

Cultural Competence and its Impact on Student Academic Achievement in Urban Elementary
Schools

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Amy Louise Brace
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DEDICATION

To Tonia: Without your support, patience and love I could not have begun or finished this program. Thank you for the many small things you did each day to push me through and for being supportive when you probably wanted to scream. My life is better because you are a part of it. You amaze and inspire me every day. Thank you for being the best thing that ever happened to me.

To my Parents and Family: Thank you for the constant reminder of how much I am loved. Thank you for laughing with me through all of this and for believing I could finish, especially when I wasn't so sure.

To Daphne: "I'll do it if you do it." "Awesome." The time I have spent with you over the last few years has been some of the best of my life because you were a part of them. I have enjoyed all that we have been through together whether it has been on or off task (studying, COMPs, backpack fights, making flags and puppets). Know that I would never have done this alone. Thank you for the days you dragged me through with you. You are one of the most incredible women I have ever known and I am thankful everyday to be a part of your life.

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ABSTRACT

The purpose of this mixed methods study was to examine the relationship between the cultural competence level of urban elementary school teachers and the academic achievement of their students as measured by standardized testing. The specific research questions addressed throughout the course of this study were:

- (1) What is the relationship between the (level of) cultural competence of the teacher and his/her students' academic achievement as measured by standardized testing?
- (2) How do urban elementary school teachers understand cultural competence?
 - (a) How do they define/describe cultural competence?
 - (b) What groups do they include in their definition of cultural competence?
 - (c) What does cultural competence mean to them?
 - (d) What skills, knowledge and attributes do they possess related to cultural competence especially that impact academic achievement?

The quantitative findings revealed that there was no significant relationship between the teachers' scores on the "Personal and Professional Beliefs About Diversity" scales and the students' scores on standardized tests measured in either normal curve equivalents or percentage of students scoring proficient and advanced. The qualitative data were collected through interviews with urban elementary school teachers and demonstrate a link between teacher cultural competence and student academic achievement through improved relationships with students. Findings also discuss the themes developed to explain how urban elementary school teachers understand the concept of cultural competence.

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CHAPTER 1

INTRODUCTION

Chapter Introduction

From its beginning, the American system of public education was not created for all members of our society. African Americans were initially excluded from formal education altogether. When finally given access to formal education, schooling was through segregated and frequently inadequate means. Other minority groups also experienced such discrimination in education. Early in our nation's history, women were provided with only a basic education and were not generally encouraged to seek additional education unless it was in the domestic arts, dancing, music or language. Even this was limited to those of the upper class. When the government finally provided education for Native Americans, schooling often meant transporting students to boarding schools with the intent to erase their culture and customs. Children were forcibly removed from their families and forbidden to use their native language. Ethnic White students also experienced discrimination in education. For example, in the early 1800s, the common school was opened to all children regardless of class or socioeconomic status. This purported universality of the common school did not include African Americans or White children with "strange religious beliefs such as Irish Catholics" (Urban & Wagoner, 2000, p. 97). As education progressed, the purpose was often to socialize immigrants into the American culture, which was considered superior to that of their homelands.

In our current educational climate inequality may be less overt, but it still exists in many schools. Ladson-Billings (1994) stated one example.

African American students continue to lag significantly behind their White counterparts on all standard measures of achievement. [They] are three times as likely to drop out of school as White children are and twice as likely to be suspended from school. [In addition, they] make up only about 17% of the public school population but 41% of the special education population. (p. 2)

African Americans are not the only group experiencing such inequality in schools. According to the U.S. Department of Education (2006), students in high poverty schools demonstrated lower achievement in math than students in low poverty schools. In addition, a report by Planty, Hussar, Snyder, Kena, KewalRamani, Kemp, Bianco, and Dinkes (2009) showed that a gap in achievement exists in both reading and math between White students and their Hispanic counterparts.

If our country is to change the current inequalities in society, we must begin by providing a truly equal education to all children. In order to do this, schools and teachers must begin to understand that schools reflect the dominant culture of our country and that this can put students from other cultures at a distinct disadvantage. In the United States the dominant culture is generally viewed as reflecting White (European American), middle class values and beliefs. It can even be expanded to include the values generally held by male, heterosexual and non-disabled individuals. Diller and Moule (2005) gave examples of values typically held by those from the dominant culture. These values include an emphasis on self-disclosure, long-term goal setting, development of the individual and belief in an internal locus of control. It is values such as these that are deemed “correct” in dominant culture, while differing values are either not

recognized at all or considered inferior. This is one theory for the difference in achievement between White and non-White students.

One theory to improve the effectiveness of educators working with culturally different students is that of cultural competence. Cross, Bazron, Dennis, and Isaacs (1989) defined cultural competence as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or professional and enable that system, agency, or professional to work effectively in cross-cultural situations” (p. iv). The ability of a professional to work effectively in a cross-cultural situation is an asset, which is becoming more vital as the number of minority culture students increases in our public schools. In order for our system of education to better serve students not of the dominant culture, educators must work toward becoming culturally competent by first understanding the impact culture has on education and learning, realizing the cultural differences that exist in their classrooms, and then making instructional and assessment decisions that incorporate this information. This change from a Eurocentric worldview is one way to equalize our current educational system and make it truly effective for ALL students.

Statement of the Problem

The problem explored in this study is that of the consistent underachievement of poor and minority students as compared to their White, middle and upper class peers, specifically in urban areas. Multiple researchers have documented the difference in achievement between these groups (White-Clark, 2005; Constantine & Sue, 2006; Gay, 2000; Ladson-Billings, 1994; Lyman & Villani, 2004; Nieto, 1999; Planty et al., 2009). This issue becomes significantly more important in view of the current demographic make up of our country when compared to our teaching force. Our country is becoming increasingly diverse. Diller and Moule (2005) quoted a

report by Riche stating the 1999 relative population percentages were as follows: White 72%, African American 12 %, Hispanic 12%, and Asian 4%. Projections showed that by the year 2050 Whites will make up only about 53% of the population while Hispanics will be 24%, African Americans 13%, and Asians 9%, with Whites becoming less than 50% of the population by 2060 and about 40% by 2100. A report by Planty et al. showed that the percentage of White students in public schools decreased from 78% to 56% between the years 1972 and 2007. In addition, African Americans made up about 15% of the population while Hispanic students made up about 21%.

The above statistics are in direct contrast to the demographics of our current teaching force. As our nation's children have become more culturally diverse, the teachers staffing our schools have become less diverse. A 2007 report by the U.S. Department of Education showed that about 75% of all teachers were females during the 2003-2004 school year. This is a slight increase from the 1993-1994 school year when 73% of all teachers were female. The data from the 1993-1994 school year showed that 87% of teachers were White. By the 2003-2004 school year this number had only dropped to about 83%. Over the past 10 years, the percentage of minority teachers has only increased slightly. During the 1993-1994 school year 4% of teachers were Hispanic versus 6% of teachers during the 2003-2004 school year. The percentage of African American teachers has remained fairly constant increasing only from 7.2% to 7.8% over the same 10-year period. Based on these statistics, it is not difficult to see that drastic cultural differences exist between much of the student population and the teaching population. This is especially true in urban schools where the majority of the student population is often poor and

minority. In order to bridge this gap, teachers must understand the importance of culture in education and work toward becoming culturally competent.

This study addressed the need for increased awareness of culture and cultural competence in education. Focusing on the field of healthcare, Goode, Dunne and Bronheim (2006) stated,

The field of cultural and linguistic competence is clearly in the early stages with a preponderance of the literature exploring and defining the concepts and issues and identifying important research questions. It is now moving toward pilot and controlled studies to test the impact of cultural and linguistic competence on quality and effective care in relation to health outcomes and well being. (p. 7)

The study of cultural competence within the field of education occupies a similar position. Much research and writing has worked to define and explain the concept. Other research has focused on developing cultural competence in both pre-service and practicing teachers, but very little current research has explored the link between cultural competence and student academic achievement. What research studies do exist are generally 20 or more years old. This study seeks to add to that research.

Purpose of the Study

The purpose of this mixed methods study was to examine the relationship between the cultural competence level of urban elementary school teachers and the academic achievement of their students as measured by standardized testing. In addition to quantitative methods, qualitative methods were utilized to explore teacher understanding of cultural competence, teacher perception of the skills, knowledge and attributes they possess relating to cultural competence, and how these factors relate to student academic achievement.

Research Questions

The specific research questions addressed throughout the course of this study are:

- (1) What is the relationship between the (level of) cultural competence of the teacher and his/her students' academic achievement as measured by standardized testing? (Quantitative)
- (2) How do urban elementary school teachers understand cultural competence? (Qualitative)
 - (a) How do they define/describe cultural competence?
 - (b) What groups do they include in their definition of cultural competence?
 - (c) What does cultural competence mean to them?
 - (d) What skills, knowledge and attributes do they possess related to cultural competence, especially that impact academic achievement?

Definition of Terms

Throughout this study, multiple terms relating to culture and cultural competence are used. According to Creswell (2005), providing operational definitions of the terms used is an important component of designing a study. The specific terms listed below are used throughout this research and have been defined based upon the literature reviewed for this study. While several of these terms are defined in different ways by different researchers, the selected definitions are most congruent with the purpose of this study.

African American/Black: These two terms are used interchangeably and refer to “a person having origins in any of the Black racial groups of Africa” (Planty et al., 2009, p. xiv).

Asian American: “...[a] person having origins in any of the original peoples of the Far East, Southeast Asia, and the Indian subcontinent; this includes for example, Cambodia, China,

India, Japan, Korea, Malaysia, Pakistan, the Philippines, Thailand, and Vietnam” (Planty et al., 2009, p. xiv).

Cultural Competence: “...[a] set of congruent behaviors, attitudes, and policies that come together in a system, agency, or amongst professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations” (Cross et al., 1989, p. iv).

Culture: “...a lens through which life is perceived. Each culture, through its differences...generates a phenomenologically different experience of reality. Thus, the same situation may be experienced and interpreted very differently, depending on the cultural backgrounds” of the individuals involved (Diller & Moule, 2005, p. 5).

Dominant Culture: Because this study is being conducted in the United States, dominant culture refers to the values, beliefs and world-view of White or European American, middle or upper class people that are generally reflected in most institutions and circumstances.

Elementary: For the purposes of this study, elementary schools are schools serving children in either pre-kindergarten or kindergarten through fifth grade.

European American/White: These two terms are used interchangeably to mean “a person having origins in any of the original peoples of Europe, North Africa or the Middle East” (Planty et al., 2009, p. xiv).

Hispanic/Latino(a): These two terms are used interchangeably and refer to “a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race” (Planty et al., 2009, p. xiv).

Native American: “...[a] person having origins in any of the original peoples of North and South America (including Central America)” (Planty et al., 2009, p. xiv).

Poverty Area: For the purposes of this study, poverty area refers to "...a neighborhood in a mid- to large-sized city with a poverty rate of 40% or more" (Lippman, Burns, McArthur, Burton, & Smith, 1996, p. 18).

School Poverty Rate: This is defined as the proportion of students within a school receiving a free or reduced-price lunch. Students whose families have an income below 185% of the poverty guidelines established by the Department of Health and Human Services are eligible for a free or reduced-price lunch. Schools are divided into four levels based on the percentage of students who meet this criterion. Schools in which 0-5% of the student population receives free or reduced-price lunch are considered low poverty schools while schools with 40% or more receiving free or reduced-price lunch are considered high poverty schools (Lippman et al., 1996).

Urban Schools: This term refers to those schools located within the central cities of Metropolitan Statistical Areas (MSA's) as defined by the U.S. Census Bureau (Lippman et al., 1996).

White Privilege: "...[t]he unearned advantages and benefits that accrue to White folks by virtue of a system normed on the experiences, values, and perceptions of their group" (Constantine & Sue, 2006, p. 6).

Delimitations

Several delimitations exist within this study. First, this study was conducted in the urban area of a mid-size, southeastern city. The minority populations in this area are predominantly Latino students, African American students, and students whose families have low socioeconomic status. Other cities or areas of the country are likely to have a different demographic configuration of their student populations. In addition, this study looked only at the

level of cultural competence of elementary school teachers, and should not be generalized to middle or high school teachers. Finally, as stated previously, this study was specific to urban schools, and may or may not apply directly to schools in rural or suburban areas.

Limitations

The major limitation of this study is its reliance on standardized test data to determine academic achievement. Although there are multiple ways for students to demonstrate academic achievement, PL 107-100 (commonly referred to as the No Child Left Behind Act of 2001) has mandated that these scores be used as the predominant measure of public school performance. It is important to utilize this as the measure of academic achievement because it makes the findings more relevant in the current climate of educational accountability. In addition, the measure of cultural competence is a self-report survey, and if the teacher is not completely honest, the results may not truly reflect the level of a specific teacher's cultural competence.

Significance of the Study

This study is significant in that there is very little research in the field of education examining the relationship between the cultural competence of the teacher and the academic achievement of their students. Much that is available is qualitative in nature while most quantitative studies available are generally 15 or more years old (Au & Jordan, 1981; Dick, Estell, & McCarty, 1994; Krater, Zeni, & Cason, 1994; Mohatt & Erickson's, 1981). This study attempts to look at cultural competence through mixed methods research, thus introducing an updated quantitative aspect to cultural competence research as it relates to student academic achievement. In addition previous studies generally attempted to assess the impact of specific culture based strategies on student achievement (Au & Jordan, 1981; Dick, Estell, & McCarty,

1994; Krater, Zeni, & Cason, 1994; Mohatt & Erickson's, 1981). In contrast, this study seeks to understand the impact of the teachers' cultural competence on student achievement. This is important because cultural competence involves the internal skills, knowledge and attributes that teachers bring to the classroom on a daily basis, rather than strategies they implement in their classrooms with their students.

Several researchers deal with cultural competence through qualitative research (Ladson-Billings, 1994; Lyman & Villani, 2004), but this research is less directed at the impact on students and more focused on understanding the concept of cultural competence and its characteristics. Other researchers in the field of education have conducted quantitative studies on how to develop cultural competence in healthcare students or education majors (Dantas, 2007; Markey & Tilki, 2007; Romanello, 2007; St. Clair & McKenry, 1999; Upvall & Bost, 2007), or discussed the importance of developing cultural competence in high school students (Ford & Whiting, 2007). Finally, much literature is available on issues related to cultural competence such as culturally relevant teaching/pedagogy (Ladson-Billings, 1994, 2001), cultural congruence (Nieto, 1999), multicultural education (Banks & Banks, 2007), and culturally responsive teaching (Gay, 2000), but very little is available in this field concerning the specific topic of cultural competence. The definition of cultural competence suggests that this asset is a prerequisite of the above concepts. In other words, a teacher must develop a higher level of cultural competence in order to be willing or able to use culturally relevant pedagogy or culturally responsive teaching. This study seeks to fill several of the gaps in the literature including the need for research on cultural competence related to education, the need for updated

quantitative studies and the need for studies that examine how the teachers' cultural competence impacts student academic achievement.

Organization of Study

Chapter 1 of this study introduces the research by stating the problem. It describes the purpose of conducting the research and lists the specific research questions to be answered. In addition it includes operational definitions of the terms used throughout this study as well as the limitations and delimitations of the study. Chapter 1 concludes with a discussion of the significance of this study on cultural competence.

Chapter 2 of this study includes a review of the relevant literature. The first section includes a discussion of the achievement gap, the existence of which justifies the need for this study. The second section of the literature review is a general discussion of culture, including a discussion of the dimensions of culture and the characteristics of culture. The subsequent section links culture to education and discusses how culture impacts our current system of education. The concept of cultural dissonance is the topic of the next section and explains ways in which the dominant culture is embedded in education and how it may conflict with students not of the dominant culture. This is followed by a discussion of various research studies that have been done in an effort to demonstrate how instruction can be altered to make it more congruent with the culture of the community served by the school and the results of such changes. The final two sections of the literature review address the concept of cultural competence, how it relates to similar concepts, and four models of cultural competence found in the literature. This section also describes the model of cultural competence that will serve as the theoretical framework for this research.

Chapter 3 of this study provides a discussion of the methods used to conduct this study. It includes a rationale for utilizing a mixed methods approach and a detailed description of the study design. It also includes a description of the role of the researcher and a detailed description of the sites and participants involved. Finally, this chapter explains the data collection methods (including a description of the data sources), methods of data analysis and the techniques used to verify them.

Chapter 4 includes a detailed description of the quantitative data sources and demographic information about the participants in this phase of the study. It includes the descriptive statistics and correlation values found through the data analysis. Finally, chapter 4 contains a discussion of the analysis and findings in order to answer the first research question.

Chapter 5 provides a description of the qualitative data collected as well as a description of the participants for this phase of the study. It includes a discussion of the data sources used as well as the analysis and findings. Finally, it provides answers and discussion related to the second research question.

Chapter 6 includes a discussion of the relevance of this study and its implications for future practice and research. It also provides a summary of the findings and provides lessons for practicing administrators.

