaching competence scores were. On the other side, the mean score for faculty members who did not participate in any of the multicultural activities was significantly lower than those who participated in multicultural activities 1 to 5

times, 6 to 10 times, and more than 10 times. The differences were between all groups of the number of involvements in multicultural activities except the categories of 6 to 10 times and more than 10 times. Unfortunately, only 13.1% (n=35) of the participants reported having more than 10 multicultural activities, while 43.7% (n=117) reported having between 1 and 5 multicultural activities in last 5 years. This result is expected to reassure the faculty members that the number of involvements in multicultural activities matter when they are trying to develop and increase their multicultural teaching competence to meet the academic needs of their diverse students.

The results of the second one-way ANOVA showed that there is a statistically significant difference in faculty members' multicultural teaching competence scores measured by the MTCS based on the type of their multicultural activities. The participants who were involved in multiple types of multicultural activities maintained a higher MTCS score than the participants who were involved in International Experience, and Real-life Experiences. This result once more emphasized the need for the faculty members to be involved in multiple types of multicultural experiences to develop or to increase their multicultural teaching competence.

The four categories emerged as a result of a qualitative method of data analysis were as expected and similar to the professional characteristics studied by the other researchers in the field. These categories were also in line with the concept of internationalization of higher education institutions leading to a large number of involvements in multicultural activities, including student mobility initiatives such as exchange programs, field schools, internships, and other study abroad programs; research and collaborative development projects with partner abroad; faculty exchange programs; offshore programs such as twinning arrangements and satellite campuses (Schuerholz-Lehr, 2007). A range of studies examined the impact of these

multicultural activities on the level of faculty's intercultural competence and "how levels of intercultural competence and world-mindedness among faculty translated or failed to translate into a more culturally sensitive and interculturally appropriate teaching approach for global literacy in higher education" (Schuerholz-Lehr, 2007, p. 188).

Reflecting on the reasons why the participants who were involved in multiple types of multicultural activities maintained a higher MTCS score, two rationalizations came to mind. First of all, this category compiled multiple types of multicultural activities that faculty members were involved. Therefore, this category might also bear the joined effect of other categories such as International Experience, Real-life Experiences, and Professional Developments. Secondly, the higher MTCS score might be the natural outcome of the faculty members' participation in multiple types of multicultural activities. The findings of the previous studies examining the professional characteristics of the participants revealed that several of these multicultural activities had a considerable impact on the development of intercultural competence (Helms, 2004; Khishtan, 1990). The further examination of both the characteristics of the participants who pursued the multicultural experiences and the impact of their professional characteristics might provide a better understanding of the factors on the development of multicultural teaching competence of the participants.

Another finding of the study was that the participants who were involved in international experience had the lowest MTCS score compared to participants involved in various type of multicultural activities. This finding appeared to contradict some of research findings. Anderson, Lawton, Rexeisen, and Hubbard (2006) reported dramatic growth in the number of colleges and universities offering study abroad programs. Recently, many faculty members took advantage of the education abroad programs as a part of an emphasis to prepare their college students to be

more interculturally competent (Root & Ngampornchai, 2013). Root & Ngamporncha (2013) studied the faculty members' limited understanding of intercultural learning and how to facilitate such learning as well. Furthermore, Barakat (2014) discussed travel abroad experiences and its effect on cultural competence of students in educational leadership preparation programs. Barakat (2014) stated that the participants who had travel abroad experiences had higher cultural competence than participants with no travel abroad experience. Helms's (2004) study also revealed that faculty members chose travel as the most prevalent response with respect to the enhancement of their level of intercultural competence. The faculty members in this study also identified that living in another country was another factor that had a considerable impact on the development of intercultural competence among faculty members.

Even though the previous research portrayed international experience as being of great significance in acquiring multicultural competence, only a meagre 14% of the participants in this study had international experiences. The lower MTCS score of those involved in international experience might be specific to the sample but at the same time poses a question which might be worthwhile for future research. Given that study abroad programs for students and faculty garnering resources from on-campus programs and activities, are universities encouraging international experiences for the faculty members' development of multicultural competence?