Conclusion

The primary purpose of this study was to utilize quantitative and qualitative methods to examine the relationship between teacher cultural competence and student academic achievement through research questions specifically focused on these two components. In this chapter I have described the purpose of this study and stated the research questions that will be

addressed. I have described the significance of this study. This study is significant because it fills a gap in the current literature in that very little mixed methods or quantitative research has been conducted within the last 10 years that attempts to understand the impact of teacher cultural competence on student academic achievement. The current demographic trends in education make this topic relevant, while the current national educational focus on student academic achievement as measured by standardized tests make this topic timely. In the next chapter I will review the literature related to this study. In order to begin a journey toward cultural competence, it is important to understand the research on the achievement gap, culture, cultural dissonance and cultural competence.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Chapter Introduction

Despite some positive trends in education statistics, minority students (specifically, students of color, poor students and students with disabilities) lag behind their middle and upper class White peers in the areas of academic achievement and graduation rate. In addition, poor and minority students drop out of school at a higher rate than their middle and upper class majority peers (Cataldi, Laird, & KewalRamani, 2009; KewalRamani, Gilbertson, Fox, & Provasnik, 2007). Many factors may contribute to this difference including personal and institutional racism (discrimination), inadequate healthcare, housing, unprepared teachers, and differences in the distribution of qualified teachers (Teel & Obidah, 2008). One other possible explanation is the difference in culture between many of these students and the school itself. This is known as cultural dissonance theory and can include differences in the way students and teachers interact, use language, communicate, and view authority. The purpose of this study was to examine the relationship between the cultural competence level of urban elementary school teachers and the academic achievement of their students as measured by standardized testing. In addition, this study explored teacher understanding of cultural competence and how it related to student academic achievement. The specific questions addressed in this mixed methods study were as follows:

- (1) What is the correlation between the (level of) cultural competence of the teacher and their students' academic achievement as measured by standardized testing? (Quantitative)
- (2) How do urban elementary school teachers understand cultural competence? (Qualitative)

- (a) How do they define/describe cultural competence?
- (b) What groups do they include in their definition of cultural competence?
- (c) What does cultural competence mean to them?
- (d) What skills, knowledge and attributes do they possess related to cultural competence, especially that impact academic achievement?

In order to address the above questions, this review of literature explains in detail the issue of culture and its influence on education as one possible explanation for the achievement gap. Multiple sources of information were utilized to complete the review including other dissertations, books, journal articles, empirical studies, and reliable online sources and databases. This review is divided into four sections and focuses on the achievement gap, culture, culture and education (including the theory of cultural dissonance), and the concept of cultural competence, including the specific theory of cultural competence serving as the theoretical framework for this research. The literature addressing the achievement gap was important in that it provided support for the significance of this study. The literature on culture was addressed in order to provide a working definition as well as various conceptualizations of culture and how it impacts daily life for various groups of individuals. The literature concerning the impact of culture on education was reviewed in order to provide an understanding of current research in this area, as well as describe the theory of cultural dissonance. Finally, cultural competence was defined and various models were described. This concept was important because it provided a possible solution for the achievement gap and cultural dissonance.

When searching for literature to review for this study, online databases were utilized including ERIC, Education Full Text, and Education Index Retro. In the health sciences field the

CINAHL Plus with Full Text database and Nursing Journals @ OVID databases were searched. Searches were done on topics such as culture, culture and education, the achievement gap, cultural competence, and specific authors related to these areas. General Internet searches utilizing Google Scholar were also performed on specific authors and the topic of cultural competence. Finally, the University of Tennessee Library catalog was searched for book sources dealing with culture, education, and cultural competence. Information on the achievement gap was found through searches of the National Center for Education Statistics, and journal articles and books found through online database searches. Information specific to the school district studied in this project was found on the state Department of Education website or gathered directly from the selected school district.

Most of the literature found on culture and cultural competence was theoretical in nature, while the empirical studies dealt mainly with how best to develop cultural competence in pre-service teachers and healthcare personnel in order to provide more effective services. Much more research was available in the field of healthcare and mental health than was available in the field of education. The empirical research found related to academic achievement and culture was generally qualitative in nature, such as the work done by Ladson-Billings (1994). Research that was not qualitative in nature was generally 15 or more years old such as the research done by Au and Jordan (1981) on Native Hawaiian children. The exception to this was the literature from the U. S. Department of Education. This work primarily contained descriptions of the current state of education and was not experimental in nature. In addition, empirical research on cultural differences between students and teachers typically addressed one aspect of culture such as language differences or interaction differences. This study sought to add to the current

research base by using a mixed method design and by looking at the level of general cultural competence of the teacher. In order to understand the need for cultural competence, one must begin with an understanding of the difference in achievement levels of different groups of students.

The Achievement Gap

The achievement gap refers to the “disproportionate failure of students of particular backgrounds in U.S. schools...” (Nieto, 1999, p. 19) and can be viewed through various indicators. The most common indicator used to reflect the achievement gap is that of academic achievement on standardized tests. Multiple researchers have written on this subject and most agree that African American and Latino students lag behind their White peers throughout their educational careers (Constantine & Sue, 2006; Ladson-Billings, 1994; Lyman & Villani, 2004; White-Clark, 2005). According to Lyman and Villani, the achievement gap now stands at four years by the time students finish high school. In other words, African American and Latino students function at reading and math levels that correlate with the skills of White students at the end of eighth grade. Constantine and Sue support these authors and also list the achievement gap between White and African American and Latino students at about four years.

Vanneman, Hamilton, Baldwin, Anderson, and Rahman (2009) reported a definite gap in the average achievement scores of African American and White students relating to their performance on the National Assessment of Educational Progress (NAEP) standardized test. In general, White students’ average score was higher than the average score of Black students. In addition, White students consistently performed at or above the national average and Black students consistently performed below the national average. Figures 1 and 2 demonstrate the

difference in average performance between Black and White students on the NAEP at grades 4 and 8 in reading and also compare both ethnicities to the national average. Figures 3 and 4 demonstrate the difference in average achievement scores on the NAEP in math performance in grades 4 and 8 and also compare these averages to the national average.

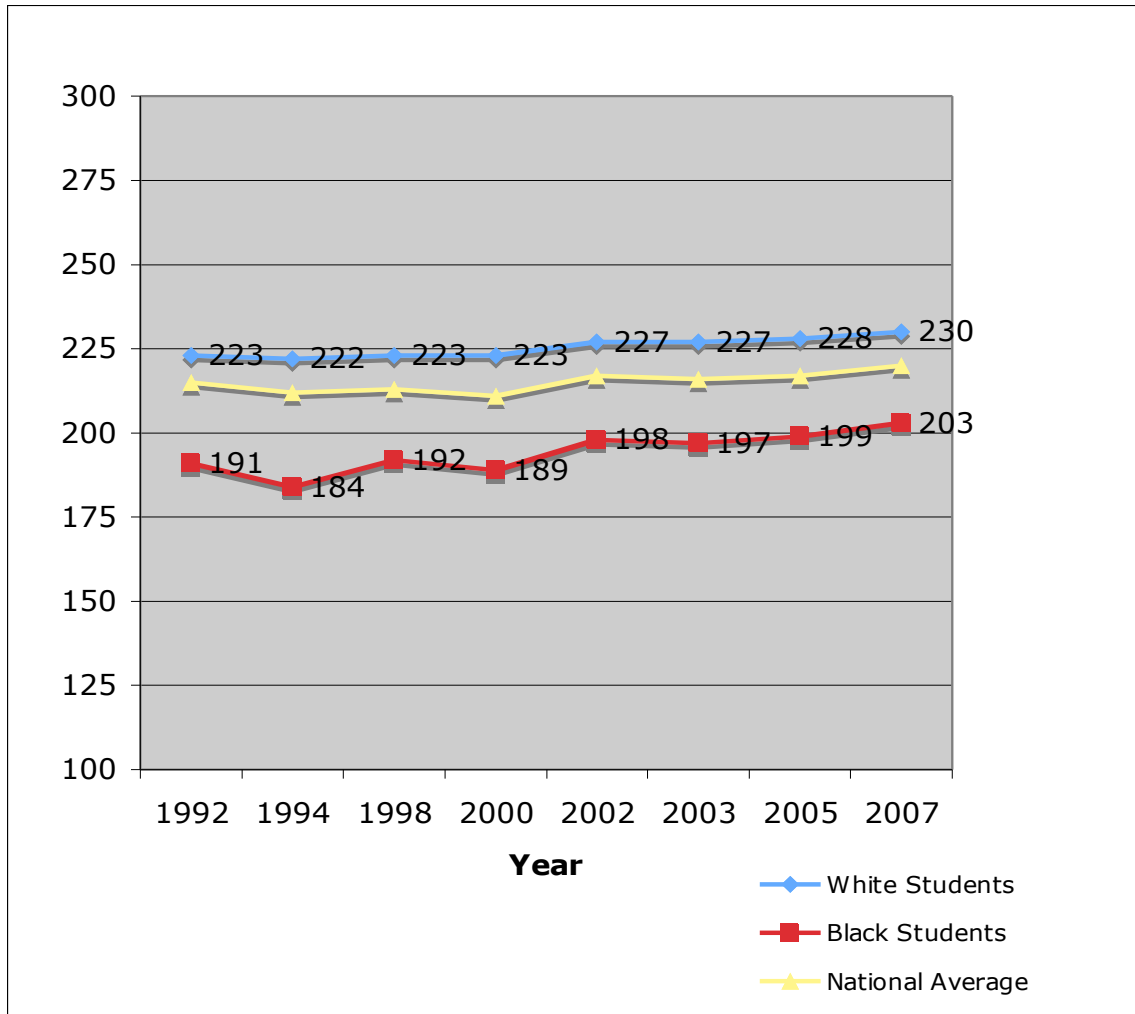


*Figure 1. Reading achievement score gaps between Black and White public school students at grade 4 (various years, 1992-2007). Adapted from “Trends in reading scores and achievement gaps, 1992–2007” by A. Vanneman, L. Hamilton, J. Baldwin Anderson, and T. Rahman, 2009, *Achievement Gaps How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress Statistical Analysis Report*, p. 29. Copyright 2009 by the National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.*

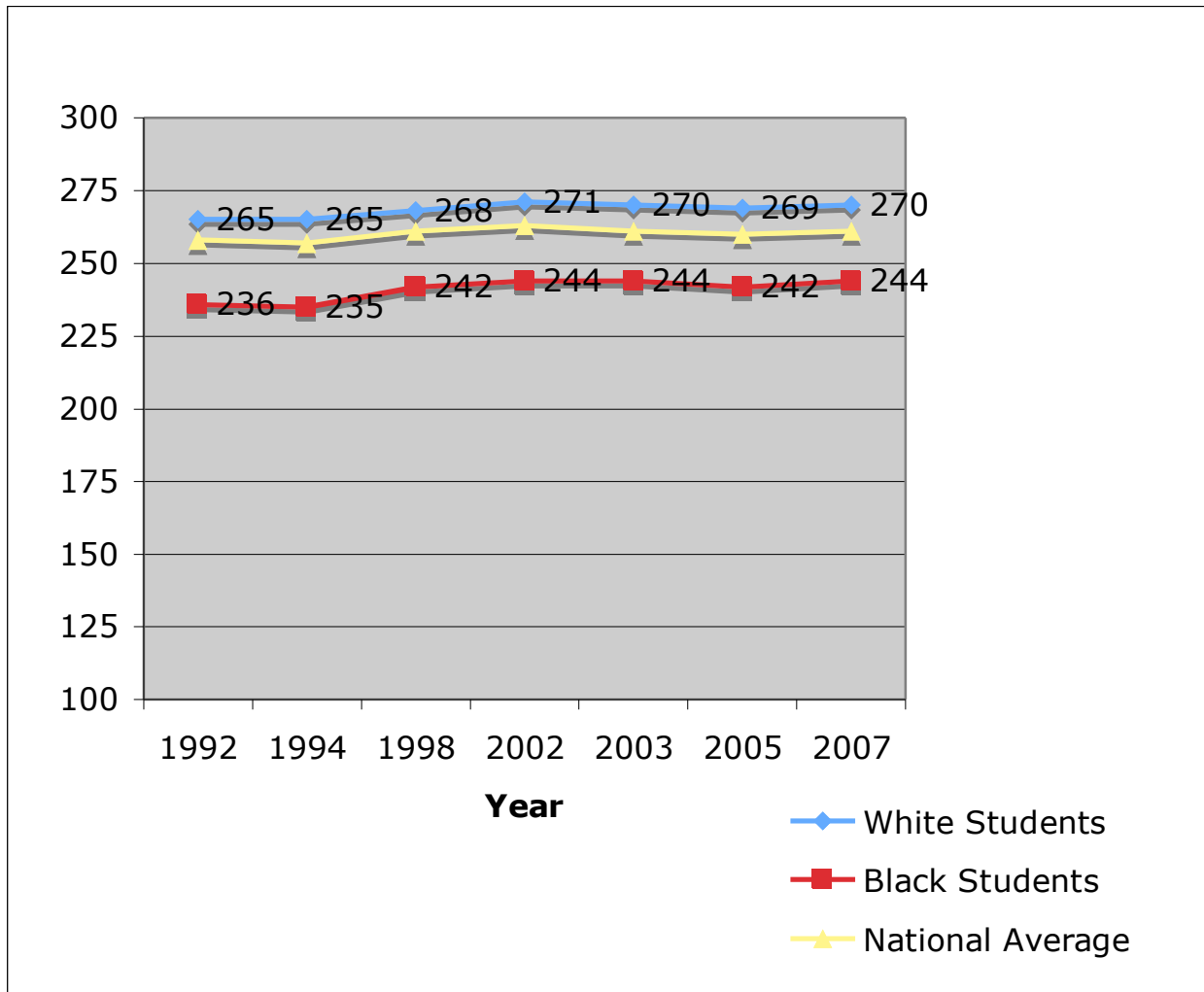


*Figure 2. Reading achievement score gaps between Black and White public school students at grade 8 (various years, 1992-2007). Adapted from “Trends in reading scores and achievement gaps, 1992–2007” by A. Vanneman, L. Hamilton, J. Baldwin Anderson, and T. Rahman, 2009, *Achievement Gaps How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress Statistical Analysis Report*, p. 29. Copyright 2009 by the National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.*

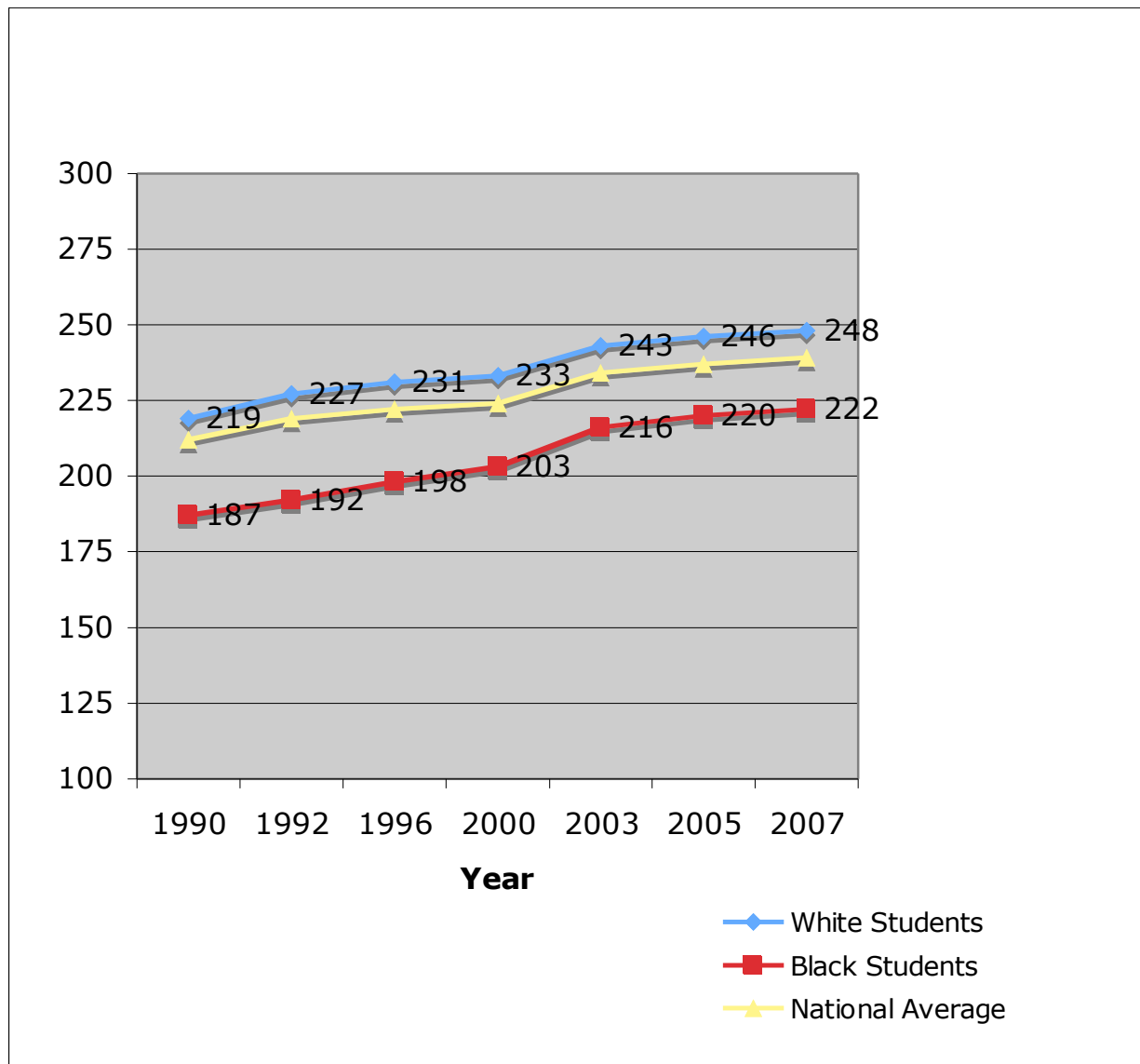


*Figure 3. Math achievement score gaps between Black and White public school students at grade 4 (various years, 1990-2007). Adapted from “Trends in mathematics scores and achievement gaps, 1990–2007” by A. Vanneman, L. Hamilton, J. Baldwin Anderson, and T. Rahman, 2009, *Achievement Gaps How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress Statistical Analysis Report*, p. 7. Copyright 2009 by the National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.*