Research Question 4: Demographic characteristics, multicultural experiences, and multicultural teaching competence

A linear multiple regression analysis was conducted to identify variables that predict the faculty members' multicultural teaching competence. The model summary and the ANOVA summary indicated that the overall model of the eight independent variables significantly predicted the multicultural teaching competence. The regression model, consisting of

multicultural experiences, and demographic characteristics, accounted for 49% of the variance in faculty members' multicultural teaching competency score measured by the MTCS. The number of involvements in multicultural activities and being in the College of Education made the strongest unique contribution to the prediction of perceived multicultural teaching competence of the faculty members, when the variance explained by all other variables in the model was controlled for. The affiliated colleges such as the College of Sciences and Mathematics, Veterinary Medicine and Pharmacy as well as the categories of teaching experience predicted multicultural teaching competence of the faculty members at a statistically significant level, indicating that after accounting for all other variables in the model, these variables made a less of a unique contribution to the prediction of multicultural teaching competence of faculty members. Teaching experience has already been identified as an important factor in the literature affecting the acquisition and shaping multicultural teaching competence of faculty members.

These findings were consistent with the findings of another study by Ketterer et al. (2009). They suggested that certain demographic and background variables were related to faculty and student perceptions of multicultural competence. According to the scholars, "faculty who has attended multicultural workshops perceive themselves to be more competent" (Ketterer et al., 2009, p. 15). Barakat (2014) investigated certain biographical characteristics and experiences among graduates of educational leadership preparation programs. Her research findings indicated that cultural competence of educational leaders was affected by biographical characteristics such as gender and perception of belonging to marginalized groups and travel abroad experiences which was contrary to the findings of this study. Similarly, Marina (2004) stated that conference attendance and courses taken were significant factors to the level of multicultural competence of the faculty and administrators and suggested that additional training

increase multicultural awareness, knowledge and skills. Additionally, the relationship between formal multicultural training and the self-perceived multicultural counseling competence has been investigated by many researchers (Sodowsky, Taffe, Gutkin, & Wise, 1994) and prior multicultural training was found to be significantly correlated with higher levels of self-reported multicultural counseling competence. Contrary to these research findings, the biographical characteristics such as age, gender, race, teaching at graduate or undergraduate level as well as the types of multicultural activities including travel abroad experience, conference and course attendance, and multicultural training did not make statistically significant contribution to the prediction of perceived multicultural teaching competence of the faculty members. A more targeted qualitative assessment of multicultural activities is recommended to clarify the findings of this variable.

Two different perspectives of multicultural experiences were examined in this study. Only the number of involvements in multicultural experiences made a statistically significant unique contribution to the prediction of perceived multicultural teaching competence, while the type of multicultural activities did not, after accounting for all other variables in the study. In other words, it was the quantity of multicultural activities, not the type that mattered when predicting perceived multicultural teaching competence of the faculty members. Given that a large number of participants (44%) in this study self-reported being involved in multicultural activities 1 to 5 times in the last 5 years, the robust relationship between recent experiences with cultural diversity and faculty self-perceptions of multicultural competence discussed by Ketterer et al. (2009) was also reconfirmed.

Another finding of the study was that the College of Education made a statistically significant contribution to the prediction of perceived multicultural teaching competence, while

the College of Sciences and Mathematics, Veterinary Medicine and Pharmacy made less of a unique contribution to the prediction of multicultural teaching competence of faculty members. The possible underlying causes for this finding need to be investigated, but Helms (2004) provided some explanation by stating that personal knowledge and expertise regarding other cultures and languages do not automatically provide faculty with the competence to deliver interculturally competent curricula. The faculty with these experiences must show an intentional effort to apply such knowledge and experience to their teaching practice (Green & Olson, 2008).

Reflecting on the reasons that could explain the higher MTCS scores associated with the faculty members from certain academic areas such as the College of Education, Sciences and Mathematics, Veterinary Medicine and Pharmacy, the following rationalization came to mind. Cultural competence has been an active area of scholarship and professional development, especially in the trainings of K-12 education and health care professionals (Diller & Moule, 2005). In fact, the medical, pharmacy, and teacher preparation programs devoted significant curricular time in developing cultural competence among their trainees (Tanner & Allen, 2007). This might simply be the positive outcome of those current efforts to strive for cultural competence in certain academic areas and colleges. Yet, some of the colleges still argue about the relevance, implications and importance of cultural competence within their academic areas, especially in the context of their teaching in classrooms and laboratories. This might be the possible explanation of the lower MTCS scores of the faculty members in these colleges.

Limitations

The current study had some limitations that should be noted. The major limitation was related to the nature of the self-report measures. The influence of social desirability bias has been noted as a particular concern when the self-report measures utilized, especially when measuring

sensitive topics such as race, ethnicity and culture (Debnam et al., 2015; Leung et al., 2014). The scholars expressed concern about these measures not accurately reflecting teachers' actual classroom behaviors because of the social desirability bias or the possibility of limited self-reflection. Therefore, the self-report scores may be inflated. The participants may have selected responses that are socially acceptable or cast themselves in a more favorable light. Their responses may be biased toward what they believe is socially desirable.

One must use caution in generalizing the results of this study because of the response bias. Response bias might have influenced the responses of participants away from an accurate or truthful response. Those faculty members who chose to participate may have had a particular interest in the research topic and may potentially be different from those who did not choose to participate. They may have interpreted the item on the instrument differently than it was intended. The participant may have assessed behavior that they anticipated engaging in rather than the actual behavior.

All of the faculty members were given an opportunity to participate in this study. However, their participation was voluntary. The participants of this study may not represent faculty members at other institutions of higher education across the U.S. Any assumptions, conclusions, or applications outside of this study should be made with caution. Even though these limitations have been recognized, it was expected that this study would contribute to the multicultural teaching competence and higher education literature in a meaningful way by stimulating critical thought and further research.

Implications

Multicultural teaching competence has become a necessary attribute of higher education faculty who are addressing diversity issues in today's multicultural classrooms and promoting

the academic achievement of an increasingly diverse student population. Ketterer et al. (2009) cited that the multicultural competence of professors of higher education has long been considered a significant factor in student success (Ladson-Billings, 2009). Educators who are empowered with practical knowledge and skills in working with diverse student populations become culturally competent educators who can effectively teach and appropriately interact with these students (Ming & Dukes, 2006). The results of this study have implications for the faculty members, their professional development, academic search committees, faculty services and programs, and research on these areas.

The information provided by this study can be useful to faculty members by facilitating an introspection of their own cultural competence. Hopefully, the self-examination would lead to a realization of the need for multicultural experiences, which in turn could encourage educators to participate in these experiences. The previous research clearly supported the fact that mere exposure was not sufficient to bring about the necessary changes in shaping educators' multicultural teaching competence (Ketterer et al., 2009). More deliberate and intentional efforts were needed. The findings of the current study might help educators to realize the return on their investment on the development of the multicultural teaching competence.

The implication of this study on research might be towards the suggestion of some relevant research to find out impact of multicultural experiences in actual classroom practices; in other words how such knowledge and experiences “translate automatically into more globally inclusive teaching practices” (Schuerholz-Lehr, 2007, p. 199).

It is clear from the finding of this study that the multicultural teaching competence can be learned through multicultural experiences. The quantity of involvements in multicultural activities is essential for the development of faculty's multicultural teaching competence during

this learning process. Therefore, the faculty members in higher education institutions should be encouraged to be involved in these multicultural activities. These results also point out to the importance of recruiting and retaining faculty members with multicultural experiences to better serve the increasingly diverse student population. Therefore, academic search committees can integrate a multicultural experience inquiry into interviewing process for the new faculty members.

The suggestions above may serve as a work agenda for the faculty services and programs geared toward training faculty and graduate teaching assistants to become more effective instructors both in the classrooms and laboratories. A non-optional component of multicultural teaching competence might be added to these programs augmenting faculty teaching and professional skills that will undoubtedly benefit all students.

Recommendations for Future Research

The findings of this study provided many possibilities for future investigations that would benefit multicultural competence in general and multicultural teaching competence of the faculty members of higher education in particular. There is still a continued need for the research investigating the current level of the faculty members' multicultural teaching competencies. Since the development of multicultural teaching competence and the acquisition of key intercultural skills does not happen by just being in the vicinity of students from different backgrounds, further research are needed to investigate the faculty members' interest in developing and enhancing their multicultural teaching competence in higher education institutions. Adding demographic or survey questions assessing the aspect of the faculty members' interest might be a good starting point.