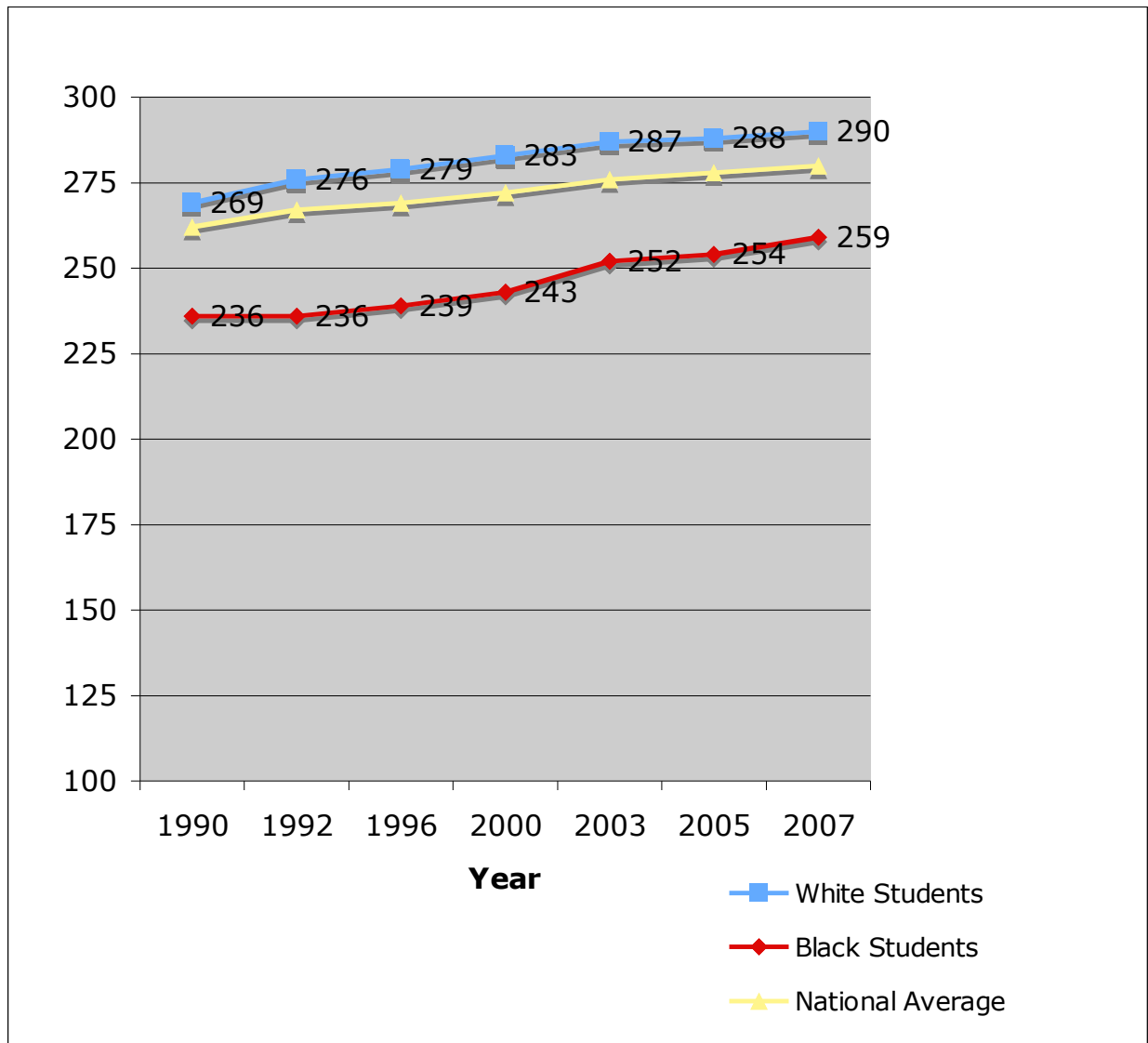


*Figure 4. Math achievement score gaps between Black and White public school students at grade 8 (various years, 1990-2007). Adapted from “Trends in mathematics scores and achievement gaps, 1990–2007” by A. Vanneman, L. Hamilton, J. Baldwin Anderson, and T. Rahman, 2009, *Achievement Gaps How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress Statistical Analysis Report*, p. 7. Copyright 2009 by the National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.*

A report by KewalRamani et al. (2007) included data on Hispanic students as well as Black and White students. As of 2004, the average reading scores on the NAEP for Black,

White and Hispanic 9- and 13-year-olds all were better than in 1975. However Black and Hispanic 17-year-olds showed improved scores while White 17-year-old students' scores remained nearly the same as in 1975. White students at all three age levels out-performed Black and Hispanic students, however the gap between their scores has narrowed since 1975.

This same report indicated that performance in math was very similar to that of reading (KewalRamani et al., 2007). The average scores for all three racial groups were higher than at any other year, with the exception of 17-year olds whose scores were not measurably different from those in 1999. Again, White students out-performed Black and Latino students at all age levels but the gap between their performances has continued to decrease. The only exception to this was nine-year old Latino and White students where the gap between the two groups was not measurably different than in 1975, but did show a decrease from 1999 (KewalRamani et al.). Figures 5 and 6 demonstrate the achievement gap reduction for nine-year old students in reading and math.

While achievement test scores are one way to view the achievement gap, other ways include the school drop out and graduation rates (Teel & Obidah, 2008), numbers of students represented in gifted programs (Constantine & Sue, 2006), and representation in special education programs (Ladson-Billings, 1994). When looking at graduation and drop out rates, African American students are three times as likely as their White peers to drop out of school (Ladson-Billings). Cataldi, et al. (2009) reported two different types of dropout measurements. The first is referred to as the event dropout rate and “estimates the percentage of high school students who left high school between the beginning of one school year and the beginning of the next without earning a high school diploma or its equivalent (e.g., a GED)” (p. 1). The second

reported measure is that of status dropout rate which refers to “the percentage of individuals in a given age range who are not in school and have not earned a high school diploma or equivalency credential” (p. 2). The event drop out rate is a national rate and includes students in both public and private school settings who left school from October of one year until October of the following year. It can be used to track changes to the U.S. student population’s dropout behavior. In comparison, the status dropout rate measures data across a range of ages and can be used to examine general population trends and issues. In relation to the event dropout rate, Cataldi et al. reported that 3.5% of students between the ages of 15 and 24 dropped out of school between October 2006 and October 2007. When viewed by ethnicity, Black and Hispanic students were more likely to drop out than their White counterparts. Six percent of Hispanic students dropped out as compared to 2.2% of White students, although all three ethnic groups showed a decrease in the number of students dropping out. The same report also found that students living in low-income families were 10 times more likely to drop out than their high-income counterparts. This is important to note because the percentage of minority students who live in low-income families is greater than that of White students, possibly placing them at added risk of dropping out. The 2007 status dropout rate was calculated to be 5.3% for White students, 8.4% for Black students and 21.4% for Hispanic students. This estimate can be misleading because it counts all members of the 16 to 24 year old age range who are not in school or have a high school equivalent, regardless of whether they attended school in the United States. It does, however, demonstrate that a disparity exists in the level of educational attainment of different racial and ethnic groups within our country.

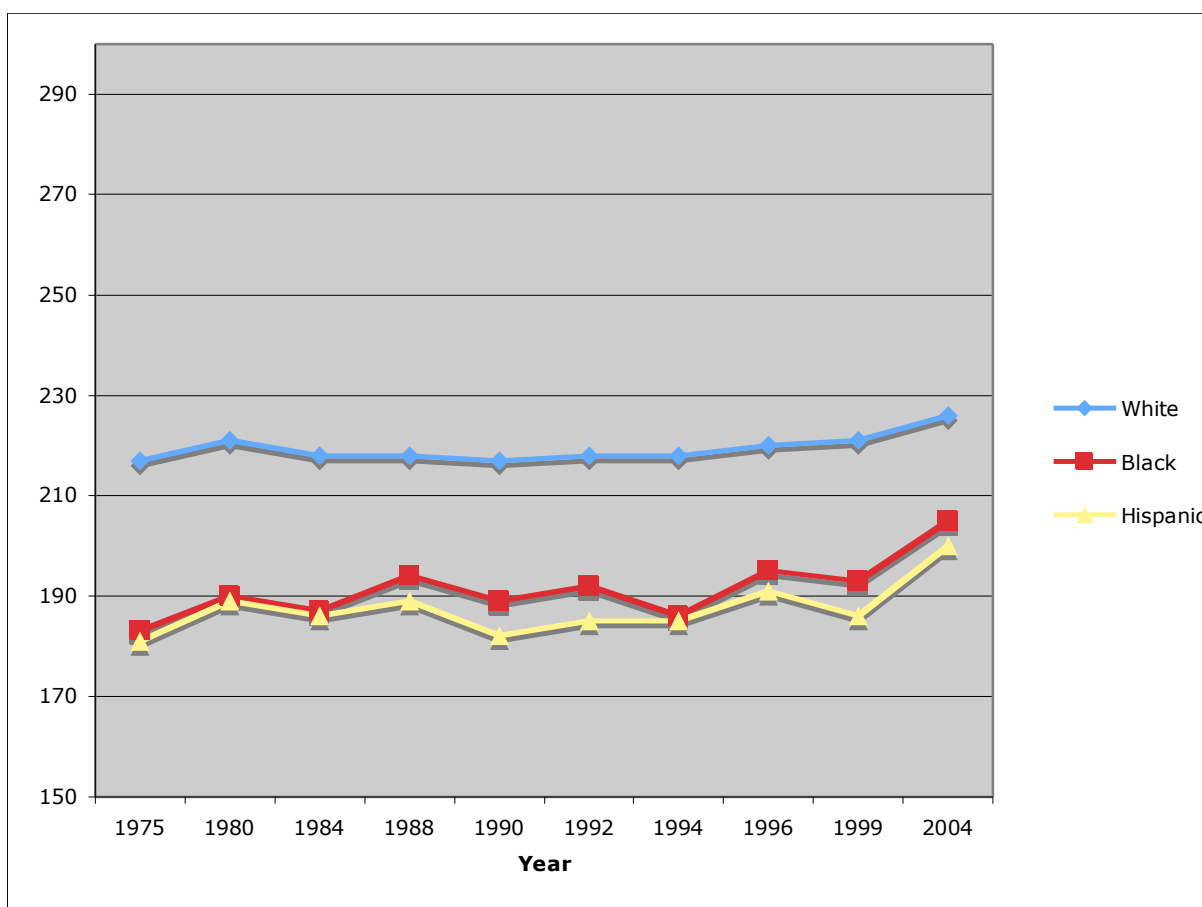


*Figure 5. Average reading scale scores for 9-year old students on the NAEP by ethnicity. Adapted from *Status and Trends in the Education of Racial and Ethnic Minorities* (NCES 2007-039) by A. KewalRamani, L. Gilbertson, M. Fox, and S. Provasnik, 2007, National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.*

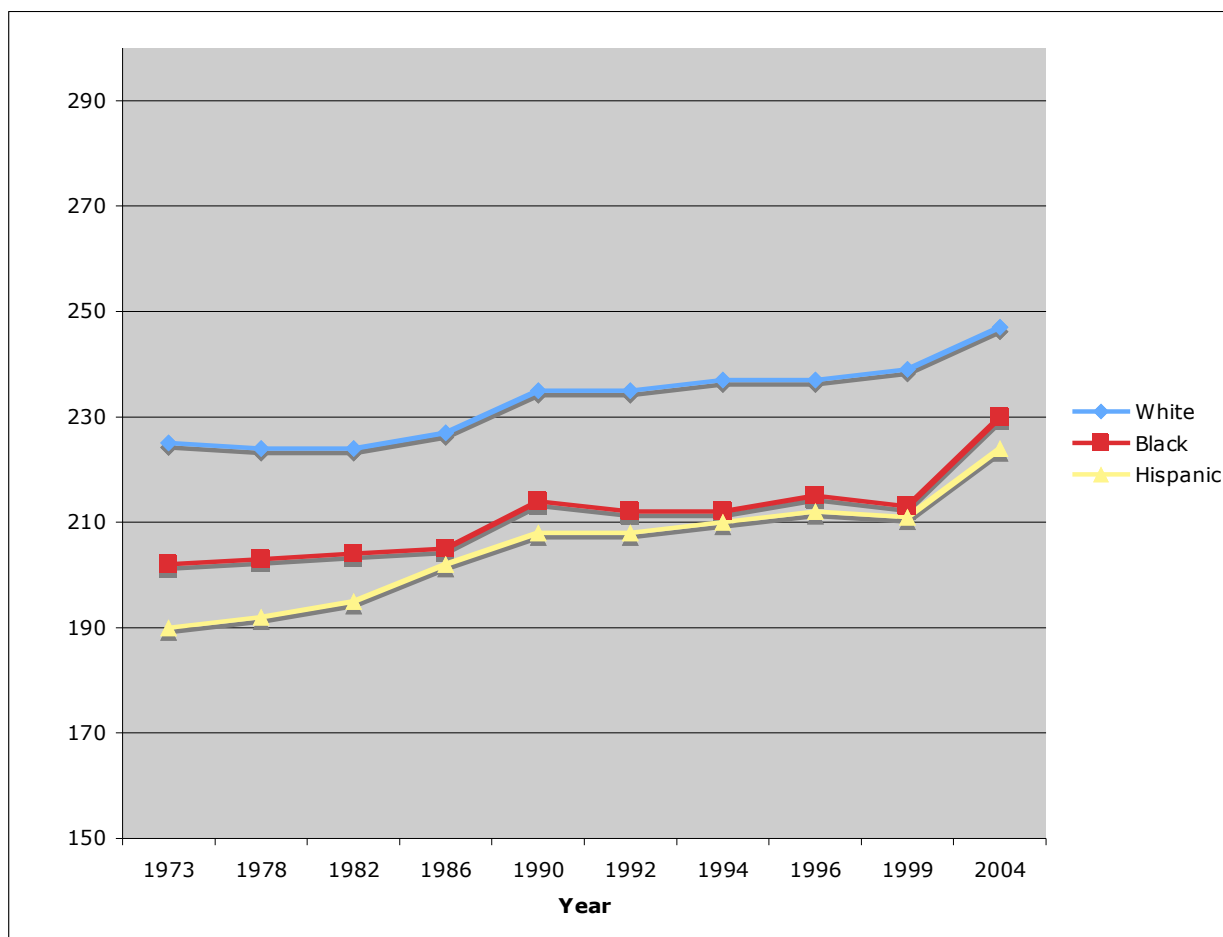


Figure 6. Average math scale scores for 9-year old students on the NAEP by ethnicity. Adapted from *Status and Trends in the Education of Racial and Ethnic Minorities* (NCES 2007-039) by A. KewalRamani, L. Gilbertson, M. Fox, and S. Provasnik, 2007, National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

In addition to the two types of dropout rates calculated, Cataldi et al. (2009) also calculated a status completion rate. This rate is defined as “the percentage of young people who have left high school and who hold a high school credential. The rate reported here...represents the percentage of 18- through 24-year-olds who are not enrolled in high school and who have earned a high school diploma or equivalent credential, including a GED certificate” (p. 8). In other words the status completion rate shows the percentage of students either completing high school or receiving a General Equivalency Diploma (GED) or other equivalent. Nationally,

White and Asian/Pacific Islander students showed the highest rate of status completion at more than 93%. Black students had an 88.8% completion rate as compared with 72.7% for Hispanic students. When GED completion is factored out of this analysis, the overall high school graduation rate falls to 83.1% nationally with no data reported by ethnicity. This is important to note due to the difference in earning potential for those with high school diplomas versus a GED. Students with only a GED fair worse in their ability to earn income and to complete post-secondary education.

Constantine and Sue (2006) estimated graduation rates considerably lower than the above information. According to their work, about 75-80% of White students graduate from high school versus about 50-55% of Hispanic and Black students. This difference is most likely due to a variation in calculation rates between the two groups of researchers, however both groups of authors demonstrate a difference in the graduation rates of White, Black and Hispanic students.