Future studies should incorporate the use of qualitative research studies that further investigate the impact of multicultural experiences over time. Qualitative responses could be helpful to understand the impact of multicultural activities on multicultural teaching competence of faculty members. They can elaborate the need and necessity for multicultural experiences of faculty members in higher education by explaining reasons and the effectiveness of these multicultural activities. The further examination of both the individual and joined impact of multicultural experiences might provide a better understanding of the factors on the development of intercultural competence of the participants. Future investigators are encouraged to use larger random samples to enhance the generalization of findings and ensure representation of participants from diverse cultural backgrounds. In an effort to investigate the consistency between the actual possession of multicultural teaching knowledge and skills and self-perception of multicultural teaching competence, the multi-informant and performance-based assessments integrated along with the MTCS are recommended. For a comprehensive assessment of multicultural teaching competence and the prevention of the social desirability bias, the researcher recommends employing a mix of quantitative and qualitative methods including interviews, classroom observations, and judgment by self and students.

Contrary to the previous research portraying the international experience as being of great significance for the educators in acquiring multicultural teaching competence, the reason why a small number of participants reported being involved in international experiences and the corresponding lower MTCS scores in this study called for further research. Furthermore, the characteristics of the faculty members who pursue the multicultural experiences and why they pursue these multicultural activities worth investigating. Does the previous intercultural sensitivity lead them to participate in multicultural activities?

Conclusions

“The demographic diversification of the student body has and will continue to affect collegiate and graduate-level educators” (Prieto, 2012). The student diversity along with the cultural mismatch between students and educators impacted both students’ academic achievement and the faculty and graduate-level educators by creating challenges and adding complexity into their teaching. It is no longer optional for the faculty members to learn more about students from different cultural backgrounds and to provide a global education for all of their students. The previous research also emphasized the need for educators to become multiculturally competent (Pope & Mueller, 2005; Pratt-Johnson, 2006; Schuerholz-Lehr, 2007). Additionally, Pope and Mueller (2005) deemed each component of multicultural competence (awareness, knowledge, and skill) to be essential for faculty members in developing their multicultural teaching competence. The multicultural teaching competence has become a necessary attribute and a professional imperative for faculty members in addressing diversity issues in multicultural classrooms and meeting the academic needs of diverse student population. The purpose of this study was to examine the multicultural teaching competencies of faculty members with regard to their multicultural teaching knowledge and skills. The study also focused on the relationships between multicultural teaching competence and selected demographic and experiential characteristics of a sample of faculty members in an institute of higher education.

The analysis of multicultural teaching competence scores measured by MTCS revealed three primary results. First, the half of the faculty members in this sample self-reported having both multicultural teaching knowledge and skills. Secondly, the results indicated that the number of involvements in multicultural activities and the type of multicultural activities participated had

a statistically significant impact on multicultural teaching competence of faculty members. The faculty members who were involved in more and the multiple types of multicultural experiences maintained a higher MTCS scores. Finally, the linear multiple regression analysis of multicultural experiences, and demographic characteristics revealed that the number of involvements in multicultural activities and being from the College of Education made the strongest unique contribution to the prediction of perceived multicultural teaching competence of faculty members.

Considering the statistical results and the review of previous literature, the following three conclusions were established. First, the faculty members in the study sample perceived themselves having both the knowledge and skills of the multicultural teaching competence. This is an indication that participants perceived themselves having the knowledge of teaching strategies, identity theories, and historical experiences that are unique to ethnic minority groups. The faculty members perceived themselves having multicultural teaching skills in providing students equal opportunity for success, planning activities that value diversity, examining instructional materials for ethnic bias, and the most importantly implementing culturally sensitive teaching practices. The faculty members in this sample, regardless of their racial backgrounds are becoming multiculturally competent probably due to being exposed to more cultural diversity and benefitting from the programs on campus to help them develop increased cultural competence. The result might be attributable to the current focus on diversity as well as the commitment in preparing faculty members to interact successfully with diverse students or fulfillment of changing programs for faculty members on campuses. Further research is needed to ensure whether this is not overconfidence or natural assumption of the faculty members, but the actual reflection of their multicultural teaching competence present. The investigation of

consistency between actual possession of both knowledge and skills and the self-perception of multicultural teaching competence are recommended.

Secondly, the multicultural teaching competence can be learned through multicultural experiences, emphasizing the need for more involvements in different types of multicultural experiences for the development of faculty members' multicultural teaching competence. Both the quantity of involvement in multicultural activities and the type of multicultural experiences participated mattered when examining the variable of multicultural experience within this sample. The more experience that faculty members had with the multiple types of multicultural activities, the greater their multicultural teaching competence. In other words, experience increased multicultural competence as asserted in the literature (Ketterer et al., 2009) and presumably resulted in increased multicultural teaching competence among faculty members. The faculty members' teaching experience should be noted as an important factor in the development of multicultural teaching competence of the faculty members.

Third, the number of involvements in multicultural activities and the certain academic areas such as the College of Education, Sciences and Mathematics, Veterinary Medicine and Pharmacy as well as the teaching experience were the strongest predictors of multicultural teaching competence of faculty members. In this case, it was the quantity of involvements in multicultural activities, not the type that mattered when predicting perceived multicultural teaching competence of the faculty members. Since cultural competence has been an active area of scholarship and professional development only in some of the academic areas, the results might simply be the positive outcome of those current efforts to strive for cultural competence in certain academic areas and colleges.

Mere exposure to diversity is not enough to bring about the necessary changes in shaping educator's multicultural teaching competence. Deliberate efforts and intentional changes are needed. Therefore, the faculty members in higher education institutions must be encouraged to be more involved in various kinds of multicultural activities to improve their multicultural teaching competencies needed to meet the academic needs of diverse student population on campuses.

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Appendix A

Multicultural Teaching Competence Scale (MTCS)

You are invited to participate in a research study to examine faculty members' levels of multicultural teaching competencies at Auburn University. This study is being conducted by Sevgi Kucuktas, doctoral student, under the direction of Dr. Maria Witte, Professor, in the Auburn University Department of Educational Foundations, Leadership, and Technology. You are invited to participate because you are a faculty member at Auburn University and are of age 19 or older. Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete a brief online survey through Qualtrics. Your total time commitment will be approximately 5-10 minutes. There are no foreseeable risks associated with this study. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any time by closing your browser window. Any data obtained in connection with this study will remain anonymous. Once you've submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate will not jeopardize your future relations with the Department of EFLT and Auburn University. I hope the results of this study will yield greater understanding of faculty members' levels of multicultural teaching competencies at Auburn University, and enhance the manner in which the academic achievements of all students regardless of their cultural background can be nurtured. However, I cannot promise you that you will receive any or all of the benefits described. There will be no costs to participants and no compensation offered for 5-10 minutes of your time. Information collected through your participation will be used in a dissertation for partial fulfillment of a doctoral degree in Adult Education. Information collected may also be used for publication or professional presentation. If you have questions about this study, please ask them now or contact the doctoral student, Sevgi Kucuktas at kucukse@auburn.edu or the chair of the doctoral committee, Dr. Maria Witte at wittemm@auburn.edu. If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334)-844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

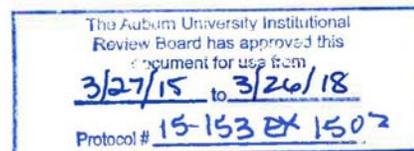
HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO.

Please answer the following questions about yourself:

What is your age?

What is your gender?

- Male
 Female



Please add this approval information in sentence form to this letter. Send your updated letter to the IRB with a live link to the survey.

What is your race?

- African American
- Caucasian
- Other _____

What is your ethnicity?

How many years of teaching experience do you have?

- 1-5 years
- 6-15 years
- 16 years+

What college do you belong to?

- College of Agriculture
- College of Architecture, Design and Construction
- College of Business
- College of Education
- College of Engineering
- College of Forestry and Wildlife Sciences
- College of Human Sciences
- College of Liberal Arts
- College of Nursing
- College of Pharmacy
- College of Sciences and Mathematics
- College of Veterinary Medicine
- Other _____

What level are you teaching?