Another factor used to discuss the achievement gap is that of representation in special education and gifted programs. Students of color, such as African American and Hispanic students, are disproportionately represented in both programs. According to Ladson-Billings (1994), African American students make up only about 17% of public school population, but represent about 41% of the special education population. According to Ford, Grantham, and Whiting (2008), students of color are underrepresented in gifted programs. Ford, Moore, and Whiting (2006) concur with that sentiment and give the following statistics in support:

Black students were 17% of school districts nationally but 8.2% of gifted education in 2000; Hispanic American students were 16% of school districts nationally but 9.5% of

gifted programs; and American Indian students were 1.1% of school districts nationally but .91% of gifted programs. (p. 176)

The reasons for the achievement gap are not known with any level of certainty, but many authors offer possible explanations. Teel and Obidah (2008) claimed that personal and institutional racism, inadequate healthcare and housing, unprepared teachers, differences in teacher-student ratio and inequitable distribution of qualified teachers all impact the achievement gap. Ladson-Billings (1994) supported the assertion of inadequate healthcare and housing by noting that the infant mortality rate of African Americans is twice as high as that of Whites. In addition, African Americans are twice as likely to live in substandard housing. White-Clark (2005) supported the causal factor of unprepared teachers by stating that “a national report found that only 17% of the teachers who taught LEP [Limited English Proficient] or culturally diverse students were totally prepared” (p. 42). In addition, this study reported that “research indicates that how teachers relate to students in terms of attitudes and perceptions is one of the critical factors in how students learn. Teacher misconceptions can lead to minority students being misunderstood, miseducated, and possibly mistreated” (p. 42).

Other authors point to deficit thinking by teachers and administrators as a contributor to the achievement gap (Ford et al., 2006; Lyman & Villani, 2004). Constantine and Sue (2006) defined deficit thinking as “negative, stereotypical, and prejudicial beliefs about diverse groups. ...the deficit thinking paradigm posits that students who fail in school do so because of alleged internal deficiencies or shortcomings socially linked to the youngster” (p. 176). Deficit thinking lowers expectations of teachers for certain students and places the blame for a lack of academic success on the student and his/her family. It can also lead to teacher bias, which may impact

instructional, assessment and disciplinary decisions that result in ineffective schooling for minority students.

One option for reducing deficit thinking and improving the quality of teachers working with minority students is to provide teachers with the training they need to increase their level of cultural competence. Increasing the level of the teachers' cultural competence will result in a decrease in deficit thinking and a greater understanding of culture and its impact on education. In turn, this will lead to a more effective education for all students, but especially minority students. The gap in achievement must be closed in order to create a more equitable and fair society for all children.

Summary

The achievement gap has been defined in literature as the “disproportionate failure of students of particular backgrounds in U.S. schools...” (Nieto, 1999, p. 19). Multiple indicators of this gap in achievement exist including racial and income level differences in achievement test scores (KewalRamani et al., 2007; Vanneman et al., 2009), high school graduation and dropout rates (Cataldi et al., 2009; Constantine & Sue, 2006; Teel & Obidah, 2008) and representation in both special education (Ladson-Billings, 1994) and gifted programs (Ford et al., 2006; Ford et al., 2008). Black and Hispanic students tend to perform more poorly than their White peers on measures of academic achievement such as the NAEP, and have lower graduation rate and higher dropout rates than their White counterparts. Researchers have debated the causes of the achievement gap, but have been unable to agree on a single cause. Some factors that have been discussed as impacting the achievement gap include personal and institutional racism, differences in teacher-student ratio and inequitable distribution of qualified teachers (Teel &

Obidah); inadequate healthcare and housing (Ladson-Billings; Teel & Obidah); unprepared teachers (Teel & Obidah; White-Clark, 2005); and deficit thinking (Ford et al., 2006; Lyman & Villani, 2004). Deficit thinking by teachers lowers expectations toward some students and places blame for academic failure on the student and his/her family. Reducing deficit thinking is one way to address the achievement gap and work toward a more equitable and effective system of education for all students. One way to do this is to develop cultural competence within our schools and teachers. This journey begins with an understanding of culture and the role culture plays in education.

Culture

Dimensions of culture

Culture is defined in many different ways by many different authors, but all agree that culture has a profound impact on the daily life of each and every person. One's definition of culture will also differ based on the discipline in which one studies. For example, researchers in anthropology have defined culture as "the holistic study of humankind—its origins, development, social and political organizations, religions, languages, art and artifacts" (O'Hagan, 2001, p. 32). From the vantage point of psychology, culture has been defined as a "system of information that codes the manner in which the people in a group interact with their social and physical environment" (O'Hagan, p. 40). In education, culture is defined most broadly as, "a way of life, a way of being and doing things that is understood by a particular group of people whose ways are distinct from other groups" (Gibson, 1999, p. 19). Other authors view culture as a lens through which an individual perceives life (Diller & Moule, 2005), or a flexible framework that guides life and life practices (Lynch & Hanson, 2004). It is flexible in that it

guides behavior and influences tendencies toward certain behaviors. Ford et al. (2008) supported Lynch and Hanson's definition when proposing that culture is a frame of reference through which a group of people view and respond to the world. Culture binds a group together through aspects such as language, geography, religion and social class (Nieto, 1999), but is also influenced by other factors such as gender and education (Gay, 2000). Ford and Moore (2000) used the analogy of an iceberg to explain culture. Just as the vast majority of an iceberg is not seen above the water, so the vast majority of culture is not readily visible. Those aspects that are visible are known as surface culture and include food, dress, games, drama, crafts, and celebrations. However, below the surface lies the deep culture, which can include issues such as cultural preferences for concepts of time, conversational patterns, personal space, tempo of work, notions of leadership, and gender and family roles. Deep culture carries with it a high emotional load and is what will most likely clash when people of different cultures interact. Ford and Moore summed up the need to understand these cultural differences in the following way: "The less we know about each other, the more we make up" (p. 38).

Dimensions of culture can be used to compare different cultural groups on specific components, or to determine how two cultural groups differ. Ho (1987) defined the dimensions of culture as: nature and the environment, time orientation, people relations, work and activity, and human nature. In relation to nature and the environment, cultural groups view themselves as living in harmony with the environment or in mastery over it. Time orientation describes groups as future oriented (European Americans), past-present oriented (Asian and Latino cultures), or present oriented (Native Americans and African Americans). The concept of people relations focuses on groups being either individually focused or collaterally focused. A collateral focus

involves making decisions and acting in such a way as to better the family or community. Work and activity refers to whether a group is focused on doing or being-in-becoming. A tendency toward doing is typical of European American, Asian American and African American culture and involves being active in pursuit of a goal. On the opposite end of the spectrum is being-in-becoming. This is characterized by a more passive, process oriented approach, and is typical of Native American and Latino culture. Finally, human nature deals with the way in which a group views good and bad within a person. For example, some cultures such as African American and European Americans view people as having the potential to be both good and bad. In contrast, Native American culture, Latino culture and Asian American culture tend to view human nature as basically good.

Brown and Lundrum-Brown (1995) further delineated the dimensions of culture as psycho-behavioral modalities, axiology, ethos, epistemology, logic, ontology, concept of time and concept of self. Psycho-behavioral modalities refer to a culture's preferred type of activity. For example, individuals within a specific culture may tend to be more active and engage the world whereas individuals from another culture may prefer to more passively experience their world. People of yet another culture may be more comfortable experiencing the world and evolving through that experience. Axiology refers to the values taught by a culture, while ethos refers to the beliefs held by a culture. Epistemology is defined as the way a cultural group gains knowledge and learns about the world. Logic refers to the reasoning processes utilized by a group, while ontology is the cultural group's view of reality. The concept of time refers to how a group experiences or understands time. Groups can experience time as clock-based, event-based

or cyclical. Finally, the concept of self refers to whether or not group members view themselves as an individual or as an extension of the group.

In addition to the previous authors, Ford and Moore (2000) listed five dimensions of culture that are very similar to those listed by Ho (1987). This theory proposed that dimensions exist along a continuum, with some cultures existing at the poles of the continuum while others exist somewhere between the two poles. The list of the dimensions of culture for this theory included the concept of self, personal v. social responsibility, concept of time, locus of control and styles of communication.

The concept of self, as explained by Ford and Moore (2000), involves one's sense of personal identity. At one end of the continuum stands individualism, while the other pole is characterized by collectivism. Individualist cultures view the smallest unit of survival as the self, and tend to value independence, self-reliance, and personal freedom. Cultures on the collectivist end of the continuum view the smallest unit of survival as the family or immediate group. These cultures tend to value interdependence and harmony.

Another dimension used in this theory to compare cultures is that of personal/social responsibility. This dimension involves universalism at one pole and particularism at the other pole. Cultures leaning more toward universalism tend to believe in certain absolutes. Fairness involves treating all people the same and not making exceptions even for one's family or friends. Cultures leaning more toward particularism tend to view right and wrong as based on circumstances. They believe that fairness means looking at people as unique individuals and treating them accordingly. They also believe that personal feelings should be listened to and not put aside.

The third dimension is the concept of time. Some cultures are monochronic . These cultures view time as quantifiable and limited, placing an emphasis on efficiency. Other cultures are polychronic viewing time as limitless and more fluid. This dimension provides a very concrete example of ways in which people's differing cultures might clash.

Locus of control ranges from internal to external. Cultures that believe in an internal locus of control believe that one can achieve anything one sets one's mind to do. Accomplishment is up to the individual. At the opposite end of the continuum, cultures that believe more in external locus of control believe that accomplishment is a function both of effort and good fortune.

The final dimension of culture listed by Ford and Moore (2000) is that of style of communication. This dimension involves "what people say, how they say it and what they don't say..." (p. 37). It can be viewed across two different continua—directness v. indirectness and high v. low context. Direct cultures tend to be explicit in their communication, while indirect cultures tend to infer and imply what needs to be communicated. In high context cultures, much of what is communicated is done so via nonverbal cues. The opposite is true of low context cultures where the majority of communication is done verbally.

Three similar perspectives on the dimensions of culture were presented in the above section. While Brown and Lundrum-Brown's (1995) dimensions of culture are more theoretical and abstract, Ho (1987) and Ford and Moore (2000) have all written in terms more relevant to practitioners in the human services fields. Regardless of the names given to each dimension, it is important to note the commonalities between and among each theory. One consistency among the work of all three researchers is a focus on the concept of time and the concept of self.

Individuals make assumptions about behavior and courses of action based on their own cultural viewpoint. These assumptions may or may not be accurate depending on whether or not they understand the cultural perspective of others. In particular, these previously listed dimensions of culture are part of the deeper culture, and therefore a part of culture that could create conflict between individuals who are unaware of the impact of culture on daily life, and, more specifically, on the arena of education.

Characteristics of culture

Nieto (1999) identified several characteristics of culture. First, culture is embedded in a context. It cannot be separated out from the political, historical, social, or economic context in which it exists. It must be studied and understood within a specific context. In addition, these same issues influence and change that very culture as the context changes.

Second, culture is dynamic. It is constantly changing, evolving, and developing as people are influenced by the contexts within which they exist. People accept parts of certain cultures and reject other parts based on these contexts. Therefore, “cultures are *always* hybrids” (p. 50).

Third, culture is multifaceted. It cannot be boiled down simply to race or ethnicity, although this does play a role in the development of culture. Even within a cultural group, cultural identities can be varied and conflicting, as people claim different cultural identities to varying degrees.

Another characteristic of culture is that it is created and socially constructed. Culture is not something imposed upon a group of people who have no influence over it. It is constructed at the same time that the group or individual is living that very culture. Culture constructs those who live it, but those who live it simultaneously construct the culture. “It constructs us and we

construct it” (p. 56). Banks and Banks (2007) and O’Hagan (2001) supported Nieto’s (1999) belief in the constructed nature of culture. O’Hagan stated that culture “is a dynamic concept undergoing constant change” (p. 29).

Culture is also learned. From the moment of birth, children are socialized into their culture, and taught the values and worldview of the culture of the groups of which they are a part. Children tend to learn new cultural patterns more easily than adults. Guthrie (1975) stated that the understanding of one’s primary culture usually happens by the age of five.

A final characteristic of culture listed by Nieto (1999) is that culture is dialectical, or conflicted and “full of inherent tensions” (p. 58). Culture is not good or bad in general, but has evolved out of the context in which it has been lived. As such, different parts of a culture may conflict. In addition, there may be parts of a culture that an individual does not embrace. Cultures do not have to be accepted wholly in order for someone to be an authentic member of that culture. Gay (2000) supported Nieto’s assertion of the characteristics of culture with the supposition that culture is a “dynamic, complex, interactive and changing, yet a stabilizing force in human life” (p. 10).

Regardless of the differing views of the dimensions of culture most researchers concur that all people belong to at least one, and probably multiple cultures (Banks & Banks, 2007; Betancourt, 2004; Diller & Moule, 2005; Gibson, 1999; Lynch & Hanson, 2004; Nieto, 1999; O’Hagan, 2001). People can identify with different cultures to different degrees, and thus have their behavior influenced to different degrees by each culture. People do, however, tend to operate mainly out of a primary culture (Gibson). For example, within the United States multiple cultures exist, however there is an overarching macro culture that emphasizes the ideas of

equality, individualism, materialism, superiority and the desire to conquer nature. Within this macro culture exists micro cultures that interpret and respond differently to the ideas of the macro culture.

It is important to recognize that not all cultures are assigned the same value, but that some are deemed inferior to the dominant culture (Banks & Banks, 2007). It is also important to recognize that people carry their culture with them where ever they go. Teachers and students carry their cultures with them into the classroom and unconsciously filter interactions with each other through their cultural lenses (Gay, 2000). Culture is so much a part of the fabric of our everyday life that the impact of culture on our daily interactions is rendered virtually invisible, yet it “defines what is real and right for each of us” (Diller & Moule, 2005, p. 67). For this reason, it is important for teachers to examine their own cultural beliefs in order to be most effective when working in cross-cultural situations (Lynch & Hanson, 2004).

Summary

In order to fully understand the concept, the previous section explored the definition, dimensions and characteristics of culture. The accepted definition of culture tends to depend on the field study in which one works. One definition used in the field of education, is “a way of life, a way of being and doing things that is understood by a particular group of people whose ways are distinct from other groups” (Gibson, 1999, p. 12). It can be described as the frame of reference through which an individual or group experiences and responds to the world. Ford and Moore (2000) provided the analogy of an iceberg to aid in one’s understanding of culture. Several authors including Brown and Lundrum-Brown (1995), Ford and Moore (2000), and Ho (1987) described dimensions along which differing cultures can be compared. These dimensions

were given varying names by each author, but the conceptions of time and of self are consistent among this group of authors. In addition to the dimensions of culture, Nieto (1999) discussed several characteristics of culture. These include the ideas that culture is contextual, dynamic, multifaceted, socially constructed, learned and dialectical. Culture is common to all people in that everyone has a culture, however not all cultures are assigned the same value in society. Some cultures are deemed superior while others are considered inferior. Unfortunately, this bias can occur on an unconscious level because culture is embedded in one's thoughts and behaviors. In order to work effectively in cross-cultural situations one must be willing to examine one's own culture and render it visible in order to expose biases that can impact others. In addition to self-examination, one must understand how education is influenced by culture in order to work effectively in cross-cultural situations in the field of education.

Culture and Education

Multiple researchers have documented the differences in achievement that exist between European American students and their non-White counterparts and offered possible explanations for this gap (Delpit, 1995; Diller & Moule, 2005; Gay, 2000; Zeichner, 1992). One explanation for this difference in achievement is the dissonance between the culture of the school and the culture of the home and community of many minority students. Schools, as well as most other social systems, are institutions that reflect the values and beliefs of the dominant culture. As such, in the United States the education system reflects the values and beliefs of White, middle class Americans. This system is set up to benefit many students, but it is not established to benefit all students. In fact, far too many students are failed by this very system, a system that heralds itself to be the gatekeeper of the "American dream." Students whose home culture is not

congruent with the culture of school are frequently the ones left behind by a system based on assumptions that differ from theirs. For example, the American system of education is based on assumptions that are Eurocentric (i.e., assumptions that are based on the beliefs and values of those of Western European culture). This sense of Whiteness is pervasive within school settings, and privileges those students who are White. According to Diller and Moule (2005),

Most schools and the teaching styles that define them are Eurocentric and, as such, put Students of Color at an educational disadvantage. These students often feel...that they do not belong, do not understand the rules of classroom interaction, are not valued and must give up their cultural identities to succeed. The realities are disproportionate failure and dropout rates, depressed achievement scores, negative attitudes toward education... and differential funding and educational spending vis-a'-vis the ethnicity of the students being taught. (p. 52)

Many educators do not accept the knowledge and experiences of low income or minority students as valid and a base upon which to build further knowledge. These professionals often expect families to adapt to the expectations and culture of the school rather than the school responding to the unique needs of the individual students (Nieto, 1999). In contrast, educators who work with diverse students need to “take into account how students’ languages, cultures, and other differences exist within, and are influenced by mainstream U.S. culture as well as by other subcultures with which they come into contact” (p. 69).

One explanation for the achievement gap is the difference in culture between the school and the home and community of many students. Our current education system tends to reflect the values and culture of White, middle class Americans. However, many children do not grow up

in this culture and as a result they find themselves at a disadvantage in school. This disadvantage clearly supports one explanation for the achievement gap between minority students and their majority counterparts. This conflict between the culture of school and the culture of home is referred to as cultural dissonance and is discussed in detail in the next section.

Cultural dissonance

Cultural dissonance or mismatch is one explanation for the difference in school success of majority and minority students. “Cultural mismatch is a misunderstanding or lack of understanding between different cultures” (Teel & Obidah, 2008, p. 75). It is important to note the demographic differences between students and teachers in order to understand this cultural mismatch. Ninety percent of teachers come from European American backgrounds while about 42% of school aged children come from diverse families (Teel & Obidah, 2008). In addition to racial differences, class differences exist between many students and teachers. For example, Ford et al. (2008) stated that about 50% of Black and Latino students live in poverty. In addition, most teachers are female and few receive any formal training in the areas of cultural or economic diversity. These differences lead to differences in the cultures that various groups bring to the classroom, thus impacting the expectations and communication between the groups.