- Undergraduate
- Graduate
- Both

How many times have you been involved in multicultural activities (cultural competency trainings, workshops, courses, conferences, serving in a diversity committee, participation in Study Abroad Program or any other cultural programs which focused on multicultural competency or diversity) in the last 5 years?

- 0
- 1-5
- 6-10
- 10+

Please list examples of multicultural activities you have involved in (cultural competency trainings, workshops, courses, conferences, serving in a diversity committee, participation

in Study Abroad Program, or any other cultural programs which focused on multicultural competency and diversity). (Example: Multicultural workshop)

Please choose an option that best describes your situation, when working with culturally diverse student population.

I plan many activities to value diverse cultural practices in my classroom.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I understand the various communication styles among different racial and ethnic minority students in my classroom.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I consult regularly with other faculty members or administrators to help me understand multicultural issues related to instruction.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I have a clear understanding of culturally responsive pedagogy.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I often include examples of the experiences and perspectives of racial and ethnic groups during my lectures.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I plan events to increase students' knowledge about cultural experiences of various racial and ethnic groups.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I am knowledgeable about racial and ethnic identity theories.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

My curricula integrate topics and events from racial and ethnic minority populations.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I am knowledgeable of how historical experiences of various racial and ethnic minority groups may affect students' learning.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I make changes within the general classroom environment so racial and ethnic minority students will have an equal opportunity for success.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I am knowledgeable about the particular teaching strategies that affirm the racial and ethnic identities of all students.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I rarely examine the instructional materials I use in the classroom for racial and ethnic bias.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I integrate the cultural values and lifestyles of racial and ethnic minority groups into my teaching.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I am knowledgeable about the various community resources within the city that I teach.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I often promote diversity by the behaviors I exhibit.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

I establish strong, supportive relationships with racial and ethnic minority students.

- Strongly Disagree
- Disagree
- Neither Agree nor Disagree
- Agree
- Strongly Agree

Thank you for participation. Please click next to submit your answers.

Appendix B.

Auburn University Institutional Review Board (IRB) Approval

**AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS
REQUEST FOR EXEMPT CATEGORY RESEARCH**

For Information or help completing this form, contact: **THE OFFICE OF RESEARCH COMPLIANCE**, 115 Ramsay Hall
Phone: 334-844-5966 e-mail: IRBAdmin@auburn.edu Web Address: <http://www.auburn.edu/research/vpr/ohs/index.htm>

Revised 2/1/2014 Submit completed form to IRBsubmit@auburn.edu or 115 Ramsay Hall, Auburn University 36849.

Form must be populated using Adobe Acrobat / Pro 9 or greater standalone program (do not fill out in browser). Hand written forms will not be accepted.

Project activities may not begin until you have received approval from the Auburn University IRB.

1. PROJECT PERSONNEL & TRAINING

PRINCIPAL INVESTIGATOR (PI):

Name Sevqi Kucuktas Title PhD Student Dept./School EFLT
Address 1659 Piedmont Dr. Auburn, AL 36830 AU Email kucukse@auburn.edu
Phone 334-703-0164 Dept. Head Dr. Sherida Downer

FACULTY ADVISOR (if applicable):

Name Dr. Maria Witte Title Professor Dept./School EFLT
Address 4036 Haley Center, Auburn University, Alabama 36849
Phone 334-844-3078 AU Email wittemm@auburn.edu

KEY PERSONNEL: List Key Personnel (other than PI and FA). Additional personnel may be listed in an attachment.

Name	Title	Institution	Responsibilities

KEY PERSONNEL TRAINING: Have all Key Personnel completed CITI Human Research Training (including elective modules related to this research) within the last 3 years? YES NO

TRAINING CERTIFICATES: Please attach CITI completion certificates for all Key Personnel.

2. PROJECT INFORMATION

Title: Examination of faculty members' multicultural teaching competencies at a four-year institution.

Source of Funding: Investigator Internal External

List External Agency & Grant Number: _____

List any contractors, sub-contractors, or other entities associate with this project.

List any other IRBs associated with this project (including those involved with reviewing, deferring, or determinations).

FOR ORC OFFICE USE ONLY			
DATE RECEIVED IN ORC:	<u>3-20-15</u>	by <u>YB</u>	APPROVAL # _____
DATE OF IRB REVIEW:	_____	by _____	APPROVAL CATEGORY: _____
DATE OF ORC REVIEW:	_____	by _____	INTERVAL FOR CONTINUING REVIEW : _____
DATE OF APPROVAL:	_____	by _____	
COMMENTS:	_____		

3. **PROJECT SUMMARY**

a. Does the research involve any special populations?

- YES NO Minors (under age 19)
 YES NO Pregnant women, fetuses, or any products of conception
 YES NO Prisoners or Wards
 YES NO Individuals with compromised autonomy and/or decisional capacity

b. Does the research pose more than minimal risk to participants? YES NO

Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. 42 CFR 46.102(f)

c. Does the study involve any of the following?

- YES NO Procedures subject to FDA Regulation Ex. Drugs, biological products, medical devices, etc.
 YES NO Use of school records of identifiable students or information from instructors about specific students
 YES NO Protected health or medical information when there is a direct or indirect link that could identify the participant
 YES NO Collection of sensitive aspects of the participant's own behavior, such as illegal conduct, drug use, sexual behavior or use of alcohol
 YES NO Deception of participants

If you checked "YES" to any response in Question #3 STOP. It is likely that your study does not meet the "EXEMPT" requirements. Please complete a PROTOCOL FORM for Expedited or Full Board Review. You may contact IRB Administration for more information. (Phone: 334-844-5966 or Email: IRBAdmin@auburn.edu)

4. **PROJECT DESCRIPTION**

a. **Subject Population** (Describe, include age, special population characteristics, etc.)

The participants for this study will be current faculty members who are 19 or older years of age at Auburn University.

b. Describe, step by step, all procedures and methods that will be used to consent participants.

- N/A (Existing data will be used)
- 1) Invitation e-mail will be sent through departmental chairs and/or Diversity Committee members.
 - 2) Participants will do the survey online anonymously.
 - 3) Follow-up e-mails will be sent to departmental chairs and/or Diversity Committee members within two weeks.
 - 4) The data faculty members provide through online Qualtrics survey will serve as an agreement to participate in the study.

- c. **Brief summary of project.** (Include the research question(s) and a brief description of the methodology, including recruitment and how data will be collected and protected.)

Research Questions:

1. What are the faculty members' perceptions on their knowledge levels of multicultural teaching competency?
2. What are the faculty members' perceptions of their skill levels of multicultural teaching competency?
3. What is the relationship between faculty members' multicultural teaching competency scores and multicultural experiences?
4. What is the relationship between faculty members' multicultural teaching competency scores, multicultural experiences, and demographics?

Methodology

Current Auburn University faculty members who are age of 19 or older will be selected as possible participants. Faculty members who decide to participate in this research study will be asked to take an anonymous online survey through Qualtrics. The total time commitment will be approximately 5-10 minutes. Participation in this study is completely anonymous and voluntary. Confidentiality will be maintained for all responses. Data collected will remain anonymous. Participants can withdraw from the survey at any time by closing the browser window if they feel uncomfortable during the survey. Once they submitted anonymous data, it cannot be withdrawn since it will be unidentifiable.

The principal investigator will oversee data collection process and protection throughout this study. The principle investigator will analyze and store all data using the VPN client software, SPSS and Microsoft Office. All electronic equipment needed for this project will be password protected.

- a. **Waivers.** Check any waivers that apply and describe how the project meets the criteria for the waiver.

- Waiver of Consent (Including existing de-identified data)
- Waiver of Documentation of Consent (Use of Information Letter)
- Waiver of Parental Permission (for college students)

I am seeking a waiver of documentation of consent in order to utilize an information letter.

- b. **Attachments.** Please attach Informed Consents, Information Letters, data collection instrument(s), advertisements/recruiting materials, or permission letters/site authorizations as appropriate.

Signature of Investigator	<u>Sergi Kucuktas</u>	Date	<u>March 6th, 2015</u>
Signature of Faculty Advisor	<u>Maria M. Witte</u>	Date	<u>March 6, 2015</u>
Signature of Department Head	<u>Sherida Downer</u>	Date	<u>March 17, 2015</u>

Appendix C.