The culture of education

The culture of those belonging to the teaching profession embraces a unique set of values and beliefs. “Many of the assumptions and practices that are central to the teaching professions are in conflict with the cultural worldview or personal paradigms of non-White students” (Diller & Moule, 2005, p. 77). Diller and Moule listed four meta-values of the current education system that conflict with other cultures, the first of which is that of self-disclosure. Due to the amount of

time spent together in classrooms, teachers and students can develop personal relationships, which involve the expectation of sharing personal information. Many cultures of Color are not comfortable with this type of personal sharing with people outside of the family. Asian American culture tends to view such self-disclosure as shameful, while Latinos may feel threatened by a request for personal information.

The second value common in dominant, European-American culture is that of setting long-term goals. This is in contrast to many People of Color. Culturally, People of Color tend to be more short-term and action oriented in their goal setting (Diller & Moule, 2005).

Another value involves locus of control. Most European-American teachers focus on internal responsibility and control. In other words, individuals are in control of their own destiny and achieve success or failure as a result of their own actions. In contrast, other cultures may ascribe more to an external locus of control. For example, Latino Americans with strong religious beliefs may have external locus of control based on the belief in a higher power controlling their lives. Other people, especially those who view themselves as powerless also tend to have an external locus of control (Diller & Moule, 2005).

Finally, a focus on developing the individual is an important value in the dominant culture, but this is not shared by some other cultures. Many other cultures focus more on development of the group. For example, Asian Americans tend to emphasize “interdependence, ...negation of self, transcendence of conflict, and passive acceptance of reality” (Diller & Moule, 2005, p. 81).

It is important to note that the previously discussed values should be viewed generally. All people are individuals and may or may not demonstrate many of the cultural tendencies

discussed here. These tendencies must be taken as a guide, but never applied indiscriminately to all people of a given culture. Individuals may exhibit cultural tendencies to varying degrees or not at all, which is why it is vital for teachers to build relationships with students and their families, and work to understand their culture.

A clash of cultures

According to Delpit (1995), the cultural clash between home and school is acted out in two ways: teachers who misread students due to the difference in interaction, language, and communication styles and teachers who utilize instructional or discipline techniques that go against community norms. Research by Snow, Arlman-Rup, Hassing, Josbe, Joosten, and Vorster (1976) provided an example of the difference in communication styles. Snow et al. showed that working class mothers use more directive statements toward their children than middle and upper class mothers. Middle and upper class mothers tend to make requests indirectly, frequently through the use of questions. Working class children, both African American and European American, had trouble interpreting these questions both as directive statements and as “request(s) for adherence to an unstated set of rules” (p. 34). It can easily be inferred then, that working class students might misinterpret the indirectness of dominant culture teachers’ statements as optional, rather than direct.

This difference in the use of directness may also have an impact on the way children of different cultures view their teachers. Delpit (1995) stated that cultural differences exist in the way children designate power, saying, “Black children expect an authority figure to act with authority” (p. 35). People of Color tend to see authority as earned by personal efforts or traits and exhibited through personal characteristics, while dominant, European American culture sees

authority as associated with the role a person assumes. Delpit went on to list the characteristics of an authoritative teacher as seen through the lens of African American culture.

The authoritative teacher can control the class through exhibition of personal power; establishes meaningful interpersonal relationships that garner student respect; exhibits a strong belief that all students can learn; establishes a standard of achievement and ‘pushes’ the students to achieve that standard; and holds the attention of the students by incorporating interactional features of black communicative style in his or her teaching. (pp. 35-36)

Students who are accustomed to interpreting authority through this lens may have difficulty responding to authority that manifests itself in more indirect or subtle ways.

Related to this is the cultural difference in displays of emotion. While European American culture tends to view emotions as counter-productive, children of some other cultures place great emphasis on emotions. Children of Color tend to value the social-emotional aspects of a classroom more; therefore teachers who do not display emotions may be viewed as uncaring (Delpit, 1995). It can easily be anticipated that cultural differences in the manifestation of authority could lead to students being classified as behavior problems when, in fact, they have not learned the cultural mores of school.

Gay’s (2000) work supported this conclusion as well. This study, in part, summarized research by Dandy (1991), Kochman (1972, 1981, 1985), and Smitherman (1977) that showed African Americans, especially those strongly affiliated with African American culture, utilized a discourse or interaction style that involved the use of emotions, facts, opinions, and reasoning to present a case during a discussion. This was expounded upon when it was stated “the worth of a

particular line of reasoning is established by challenging the validity of oppositional ideas and by the level of personal ownership of the individuals making the presentations” (p. 100). Due to this cultural norm, African Americans may be more likely to challenge authority than students of other cultures. Again, this could lead to students mistakenly being labeled as behavior problems by teachers who do not understand their culture.

One can look at many different cultures to find examples of differing interaction styles. Latina girls have a tendency to defer to boys and may find it more difficult to participate or demonstrate knowledge in a mixed gender class. Native American students may have a reluctance to speak for anyone other than himself or herself. One research study found that Native American students had a very difficult time writing summaries of other authors’ works. Instead of summaries, the college students wrote about their opinions of the works, even when told explicitly to write summaries (Delpit, 1995). Other examples of differing interaction styles between cultures include the possibility of a higher degree of physicality of African American boys as compared to boys of other cultures. African American boys tend to desire a greater amount of interaction with others, be it positive or negative. In addition, research has also shown that African American children, more so than White children, initiate peer interaction in the classroom in order to complete assignments. The same is also true more of boys than of girls (Delpit).

Research has long demonstrated the link between expectations and behavior. The work of Rosenthal and Jacobson (1968) studied the impact of expectation when teachers were told that one group of their students was low achieving and another group was high achieving, when in fact, both groups performed similarly and without any significant differences. At the conclusion

of the year, the groups were achieving at significantly different levels. This research demonstrated that what teachers believe about students impacts the way the students are treated. One can apply the results of that study more specifically to support the idea that the cultural beliefs of teachers can influence their beliefs about students and therefore the way students are treated and taught. Research in this area has shown that cultural differences can impact the expectations of teachers for their students as it relates to interaction and eventually achievement. Gay (2000) listed two of these differences as the teacher-student relationship and “verve.” This study proposed that the dominant culture in schools generally encourages a fluid and active relationship between students and teachers. Other cultures tend to have more rigid, hierarchical relationships between the two. Students who are associated with this culture may find the relationships in United States schools to be confusing or intimidating.

Gay’s (2000) second example involved “verve,” defined as “the energy and exuberance with which highly culturally affiliated African Americans invest their interactions” (p. 54). Dominant culture teachers who are unfamiliar with African American culture may see “verve” as emotional, impulsive and lacking control.

Tyler et al. (2006) conducted a study that also demonstrates how cultural mismatches might impact student achievement. Similar to the previous study, this study included information about the way teachers perceive “verve.” The focus of the study was “teachers’ perceptions of the motivation and achievement of students displaying culture-based behaviors” (p. 998). The authors looked specifically at the dominant culture behaviors of competition and individualism, and the African American cultural themes of communalism and verve. The study included 62 female, European-American teachers teaching first through sixth grade in a

northeastern school district. Ninety percent of the students involved in the study were African American, while 80% of the teachers were European American. The teachers were asked to read scenarios developed to reflect different culture-based behaviors, and then answer the questions that followed each scenario concerning that student's classroom motivation and achievement. According to the results of the study,

...competitive and individualistic students were viewed as significantly more motivated and achievement-oriented than students who displayed communal and vernistic behaviors....[thus indicating] that perceptions of optimal classroom motivation and achievement are linked to those student behaviors consistent with a mainstream cultural ethos. (p. 1003)

This study has important implications for teachers and administrators as they attempt to raise expectations for all students.

Holliday's (1985a, 1985b) work theorized that schools require social competence as a precursor to academic opportunities. This study argued that students must comply with behavioral and managerial expectations prior to being given full access to more substantive academic opportunities. An example of this is a teacher who refuses to allow students to participate because they did not raise their hand for permission to speak. Students not from the dominant culture must learn to navigate both the academic expectations, but also these more subtle interactional expectations.

Esposito (1999) provided related research on the relationship between school climate and student social and academic development. While the focus of Esposito's study was school climate, it is relevant to this discussion because of its implications for teacher relationships with

students, which are in turn impacted by the teacher's beliefs toward his or her students. While this study of school climate included multiple relationships within the school community (teacher-parent, administration-teacher, student-teacher), for the purposes of this research, the student-teacher relationship is most relevant and is the only aspect of Esposito's study discussed here. Esposito determined school climate through parent ratings and examined its effect on the outcome measures of the students in kindergarten through second grade. This longitudinal study included low-income, minority students and their families living in chronically poor urban neighborhoods in the northeastern United States. Of the 152 students in this study, 80% were African American, 18% were Latino, and 2% were Caucasian. Data from this study indicated that the teacher-student relationship is the most important school-climate factor in influencing the child's school adjustment. It also indicated that for kindergarten students, the teacher-student relationship serves as a predictor of the teacher's academic perceptions of the student's academic competence. For first grade students, the teacher-student relationship predicted both reading and math achievement, however this was not the case for the kindergarten or second grade students. This research demonstrates the importance of the teacher-student relationship in an urban setting. It follows then, that cultural misunderstandings could negatively impact this relationship and therefore the academic achievement of students.

Another realm in which cultural clashes occur is that of language and communication. Gay (2000) stated that, "teaching is, above all, a linguistic activity" (p. 79), and that culture and communication are inextricably tied together. Language is not only a means of communication, but also impacts the way a group thinks, feels, and behaves. Ideas are actually shaped by language, not simply expressed through it. Many examples of linguistic differences exist

amongst varying cultures. Michaels and Cazden's (1986) research found differences in the narratives told by children of differing cultures. White students had a tendency to tell shorter, topic-centered narratives, while Black students tended to tell longer, episodic narratives. This was especially true of African American girls. It is interesting to note the difference in the adults' judgment of academic competence of the different students in this study. The adults were asked to listen to retellings of oral narratives told by both Black and White children. White adults continually judged the Black child's retelling negatively and predicted academic difficulties for the child's future. In contrast, Black adults judged the Black student's narratives positively and predicted academic success. The student was judged as "exceptionally bright, highly verbal, and successful in school" (Delpit, 1995, p. 55). These differences in judgment of competence are one example of the way in which a school can potentially contribute to the academic difficulties of students.

Another example of a language and communication difference is that of the role of questioning in different cultures. Work by Heath (1983) demonstrated that the use of questions varied between the home and school settings in a town in the southeastern United States. In the Black, working class community, questions of children were asked less frequently and with the expectation that the child would provide the information that the questioner lacked. In the school setting, questions were asked far more frequently and were used in order to display student knowledge. The study found that the differences in the use of questions frustrated the students because they did not understand why teachers would ask questions to which they already knew the answers. Villegas (1998) summed up the findings by saying, "the communicative demands

placed on the children in the classroom clashed with the rules that guided the use of language in the community” (p. 255).

Gay (2000) discussed discourse styles, which can vary by culture and also impact the communication between teachers and students. Dominant European American culture and subsequently most classrooms utilize a “passive-receptive” discourse in which students sit quietly while the teacher talks. The teacher then regulates student-talking opportunities. In contrast, other cultures tend to use a “participatory-interactive” discourse style in which listeners actively engage speakers as they are talking. This discourse style has been observed in Black, Latino and Native American culture. In Black culture this is often referred to as “call-response.” Native Hawaiian students tend to use a “participatory-interactive discourse referred to as “talk-story” which “involves several students working collaboratively, or talking together, to create an idea, tell a story, or complete a learning task” (Gay, p. 92).

Summary

The previous section discussed the concept of cultural dissonance. I began by offering Teel and Obidah’s (2008) definition of cultural dissonance as “a misunderstanding or lack of understanding between different cultures” (p. 75). Statistics about the changing demographics of schools were offered as a rationale for the need to address cultural dissonance. Before one can deal with the differences between the culture of school and the culture of students’ families and communities, one must understand the values that are often embraced by the dominant culture as it manifests itself in our system of education. These include the expectation of self-disclosure, long-term goal setting, internal locus of control, and the development of the individual over the

community. These values are reflective of White, middle-class Americans, and can be at odds with other cultures such as that of Latinos, Asians, and African Americans.

This clash of cultures can manifest itself in two ways: differences in interaction and communication style and the use of disciplinary or instructional techniques that are at odds with community norms (Delpit, 1995). Examples include differences in the use of directive statements between working class students and middle and upper class students (Snow et al., 1976); conceptions of authority (Delpit); presentation of ideas during a discussion (Gay, 2000); verve (Gay; Tyler et al., 2006); physicality (Delpit); presentation of narratives (Michaels & Cazden, 1986); and discourse style (Gay). At times this clash between cultures may result in teachers lowering their academic expectations of some students, which in turn can lower student academic achievement. Research by Rosenthal and Jacobson (1968) was presented to support the impact of teacher expectation on student academic performance or even access to participation in some educational activities (Holliday, 1981, 1985).

Research Studies

Kamehameha Early Education Program

Research conducted with the Kamehameha Early Education Program by Au and Jordan (1981) is among the most frequently cited studies in research attempting to establish a link between culture and education (Banks & Banks, 2007; Erickson, 1987; Gay, 2000; Sleeter & McLaren, 1995; Villegas, 1988). Au and Jordan studied the methodology of teachers at the Kamehameha Early Education Program (KEEP) in Hawaii. The program began as a research/development program with the goal of developing language programs that would be more effective for Native Hawaiian children, and was in existence from 1972 until 1996. The

researchers found improved academic achievement for kindergarten through third grade students at KEEP and attributed it to the teaching strategies that reflected Native Hawaiian culture. Pedagogy included extensive use of small, cooperative learning groups and activity centers, inclusion of “talk-story” discourse in the classroom, and utilization of “highly interactive discussion processes using an E-T-R sequence (experience-text-relationship)” (Gay, 2000, p. 153). Au and Jordan referred to this type of instruction as “culturally appropriate” (p. 139). At the beginning of the KEEP program, the average level of performance on state standardized tests for reading achievement was near the 13th percentile. Table 1 shows that, since then, students in the program have outperformed their non-KEEP peers significantly.

In addition to improved reading performance, research by Tharp and Gallimore (1988) demonstrated other interesting results. Gay (2000) summarized their findings saying, “KEEP teachers give significantly more praise and less criticism to students than other teachers.... Second, KEEP students have an average of 85% engaged time on academic tasks, which is 20 percentage points higher than the mean of comparison classrooms” (p. 154).

Table 1

Mean Percentile Scores of KEEP and non-KEEP Participants by Grade

Grade Level	KEEP Students %ile	Non-KEEP Students %ile
First	55.7	31.7
Second	52.5	28.8
Third	47.8	25.5

Note. Adapted from *Culturally Responsive Teaching: Theory, Research, and Practice* by G. Gay, 2000, p. 154. Copyright 2000 by Teachers College Press.

The Odawa Indian School

Mohatt and Erickson's (1981) work supported that of Au and Jordan (1981). Their research was similar to that conducted by Au and Jordan except that their work was with Native Canadian (Indian) students. In their study, Mohatt and Erickson utilized videotaping to observe the interaction patterns and participation structures of two teachers and their students. The study took place at a school in which all of the children were Indian. One teacher was of Indian heritage while the other teacher was non-Indian. Both teachers were considered "experienced, competent and effective as judged by outcome measures" (pp. 109-110). Mohatt and Erikson found that there were differences in the way that the Indian and non-Indian teacher structured and ran their classes. Differences were found in the amount of time spent in various classroom activities such as work completion, passing out papers, and entering and leaving the classroom. Differences were also found in the interactional styles of the two teachers in the area of giving individual attention to students. The Indian teacher proceeded more slowly and deliberately through the day's activities when compared to the non-Indian teacher. The Indian teacher also tended to exert control over the entire class and did not publically address students individually. The attention she provided to individual students was intimate and private, while the non-Indian teacher tended to keep control of the class publicly and called out directions to small groups and individuals. Finally, the Indian teacher provided students with a longer amount of time to respond to questions (4.6 seconds) when compared with the non-Indian teacher (2.0 seconds).

In addition to videotaping teachers, Mohatt and Erickson (1981) videotaped two children from each classroom in their homes and compared the interaction styles of the family to that used in each classroom. The Indian teacher's style of running her classroom and interacting with her

students tended to better approximate the students' home cultural patterns than the non-Indian teacher. The researchers referred to this type of teaching as "culturally responsive" teaching.

Multicultural Literacy Program

Diamond and Moore (1995) discussed a program similar to the KEEP project called the Multicultural Literacy Program (MLP). This program was instituted in three different school districts in Michigan for students in grades kindergarten through 8 for four years. The program utilized multicultural literature highlighting the contributions of Asian Americans, Latinos, African Americans, Native Hawaiians, and Native Americans in multiple genres to teach reading and writing. In addition teachers acted as social mediators, connecting the literature to the lived experiences of their students. No quantitative results on the MLP were reported by Diamond and Moore, however qualitative data were reported. The developers of the program utilized classroom observations and student work samples to demonstrate the positive impact of the program on the students. According to the developers, students across ethnicities, various cultural backgrounds and intellectual abilities demonstrated

- more interest and enjoyment in reading multicultural books;
- more positive attitudes toward reading and writing in general;
- increased knowledge about various forms, structures, functions, and uses of written language;
- expanded vocabularies, sentence patterns, and decoding abilities;
- better reading comprehension and writing performance;
- longer written stories reflecting more clarity and cohesiveness;
- enhanced reading rate and fluency;

- improved self-confidence and self-esteem;
- greater appreciation of their own and others' cultures. (p. 132)

Research by Moore-Hart, Diamond, and Knapp (2003) offered quantitative analysis of the impact of the Multicultural Literacy Program on cultural attitudes as well as reading comprehension and vocabulary measures of fourth and fifth grade students in two school districts. They utilized a pretest-posttest, quasi-experimental design. Their findings indicated that students in the treatment group (involved in the MLP) developed more favorable attitudes toward culture during year one of the program. During year two of the program, significant differences between the two groups were not found, however students in the treatment group did score consistently higher on measures of attitude toward culture.

In relation to reading comprehension and vocabulary, the results of this study were mixed (Moore-Hart et al., 2003). In year one, students in the treatment group from school district A showed no significant differences in gain scores on reading and vocabulary measures, however the gain scores of the treatment group were consistently higher than those of the comparison group. During year two, significant differences were found between the two groups in both reading and vocabulary gain scores. The treatment group showed the greater gains. In the area of reading comprehension, no significant differences were found between the groups. School district B had slightly different results. No significant differences were found between the treatment and comparison groups in either year for any academic measure (reading comprehension, vocabulary, and total reading performance), however both mean and gain scores were greater for students in the treatment group. The researchers speculated that this difference could be due to differences between the two school districts. District A had a much higher

percentage of culturally diverse students than did District B. District B was almost entirely White. In addition, “District B was characterized by high levels of academic achievement, which might have attenuated the treatment effect associated with the MLP” (p. 243).

Webster Grove Writing Project

A study on the Webster Grove Writing Project (WGWP) also provided quantitative data to support the use of culturally responsive pedagogy when teaching writing (Krater, Zeni, & Cason, 1994). This project began as a single district initiative in Missouri, and included, at its peak, 293 students and 14 English teachers in grades 6-12. The initial focus of the project was on African American students, but the program evolved to include all students in the teachers’ classes. This program had, at its core, eight principles and strategies based on African American cultural characteristics and contributions. These principles were derived from tenets of African American culture including

short stories and personal narratives written in conversational styles; oral language interpretations; storytelling, script reading, and play writing; memorizing poetry, proverbs, and quotations; call-response and dramatic performance; language variation as demonstrated by a variety of literary forms; and factual information about African American history. (Gay, 2000, p. 133)

The effectiveness of these strategies was determined by standardized test performance, analysis of writing samples, and teacher observations of student behavior. According to the data, students showed significant improvement in all three areas. Scores on the standardized writing assessment for the WGWP students increased by an average of 2.0 points, while non-program students showed a mean increase of 1.6 points. Over the course of the program, participating students

continually scored higher than their non-participating peers. This continued to be true even when the district changed writing assessments and began utilizing the Missouri state writing test. One important fact does remain: that even while demonstrating considerable improvement through participation in the project, African American students' total writing scores were significantly lower than the other students in the district (Gay, 2000). Perhaps this discrepancy was due to a large gap in achievement between African American students and other students prior to the implementation of the program, although this is not specified.

Rough Rock English-Navajo Language Arts Program

Dick, Estell, and McCarty (1994) conducted a study of a culturally based program that produced improved academic results for students called the Rough Rock English-Navajo Language Arts Program (RREN LAP). This program began with kindergarten and first grade students but eventually expanded to include students in grades kindergarten through six. The focus of the program was to take progressive pedagogies based in current educational research and adapt them to the special linguistic and cultural needs of the school. Teachers included Navajo culture (e.g., symbols, oral narratives, use of Navajo texts, cooperative learning) and language into their teaching strategies. According to this research, the students participating in RREN LAP demonstrated improvement in their achievement. According to Dick et al., quantitative data showed students demonstrated improvement

On locally developed measures, the K-3 students' group overall gained 12 percentage points in English reading comprehension, from spring 1990 to spring 1991. A cohort of students who exited RREN LAP in the spring of 1992 made mean gains of 60 percentage points over 3 years on criterion-referenced assessments of listening comprehension.

During the same period K-3 median CTBS percentile rank scores more than doubled in reading vocabulary, though they are still below national "norms." (p. 42)

The fact that these scores remained below national norms could be due to the large achievement gap between Native American students and their dominant culture peers, although this information is not given. What is known, however is that the program resulted in increased student achievement for these students. In addition to the quantitative data, teachers' qualitative assessments demonstrated improvement in the use and control of vocabulary, grammar, and the social uses of writing, as well as improved content area knowledge for participating students.

Equity 2000

Most of the previously discussed studies demonstrated improvement in the content areas of reading and writing. While there is less research in the areas of math, research on a few programs does exist in the areas of math and science. Quantitative research done on a program entitled EQUITY 2000 has shown that this effort to improve the math achievement of high school minority students has been successful (Gay, 2000). EQUITY 2000 is sponsored by the College Board, and is the most extensive program of its kind. It was initially begun in 1990 at six pilot sites in cities around the United States, including Nashville, TN. By the 1995-1996 school year, it had grown to include over 500,000 students in 700 schools representing 14 school districts. Since this time, it has continued to grow and include more school districts in more states around the nation. Students of all ethnicities (i.e., Asian American, African American, Latino, and European American) involved in the EQUITY 2000 program demonstrated improvement in various areas such as increased enrollment in high school algebra and geometry, increased percentage of students passing high school algebra and geometry, increased number of

African American and Latino students taking standardized college entrance exams such as the SAT and ACT, increased passing rates in courses, grade point averages, and increased advanced placement and testing participation.

Indian-related material in science and language arts instruction

Matthews and Smith (1991) researched the impact of the use of culturally relevant instruction materials on Native American students' interests, attitudes, and performance in science and language arts. This experimental design study included 203 fourth through eighth grade students from 11 different Indian tribes. The project was implemented in 10 schools, and included 17 classes and 17 teachers, with some classrooms and teachers serving as control groups. During this 10-week program, the experimental group teachers included Native American culture in their instruction of 25 hours of science and 25 hours of language arts. The control group teachers taught the same number of hours of each subject, but without the addition of the cultural material. Examples of cultural material included biographies of Native Americans who use science in their daily lives and math and science activities developed by groups such as the Math and Science Teachers for Reservation Schools, Career Oriented Materials to Explore Topics in Science, the Outside World Science Project, and the American Indian Science and Engineering Society. Students were given pre- and post-tests on both their attitudes toward Native Americans in science-related fields and their attitudes toward science content. Experimental group students exposed to the cultural material had a more positive attitude towards Native Americans in science related fields as well as higher achievement scores than the control groups regardless of gender. In addition, there was a slight positive correlation between attitude and achievement level in science. This result is logical, in that students who have a

positive attitude toward what they are learning will most likely learn and retain more than those who have a negative attitude about the subject matter.

Summary

In the previous section, several research studies were discussed to support the idea that changing the educational structure to better match the culture of the community can be successful. Two of the oldest works to support this ideology are those by Au and Jordan (1981) and Mohatt and Erickson (1981), who applied this concept with populations of Native Hawaiian and Canadian Indian students, respectively. The study by Au and Jordan demonstrated improved academic performance on the part of the students when changes were made in the instructional methods utilized, while the study by Mohatt and Erickson demonstrated that teachers utilizing culturally responsive teaching strategies could be effective with their students. The Multicultural Literacy Program (Gay, 2000) provided qualitative data that showed increased student success when provided with multicultural literature that was connected by teachers to student life experiences. The Webster Grove Writing Project (Gay) and the Rough Rock English-Navajo Language Arts Program (Dick et al., 1994) as well as the Equity 2000 program (Gay) provided quantitative data that supported the use of culturally responsive pedagogy when teaching various students. The WGWP found increased student achievement when applied to teaching writing, while the other two programs found similar results in the areas of reading and language arts. Finally, Matthews and Smith (1991) provided data to support the use of Native American cultural material when teaching science and language arts to Native American students to increase student achievement. While many of these studies were conducted with different cultural groups, they all indicated that positive student outcomes are achieved when schools and

teachers adapt to the cultural needs of their students and not the reverse. This is the crux of cultural competence: the awareness of the culture of students and the adaptation of instruction to best fit with that culture.

Cultural Competence

Cultural competence defined

The subject of cultural competence has achieved a more prominent position in research in recent years in areas such as social work, nursing and nursing education, healthcare and education. Yet, even with the increase in the amount of research being done in this area, there is little consensus on a universally accepted definition. Some definitions relate to entire organizations or agencies, while others relate to individuals or groups. For example, in the field of healthcare, Leavitt (2004) defined cultural competence as “a set of behaviors, attitudes, and policies that come together in a continuum to enable a healthcare system, agency or individual practitioner to function effectively in transcultural interaction” (p. 26). Another example from the field of healthcare is Betancourt, Green, Carrilo, and Ananeh-Firempong (2003) who defined a culturally competent healthcare system as one “that acknowledges and incorporates—at all levels—the importance of culture, assessment of cross-cultural relations, vigilance toward the dynamics that result from cultural differences, expansion of cultural knowledge, and adaptation of services to meet culturally unique need(s)” (p. 294). Campinha-Bacote (2007) provided yet another definition, stating that cultural competence is “the ongoing process in which healthcare professionals continuously strive to achieve the ability and availability to work effectively within the cultural context of clients” (p. 28).

Purnell and Paulanka (2005) attempted to further clarify the definition by differentiating between cultural awareness, cultural sensitivity and cultural competence. Cultural awareness deals mainly with an appreciation for outward cultural signs such as physical characteristics, food, art, and dress while cultural sensitivity deals more with the personal attitudes of the healthcare provider. It includes an awareness of words or actions that might be offensive to someone of a cultural background different from the provider. Lum (2005) generally concurred with the above distinction, stating that cultural awareness is an awareness that differences exist between cultural groups while cultural sensitivity involves “internal changes of attitudes and values” (p. 7). Cultural competence goes beyond both cultural sensitivity and awareness “and integrates and transforms knowledge about individuals and groups into specific standards, policies, practices and attitudes...to operate effectively in different cultural contexts” (p. 7).

The field of social work/human services provided a definition of cultural competence that can be applied to disciplines outside the field of healthcare. Cross et al. (1989) defined this concept as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or professional and enable that system, agency, or professional to work effectively in cross-cultural situations” (p. iv). Many researchers from various fields utilize or cite this definition of cultural competence in their work (Diller & Moule, 2005; Ford & Whiting, 2007; Hernandez & Isaacs, 1998; Keefe, 2005). Krajewski-Jaime, Brown and Ziefert (1993) expanded the definition provided by Cross et al. and defined cultural competence as

a set of academic and interpersonal skills that allow service providers to increase their understanding and appreciation of cultural similarities and differences within and

between groups so that they are able to draw on a particular community's values, traditions, and customs in developing effective and appropriate interventions. (p. 3)

Lynch and Hanson (2004) defined cross cultural competence as “the ability to think, feel, and act in ways that acknowledge, respect, and build on ethnic, [socio-] cultural, and linguistic diversity” (p. 43). Other authors have espoused definitions that encompass more forms of diversity than simply ethnic, cultural and linguistic diversity. For example, Barrera and Kramer (1997) stated that diversity is deemed to be present whenever there is the “probability that, in interaction with a particular child or family, [the provider] will attribute different meaning or values to behaviors or events than would the family or someone from that family's environment” (p. 222). In short, a lack of agreement exists on the most basic level as to what constitutes cultural competence or even cultural diversity.

Researchers from the field of education have had an equally difficult time defining cultural competence, or even settling on a single term for the concept. In education, use of the term cultural competence is more limited. Exceptions include Ladson-Billings (2001) and Ford and Whiting (2007), who advocated for the development of cultural competence on the part of students. Ladson-Billings included cultural competence as a necessary part of culturally relevant pedagogy, stating that, “...cultural competence refers to the ability of students to grow in understanding and respect of their own cultures” (p. 78). Ladson-Billings also briefly discussed the idea of cultural competence as it related to teachers, and gave indicators of cultural competence on the part of the teacher. These include the teacher understanding the role culture plays in education, making an effort to learn about the home and community culture of his/her students, including culture “as the basis for learning” (p. 99), and being aware of and flexible in

the use of the many cultural affiliations of his/her students. Diller and Moule (2005) specifically defined cultural competence with respect to educators as “[t]he ability to successfully teach students who come from cultures other than your own. It entails mastering complex awarenesses and sensitivities, various bodies of knowledge, and a set of skills that...underlie effective cross-cultural teaching” (p. 5).

Teel and Obidah (2008) provided a more comprehensive definition of cultural competence as it relates to teachers. Teel and Obidah used the term racial and cultural competence and defined it as the teacher’s

ability to see differences among students as assets. They create caring learning communities where individual and cultural heritages, including languages, are expressed and valued. They use cultural and individual knowledge about their students...to design instructional strategies that build upon and link home school experiences. They challenge stereotypes and intolerance. ...[T]eachers understand, affirm, and use students’ home and primary languages, communication styles, and family structures for learning and discipline. (p. 3)

The development of cultural competence was described on a continuum ranging from a total lack of cultural competence to advanced levels of it, and encompassed eight factors that together determine the level of cultural competence of the teacher. The factors are

- comfort level with students;
- student academic engagement;
- personal connection with students;
- level of academic expectations;

- acceptance of responsibility for student performance;
- relationship with parents;
- self-evaluation/reflection;
- culturally relevant lessons. (p. 146)

According to Teel and Obidah, teachers who are not comfortable with students and their parents, do not engage students academically, have low expectations for minority students, fail to self-evaluate, do not utilize culturally relevant lessons, and lack a personal connection with students will be on the lower end of the cultural competence continuum. In contrast, teachers who engage students academically, are comfortable with students and their parents, take responsibility for student learning, maintain high expectations for all students, reflect, and design culturally relevant lessons would be more advanced on the continuum. Efforts must be made to increase the cultural competence of teachers in order to improve the education of all students.

Culturally responsive pedagogy

While the above authors utilized the term cultural competence, others described culturally responsive pedagogy (Gay, 2000), culturally relevant teaching (Ladson-Billings, 1994, 2001), and multicultural education (Banks & Banks, 2007) with similar, though distinctly different attributes. Gay stated that

although called by many different names, including *culturally relevant, sensitive, centered, congruent, reflective, mediated, contextualized, synchronized, and responsive*, the ideas about why it is important to make classroom instruction more consistent with the cultural orientations of ethnically diverse students, and how this can be done, are virtually identical....Culturally responsive teaching can be defined 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 is culturally validating and affirming. (p. 29)

Gay (2000) listed the characteristics of culturally responsive pedagogy as validating, comprehensive, multidimensional, empowering, transformative, and emancipatory. It is validating in that this type of teaching acknowledges cultural heritage and its legitimacy in the classroom, bridges the experiences of school with the experiences of home, and uses various teaching styles that are appropriate for different learning styles. It also helps students understand and know their own culture as well that of others and utilizes multicultural information, resources and materials across the curriculum. It is comprehensive in that it teaches the whole child and promotes a sense of accountability of each student to the others. In other words, students succeed and fail together with the classroom developing into a family and community of its own. In addition, teachers promote the development of “intellectual, social, emotional, and political learning” (p. 30). Culturally responsive pedagogy is multidimensional in that it deals with more than simply curriculum and methods. It incorporates the classroom climate, the relationships between the teacher and students, the content and assessment methods, as well instructional methods. In addition, Gay asserted that culturally responsive pedagogy is empowering. Culturally responsive teachers empower students by having high expectations and creating a classroom atmosphere in which students are supported so they will “persevere toward high levels of academic achievement” (p. 32). The teacher develops an “ethos of achievement” (p. 32) and is sure to celebrate both individual and group successes. Gay also argued that

culturally responsive pedagogy is transformative in that it explicitly seeks to recognize the cultural strengths students bring into school situations and uses those strengths to enhance further learning. In a culturally responsive classroom, cultures are respected and students are not asked to choose between academic success and their cultural affiliation. In addition,

the transformative agenda is double-focused. One direction deals with confronting and transcending the cultural hegemony nested in much of the curriculum content and classroom instruction of traditional education. The other develops social consciousness, intellectual critique, and political and personal efficacy in students so they can combat prejudices, racism, and other forms of oppression and exploitation. (p. 34)

The final characteristic of culturally responsive classrooms as defined by Gay is that it is emancipatory. Students are given access to authentic knowledge and freed from the psychological stress created when they must stifle their cultural inclinations. This energy can then be applied to learning and creating an atmosphere of community within the class. In addition, students learn that many versions of the “truth” exist and are taught to question and contextualize what they learn from a variety of cultural viewpoints. They are taught to be active in their learning.