Permission to Use the MTCS

December 15, 2014

Mrs. Sevgi Kucuktas
Adult Education Doctoral Student – Auburn University
1659 Piedmont Dr.
Auburn, Alabama 36830

Re: *Multicultural Teaching Competency Scale*

Dear Mrs. Kucuktas:

I am in receipt and approve your request to utilize the *Multicultural Teaching Competency Scale* to fulfill your dissertation project at Auburn University. I hope that my survey will assist you in identifying faculty members' multicultural teaching competencies at four-year institutions.

I wish you continued success in your research and completion of your dissertation project. I look forward to your results and findings.

Sincerely,



Lisa B. Spanierman, PhD
Associate Professor

Appendix D.

E-mail Invitation for Online Survey

E-MAIL INVITATION FOR ON-LINE SURVEY

Dear Faculty Members,

My name is Sevgi Kucuktas. I am a graduate student in the Department of Educational Foundations, Leadership, and Technology at Auburn University. I would like to invite you to participate in my research study to examine faculty members' multicultural teaching competencies at Auburn University. You are invited because you are a current faculty member at Auburn University. You need to be 19 or older to be able to participate in this study.

Participants will be asked to take an anonymous online survey through Qualtrics. Your total time commitment will be approximately 5-10 minutes.

Your participation in this study is completely anonymous and voluntary. There are no foreseeable risks associated with this study. The information collected through your participation may help Auburn University to provide a supportive environment that respects diversity and provide programs that nurture the academic achievements of all students.

If you decide to participate, you can click the link below:

If you decide not to participate, your decision will not jeopardize your relationship with the Department of EFLT and Auburn University.

If you have any questions, please contact me at kucukse@auburn.edu

Thank you for your consideration.

Sincerely,



Appendix E.

IRB Information Letter

Please add this approval information
in sentence form to this letter.
Send your updated letter to the IRB
with a live link to the survey.



AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN IRB APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)

INFORMATION LETTER For a Research Study entitled

"An examination of faculty members' multicultural teaching competencies at a four-year institution."

You are invited to participate in a research study to examine faculty members' levels of multicultural teaching competencies at Auburn University. This study is being conducted by Sevgi Kucuktas, doctoral student, under the direction of Dr. Maria Witte, Professor, in the Auburn University Department of Educational Foundations, Leadership, and Technology. You are invited to participate because you are a faculty member at Auburn University and are age 19 or older.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete a brief online survey through Qualtrics. Your total time commitment will be approximately 5-10minutes.

Are there any risks or discomforts? The risks associated with participating in this study are minimal. To minimize these risks, we will maintain confidentiality of all responses. There is no identifying information connecting the data to you. Any data obtained in connection with this study will remain anonymous.

Are there any benefits to yourself or others? If you participate in this study, you can expect to be asked questions about faculty members' multicultural teaching competencies at a four-year institution. I hope the results of this study yield greater understanding of faculty members' levels of multicultural teaching competencies at a four-year institution, and enhance the manner in which the academic achievements of all students can be nurtured. However, I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? There is no compensation offered for your five to ten minutes of time.

4036 Haley Center, Auburn, AL 3684-5221; Telephone: 334-844-4460; Fax: 334-844-3072

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Are there any costs? There are no costs with the exception of your five to ten minutes of time.

If you change your mind about participating, you can withdraw from this survey at any time by closing your browser window. Your participation is completely voluntary. Once you have submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate will not jeopardize your future relations with the Department of Educational Foundations, Leadership, and Technology, and Auburn University.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by using a number identifier. Information collected through your participation will be used in a dissertation for partial fulfillment of a doctoral degree in Adult Education. Information collected may be used for publications or professional presentations.

If you have questions about this study, please contact the doctoral student, Sevgi Kucuktas at kucukse@auburn.edu or the chair of the doctoral committee, Dr. Maria Witte at wittemm@auburn.edu.

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

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

Sevgi Kucuktas

March 6th, 2015

Investigator's signature

Date

Sevgi Kucuktas

Print Name

Co- Investigator's signature

Date

Dr. Maria Witte

Print Name



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