Culturally relevant teaching

Ladson-Billing’s (1994) theory of culturally relevant teaching is similar, though distinctly different than the term described above by Gay (2000). In the book *The Dreamkeepers: Successful Teachers of African American Children*, Ladson-Billings discussed previous research and the connection between terms associated with each study. For example, Mohatt and Erickson’s (1981) research with Native American and White students and teachers utilized the

term “culturally congruent”, which according to Ladson-Billings “is meant to signify the ways in which the teachers altered their speech patterns, communication styles, and participation structures to resemble more closely” (p. 16) students’ culture. Research by Au and Jordan (1981) used the term “cultural appropriateness” to describe the changes teachers of Native Hawaiian children made in their methods that resulted in improved reading performance. Ladson-Billings believed that these terms, as well as the terms culturally responsive and culturally compatible, are reflective of a sociolinguistic approach to teaching culturally diverse students. According to Ladson-Billings, the reasons for the academic failure of diverse students are broader and more complex than speech patterns and communication styles and therefore require a term that goes deeper than sociolinguistic explanations and methods. This led to the creation of the term ‘cultural relevance’, that “moves beyond language to include other aspects of student and school culture. ...culturally relevant teaching uses student culture in order to maintain it and to transcend the negative effects of the dominant culture” (p. 17). In short, culturally relevant teaching allows students to choose academic success, yet identify and maintain their culture.

Culturally relevant teachers possess three common attributes (Ladson-Billings 2001). First and foremost, culturally relevant teachers focus on student academic achievement. They hold high expectations for all students and truly believe that ALL students can learn. Second, they develop the cultural competence of their students. The teacher views student and community culture as a strength and helps students maintain and identify with their culture. Finally, culturally relevant teachers develop a sociopolitical consciousness on the part of

students. These teachers encourage students to question the status quo and work for a more just and equitable society.

Multicultural education

A final concept linked to those previously discussed is that of multicultural education as conceived by Gay (2004). Multicultural education is described as

an idea, and educational reform movement and a process whose major goal is to change the structure of educational institutions so that male and female students, exceptional students, and students who are members of diverse racial, ethnic, language, and cultural groups will have an equal chance to achieve academically in school. (p. 32)

An important assumption underlying this definition is that the current structure of the public educational system in the United States promotes the success of students in some cultural groups but not others. Gay also points out that other authors have extended the concept of multicultural education even further to include social reconstruction as the ultimate goal of this reform movement. For example the definition is sometimes expanded to include differences in gender, social class and disability status. “This goal is achieved by teaching social and political action skills and collaboration to bring about a more equitable distribution of resources and opportunities for all oppressed groups” (p. 33).

Banks (2004) described multicultural education as encompassing five dimensions. These dimensions are content integration, knowledge construction, prejudice reduction, empowering school culture and social structure, and equity pedagogy. Content integration is described as the extent to which teachers utilize examples and content from a variety of cultural groups that connect to the subject area. Knowledge construction is described as the ways in which teachers

educate students about how “knowledge is created and how it is influenced by the racial, ethnic, and social-class positions of individuals and groups” (p. 4). The next dimension is that of prejudice reduction and focuses on teaching methods and materials that can be used to alter students’ attitudes and values to become more democratic and accepting of cultural differences. Equity pedagogy refers to the ways teachers modify their own teaching methods, styles and techniques to ensure the success of diverse students in their classrooms. The final dimension of multicultural education is that of developing an empowering school culture and social structure. This refers to the ways schools are reorganized to ensure that diverse students (those of differing racial, ethnic, language and social class groups) experience academic success as well as cultural empowerment.

Comparison of concepts

Regardless of the label given to the concept, there are several commonalities amongst the three teaching methods described above: culturally relevant teaching, culturally responsive pedagogy and multicultural education. The first is academic achievement. All three methods emphasize the need for diverse students to be academically successful, for this is the ultimate goal of education—to teach students the academic skills they will need to be successful in adulthood. The second commonality is that of providing an atmosphere that supports cultural empowerment. Researchers and practitioners who subscribe to these philosophies believe that students should not have to choose between their cultural affiliation and academic success. Another shared characteristic is that of utilizing instructional methods, styles and content to teach culturally diverse students. The above researchers agree that utilizing a variety of teaching styles, examples and methods to teach content will promote the two previous tenets of academic

success and cultural empowerment. In addition to these similarities, one more exists, but to a lesser degree. All three theories promote the idea of teaching students to think with a critical consciousness and to be aware of the influence of race, ethnicity, gender and social class in society so they can work to change the status quo and create a more equitable situation in our country.

While I could have chosen to study any one of these concepts, the reason I have chosen cultural competence is that it is my belief that culturally relevant teaching, culturally responsive pedagogy, or the use of multicultural education can only occur after an individual or group has begun the process of developing cultural competence. Culturally relevant teaching and multicultural education are the tools that teachers use once they have increased their level of cultural competence enough to realize the importance of culture in the educational arena. They are the tools teachers use to work effectively with students from cultural groups different than their own. According to Diller and Moule (2005), terms such as multicultural education and cultural diversity are “most frequently used as umbrella terms for approaches and strategies undergirding culturally competent teaching” (p. 13).

Whether one is defining cultural competence or other related concepts and regardless of the field in which one works, the common goal of each concept is that of working effectively with groups of people from a culture other than one’s own. In the field of medicine, working effectively might mean getting a patient to correctly treat a condition. In the field of social work it might mean successfully working through issues of depression in a family. In education, working effectively with diverse groups means teaching in a way that ensures academic success and cultural empowerment. Marks (2007) stated this goal succinctly by stating that the “primary

goal [of cultural competence] is to deliver high-quality, equitable [services] to people regardless of cultural background” (p. 71). Betancourt, Green, Carrillo and Park (2005) described the goal of cultural competence in the following way: “to create a...system and workforce that are capable of delivering the highest quality care to every patient regardless of race, ethnicity, culture, or language proficiency” (p. 499) and “to change a ‘one size fits all’ [system] to one that is more responsive to the needs of an increasingly diverse population” (p. 502-503).

Characteristics of those developing cultural competence

In addition to the above stated goal, the literature also indicated that there were several characteristics common to those who are interested in developing cultural competence. While they may be stated differently, the characteristics are seen across various fields of study as well as amongst various researchers. The most frequently mentioned characteristic was that of personal awareness and reflection (Constantine & Sue, 2006; Cross et al., 1989; Hernandez & Isaacs, 1998; Lum, 2005; Ming & Dukes, 2006; Romanello, 2007; Teel & Obidah, 2008). Most of these authors placed self-awareness and reflection as the most important characteristic related to cultural competence. Without this ability, those wishing to become more culturally competent will not be able to truly understand their own cultural biases and how those biases may differ from others and cause difficulties in interactions with those who are culturally different. The desire to be open to others and a willingness to adapt to diversity were also mentioned frequently in the literature (Cross et al.; Dukes; Hernandez & Isaacs; Ming & Dukes; Teel & Obidah; Wong & Blissett, 2007). Multiple authors also cited knowledge of different cultures as important in the development of cultural competence (Cross et al.; Hernandez & Isaacs; Lum; Romanello). Another often-discussed characteristic was that of personal experiences and/or the

opportunity for experiences with people of different cultures (Campinha-Bacote & Munoz, 2001; Hernandez & Isaacs; Ming & Dukes; Romanello). The chance to develop cultural competence may be limited if one's opportunity to interact with those of different cultures is also limited.

Other characteristics were mentioned in the literature, but not to the extent of the ones named above. These include valuing diversity (Cross et al.; Hernandez & Isaacs; Teel & Obidah), being conscious of intercultural dynamics (Hernandez & Isaacs), having a commitment to social justice and activism (Constantine & Sue; Ming & Dukes; Teel & Obidah), having support group experiences (Ming & Dukes), having educational experiences related to cultural competence (Ming & Dukes), and finally a desire to promote student success (Teel & Obidah).

Summary

In the previous section I discussed the concepts of cultural competence, culturally responsive pedagogy, culturally relevant teaching and multicultural education. I compared these concepts and explained how they were related. In addition I explained my choice to focus on cultural competence in this research instead of the other concepts. While the other concepts are important, cultural competence is the foundation, a prerequisite needed to utilize these concepts. Teachers are not going to use culturally relevant teaching or culturally responsive pedagogy if they have not begun to develop cultural competence. Thus, characteristics mentioned in research of those striving to develop cultural competence were provided. The following section offers several models of cultural competence found in the research.

Models of Cultural Competence

The Campinha-Bacote model

Multiple models and theories of cultural competence can be found in the literature. Researchers Campinha-Bacote (1999, 2003, 2007), Campinha-Bacote and Munoz (2001), Purnell and Paulanka (2005), Jefferys (2006), and Cross et al. (1989) all described various models of cultural competence. Focusing on cultural competence in the medical field, Campinha-Bacote designed a model, which included five components: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire. Campinha-Bacote considered the intersection of these five components to be cultural competence. Figure 7 offers a visual representation of this model.

Campinha-Bacote defined cultural awareness as “the deliberate process of recognizing personal biases, stereotypes, prejudices, discriminatory practices, and assumptions held about individuals who are different” (2007, p. 29). Cultural knowledge relates to the process of actively seeking accurate information about a given cultural group. In this context, the idea of cultural knowledge applies to medical information such as different drug reactions for different cultural groups. However, this same idea can be applied in education. Based on this model, teachers and school personnel working to develop cultural competence would seek information about the various cultural groups within the school in an effort to improve academic achievement and student outcomes.

The next component of cultural competence, according to Campinha-Bacote (2007) is cultural skill. In the medical field, this component involves medical personnel having the “ability to collect relevant cultural data regarding the clients’ health histories and presenting

problems as well as accurately performing a culturally specific physical assessment” (Campinha-Bacote, 1999, p. 204). In education, cultural skill might involve the ability of the teacher to collect relevant cultural data on students and use that data to alter instructional practices in order to enhance student success.

The fourth component of cultural competence included in this model is that of cultural encounters. Cultural encounters are the interactions providers have with those of cultural backgrounds different from their own. These experiences are important in that they offset the possibility of stereotyping that can develop through the acquisition of academic knowledge (Campinha-Bacote, 1999). This component easily translates to the field of education, as teachers, like any other profession, have interactions with those of cultural backgrounds different from their own.

Finally, Campinha-Bacote (1999) lists cultural desire as the final component of her model of cultural competency. Cultural desire is the motivation practitioners have to engage in the process of developing cultural competence and is the basis of the other four components. Educators, like healthcare providers, must have the “genuine desire and motivation to work with culturally different” clients (p. 205). If this quality is lacking, the words, actions and inner feelings of the teacher will not be congruent and this will negatively impact the quality of the interactions with students.

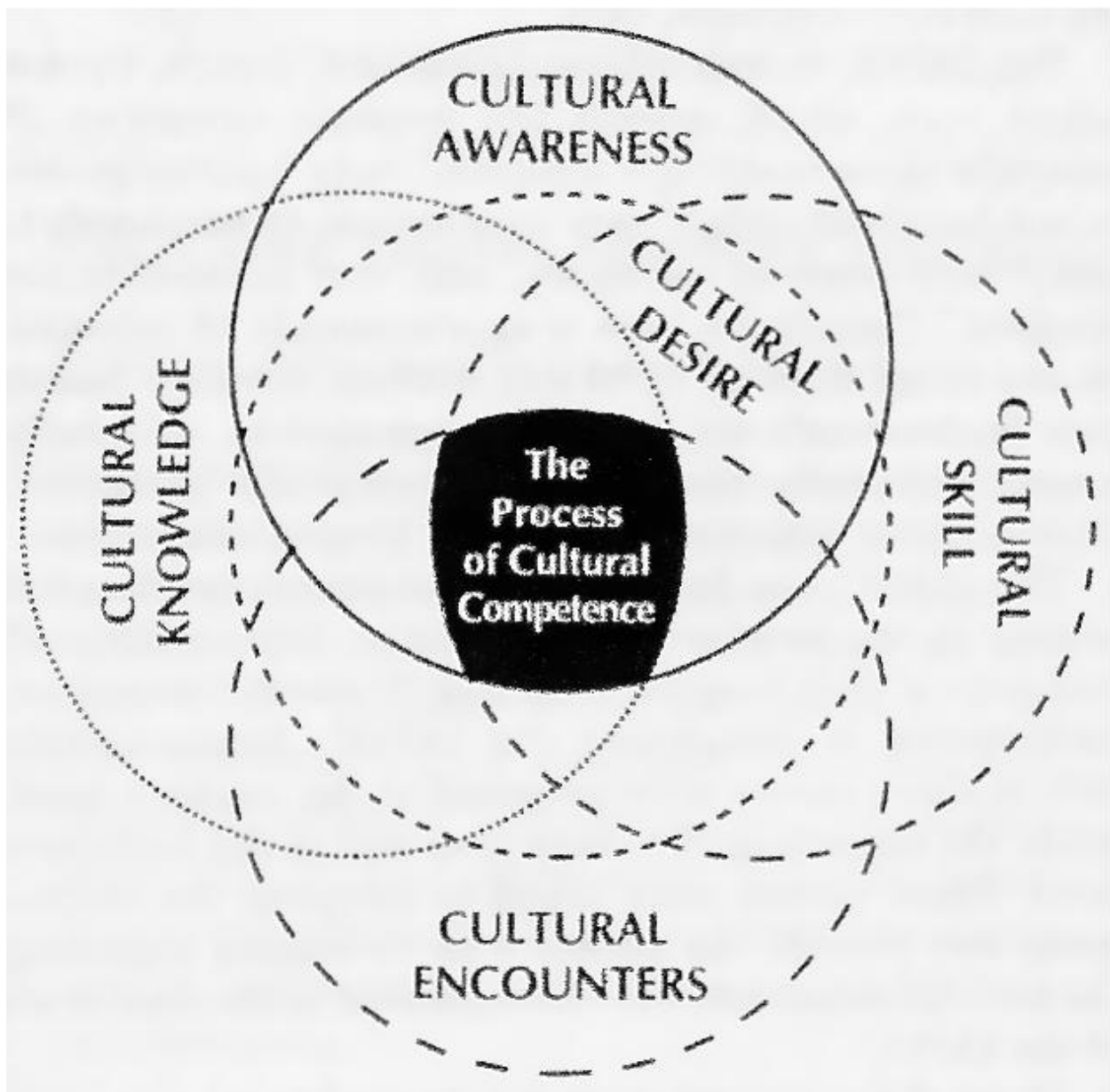


Figure 7. Campinha-Bacote's Model of Cultural Competence. Reprinted from "A Model and Instrument for Addressing Cultural Competence in Health Care" by J. Campinha-Bacote, 1999, *Journal of Nursing Education*, 38, p. 205. Copyright 1999 by SLACK.

The Purnell Model

A second model of cultural competence found in the research was the Purnell Model for Cultural Competence (Purnell & Paulanka, 2005). This model was developed for healthcare

providers working in all practice settings to help them assess the culture of their clients, as well as provide a framework within which to examine their own cultural beliefs. The model includes 12 different cultural domains or constructs surrounded by three concentric rings. Figure 8 demonstrates this model. The inner most ring represents the individual while the subsequent ring represents the family. The third ring represents the community and, finally, the outer-most ring represents global society. The 12 constructs cannot stand alone, but instead interact with and influence the others. The 12 domains are overview/heritage, communications, family roles and organization, workforce issues, biocultural ecology, high-risk health behaviors, nutrition, pregnancy and the childbearing family, death rituals, spirituality, health-care practices, and health-care practitioners.

Each of these domains includes several concepts that must be addressed in cross-cultural interaction in healthcare. For example, under the communication domain, health-care workers might ask about or observe the client's response to touch, appropriate greetings, languages spoken, eye contact, and proximity during conversation. Under the domain of family roles and organization, the practitioner may inquire about roles and responsibilities of men, women and children within the culture and family, the role of extended family members and the elderly, and views about marriage and sexual orientation. A final example is that of biocultural ecology. Within this domain, practitioners might request information about common diseases in the country of origin (if applicable), genetic diseases within the family, medication allergies, and problems faced when taking over the counter or prescription medications (Purnell & Paulanka, 205).

The final part of the Purnell model is a jagged line underneath the circle and rings. This line represents cultural consciousness, and is jagged to represent its non-linear development. In this model a practitioner or client can be located on a continuum ranging from unconsciously (culturally) incompetent to consciously incompetent to consciously competent and finally to unconsciously competent.

The Cultural Competence and Confidence Model

While the Purnell Model of Cultural Competence can be utilized to assess the cultural beliefs of healthcare clients as well as healthcare providers, the Cultural Competence and Confidence (CCC) model is used to understand the concept of developing cultural competence within individuals (Jeffreys, 2006). It has at its core the idea of transcultural self-efficacy (TSE), which is defined as “the perceived confidence for performing or learning general transcultural nursing skills among culturally different clients” (p. 25). According to Jeffreys, the concept of TSE, like other forms of self-efficacy, is related to a healthcare worker’s motivation to become culturally competent as well as the level of persistence maintained during the learning process. The stated goal for the CCC model is the promotion of “culturally congruent care through the development of cultural competence” (p. 30).

This model demonstrates that cultural competence must be developed in three different dimensions (cognitive, affective and practical), and that this development is impacted by formal educational experiences and other learning opportunities, such as observation and personal experiences. Jeffreys (2006) theorized that without the appropriate level of TSE, those in the learning process will not be successful in the development of cultural competence. For example, those who lack cultural self-efficacy may avoid situations involving cross-cultural interaction or

be less committed to them, thus reducing their effectiveness to deliver culturally congruent services, or even quality healthcare. In contrast, those who are overly confident might undermine their own development by failing to prepare adequately for a given culture-related task. This could also lead to a lack of culturally congruent care, and quite possibly, poor healthcare. In Jeffreys' opinion, cultural competence is a key to high-quality healthcare.

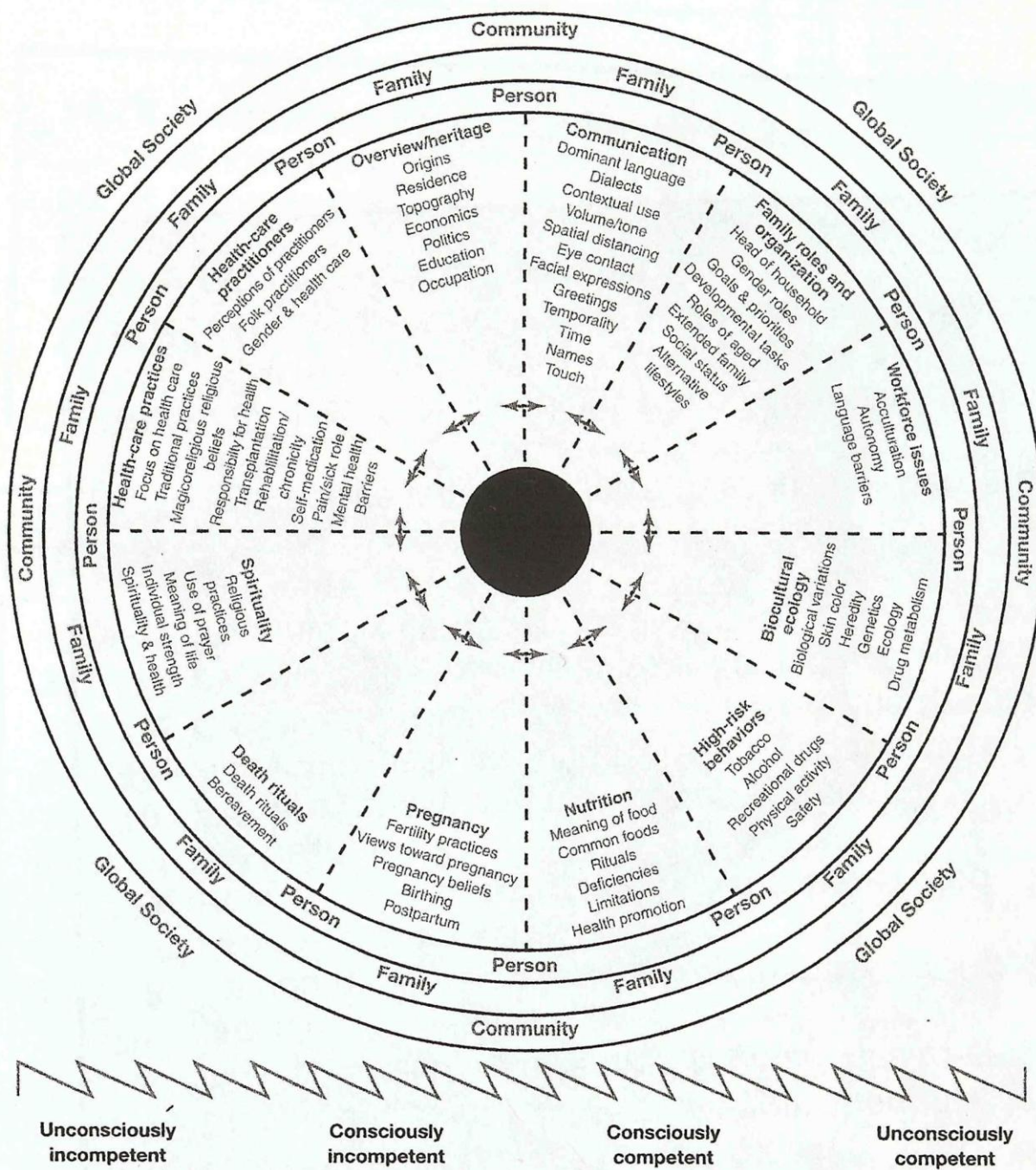


Figure 8. The Purnell Model of Cultural Competence. Reprinted from *Guide to Culturally Competent Health Care* by L. Purnell, & B. Paulanka, 2005, p. 9. Copyright 2005 by F.A. Davis.

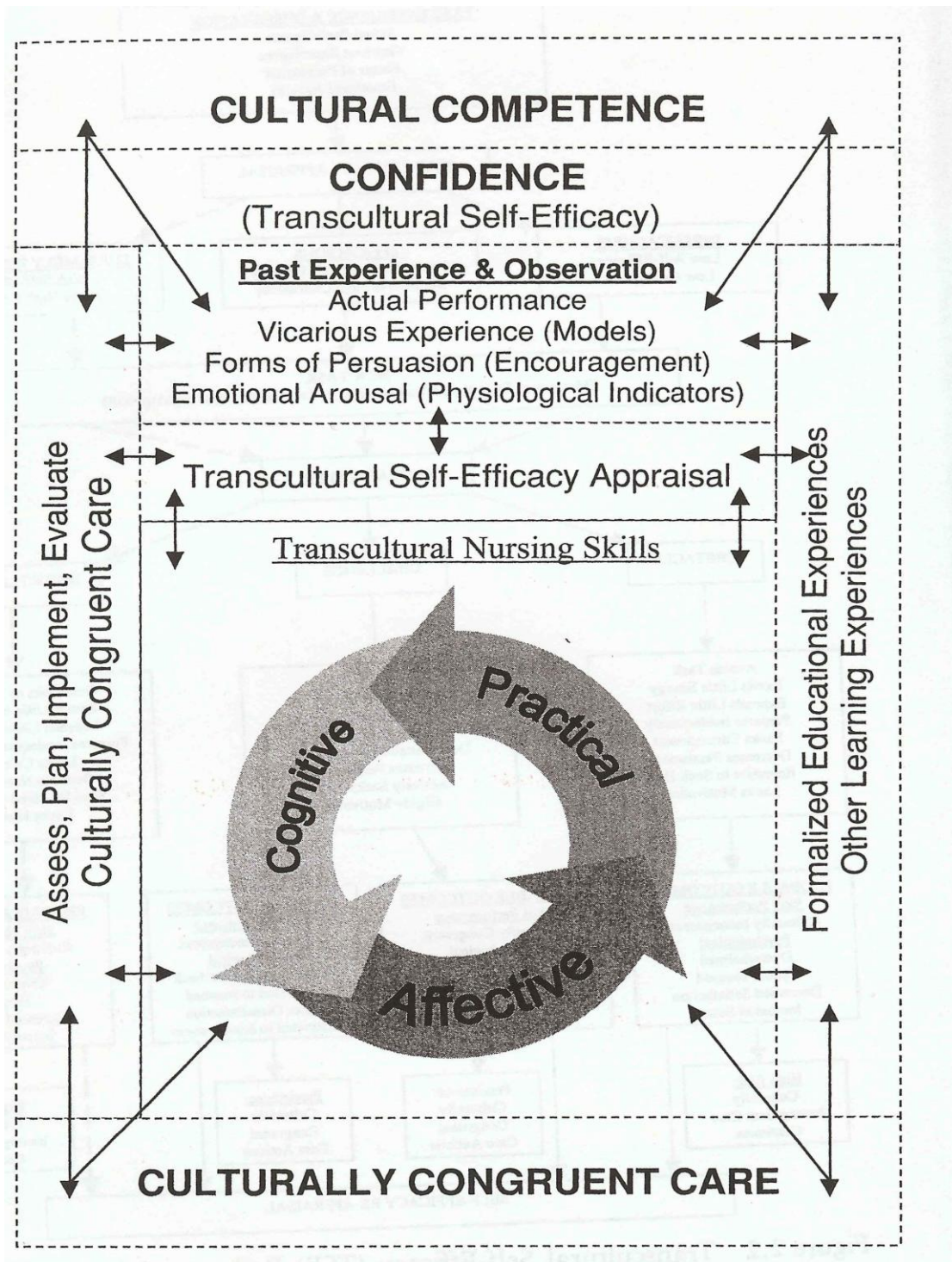


Figure 9. The cultural competence and confidence model. Reprinted from *Teaching Cultural Competence in Nursing and Health Care: Inquiry, Action, and Innovation* by M. Jeffreys, 2006, p. 26. Copyright 2006 by Springer.

Theoretical framework: The Cross Model

In the field of mental health, one can find yet another model of cultural competence. This model most closely connects to the field of education and thus is used as the theoretical framework for this research. This model was developed by Cross et al. (1989) and is outlined in the monograph *Toward a Culturally Competent System of Care (vol. 1): A monograph on effective services for minority children who are severely emotionally disturbed*. In examining the delivery of effective mental health services for minority children who are severely emotionally disturbed, Cross et al. postulate that services have not been as effective as they should be when dealing with minority students and their families. This belief is summarized in the monograph as follows:

In short, if you are a racial minority of color, you will probably not get your needs met in the present system. Yet, you are more likely to be diagnosed seriously emotionally disturbed than your Caucasian counterpart. When you do make it into the system, you will experience more restrictive interventions. Cultural traits, behaviors, and beliefs will likely be interpreted as dysfunctions to be overcome. (p. 4)

Examples of differential treatment of minorities include higher rates of placements out of the home for minority children as compared to Caucasian children; disproportionate numbers of Black children being served in less desirable placements; minority families receiving less social service support than their non-minority peers; differences in referral and diagnosis patterns for Black and Caucasian youth; and finally the greater proportion of Black children served by the public sector versus the private sector. This model contends that these differences are frequently related to cultural differences between the practitioners, agencies and systems and the children

and families they serve. Cross et al. argue that by developing cultural competence these discrepancies in care can be reduced, resulting in more effective treatment for minority youth.

Cross et al. (1989) set forth a continuum along which individuals, agencies, and systems can move as they develop cultural competence. While it ranges from cultural destructiveness to cultural proficiency, it should be noted that individuals, agencies and systems fluctuate along this continuum. Cultural competence is a developmental process and does not have a fixed end point. In addition, people may be at differing levels of cultural competence in relation to different cultural groups. One might be located at the level of cultural pre-competence when dealing with Native American culture, but at cultural proficiency when dealing with African American culture. Figure 10 shows the entire continuum including all six levels of cultural competence as set forth by Cross et al.

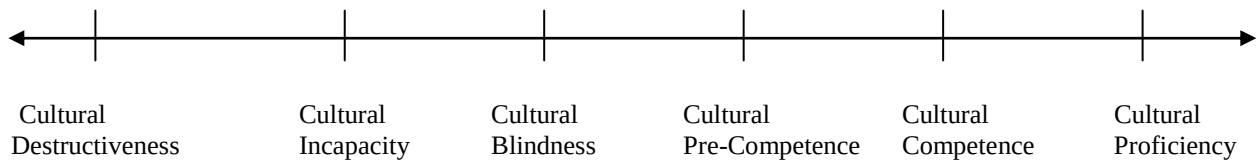


Figure 10. The cultural competence continuum. Adapted from Towards a Culturally Competent System of Care (Vol.1): A Monograph n Effective Services for Minority Children Who are Severely Emotionally Disturbed by T. Cross, B. Bazron, K. Dennis, & M. Isaacs, pp. 14-18. Copyright 1989 by the National Institute of Mental Health, Child and Adolescent Service System Program.

Cultural destructiveness is the most negative end of the scale and represents actions, attitudes and policies that are destructive to the culture of others. An extreme example is cultural genocide, such as that experienced by Native Americans when their children were removed from their homes and sent to boarding schools with the intent of ridding the children of their native

culture. The attitude of cultural supremacy is another, more common, example. This attitude assumes that one culture is somehow superior to others (Cross et al., 1989).

The next level on the continuum is cultural incapacity. At this level, the individual or agency does not actively seek to be culturally destructive, but does continue to believe in the superiority of one culture over others. In addition, this level is often characterized by fear and ignorance of those who are culturally different. Examples of actions at this level might include discriminatory hiring practices, segregation of cultures, lower expectations for minority clients than for dominant culture clients, and subtle messages sent to minorities that they are not valued (Cross et al., 1989).

Near the midpoint on the continuum is cultural blindness. At this level, individuals and agencies express the philosophy of being unbiased and “color blind” in their dealings with those of different cultures. These agencies and individuals tend to believe that culture plays no role and that all people are the same. While on the surface this may seem acceptable, it does a disservice to people of minority cultures because it ignores a very central aspect of the individual—his or her culture. In ignoring this, these individuals and agencies also ignore the cultural strengths an individual brings to the table, and encourages that individual to assimilate to the dominant culture. Characteristics of those at this level of cultural competence include agencies and individuals who tend to believe that the “helping approaches traditionally used by the dominant culture are universally applicable” (Cross et al., 1989, p. 15), blaming victims for their situations and problems, and viewing those of other cultures through a deficit model of thinking. The result is an organization or individual that functions from an ethnocentric standpoint and, in doing so, continues to operate under biased attitudes, policies and practices (Cross et al.).

Cultural pre-competence is the next level on the continuum. This level marks the beginning of the positive end of the scale, and agencies and individuals at this level are characterized by a commitment to civil rights as well as the desire to deliver quality services to those they serve. At this level agencies and individuals realize their weaknesses and work to correct them. They begin to experiment with such actions as hiring minority staff and reaching out to minorities in their service area. At this level certain risks are present, including a false sense of accomplishment, failure that prevents further growth along the continuum, and tokenism (the concept of hiring a few minority staff members with the belief that this will create a culturally competent agency) (Cross et al., 1989).

Cultural competence is the fifth level on the continuum. This level is characterized by an “acceptance and respect for difference, continuing self-assessment regarding culture, careful attention to the dynamics of difference, continuous expansion of cultural knowledge and resources and a variety of adaptations to service models in order to better meet the needs of minority populations” (Cross et al., 1989, p. 17). These agencies provide training for staff members to help them become comfortable working in cross-cultural situations. They also recognize that cultures contain various subgroups, each of which has differing characteristics, and they seek information and advice from the cultural communities they serve (Cross et al.).

The most positive point on the continuum is cultural proficiency. At this level culture is held in high esteem. Individuals and agencies at this point in their development conduct research in order to add to the knowledge base of cultural competence. They also work to improve relationships amongst cultures throughout society and push for the development of cultural competence throughout the system. An example of an action at this level is that of hiring a

specialist in culturally competent practice to help an agency continue to examine its practice and grow in cultural competence (Cross et al., 1989).

While this model was first developed for the field of mental healthcare, it can also be applied to teachers, schools and systems of education. For example, Cross et al. (1989) argued that in order to grow in cultural competence, development must occur in three areas: attitudes, policies and practices. This is true of mental health agencies, but also true of schools. In order to provide culturally competent services to students, teachers must change biased attitudes and schools must examine their policies and practices and the impact they have on all students, particularly those of the minority culture. This helps to ensure policies and practices truly become culturally impartial. When viewing schools through this framework, teachers replace practitioners and agencies become schools. Clients become students and their families and services become the provision of a high quality education for all students regardless of cultural background. Outcomes are then measured by the degree to which students experience academic success, but not at the expense of their cultural backgrounds. Cultural affiliation is respected and encouraged, and students are taught to be critical theorists working for greater equality among differing cultures in the world.

In addition to the cultural competence continuum, Cross et al. (1989) also established five essential elements that contribute to the development of cultural competence. While Cross et al. did not apply these five elements directly to individuals, but rather to systems, institutions and agencies, it can be argued that these same five elements can also apply to individuals. As the elements are described below I have attempted to apply them to individuals and schools as opposed to mental health agencies, institutions and systems. In order to develop cultural

competence an individual should value diversity, have the capacity for self-assessment, be conscious of the dynamics of difference present in cross cultural situations, have knowledge of various cultures, and be able to adapt to diversity.

Cultural competence begins with valuing diversity. Cross et al. (1989) stated that “to value diversity is to see and respect its worth” (p. 19). Individuals must come to understand that differences exist in the way people of different cultures communicate, view life and define concepts such as authority and health. Understanding these differences and respecting them is critical to providing effective services to students.

Individuals must also have the capacity to self-assess one’s own culture and personal biases in order to develop cultural competence. Cross et al. (1989) explained that one must understand one’s own culture in order to assess how that culture interfaces with the culture of others. In the field of education, this means recognizing that most public schools are reflections of the dominant culture and that this culture frequently differs from that of the students who attend the school.

The third element necessary for cultural competence is that of understanding the dynamics of difference. When people of differing cultures interact, both may misjudge the other’s actions based on learned expectations. Each brings to the relationship unique histories with the other group and the influence of current political relationships between the two groups. Both will bring culturally-prescribed patterns of communication, etiquette, and problem solving. Both may bring stereotypes or underlying feelings about serving or being served by someone who is ‘different.’ (Cross et al., 1989, p. 20)

These differences can be compounded if one party is of the dominant culture and the other is not. A lack of awareness of the dynamics of difference can lead to misinterpretation and misjudgments about the other party and lead to ineffective service.

The fourth element is that of institutionalizing cultural knowledge. When applied at an individual level, this element refers to teachers and school personnel having knowledge of the various cultural groups they serve. It is important for the information to be accurate and for all staff to have access to it. Cross et al. (1989) emphasize not only the need for this information, but the development of avenues used to discover this information. This element includes communication and the building of relationships with members of the community who can provide this information and answer questions.

Finally, one needs to be able to adapt to diversity in order to become culturally competent. Schools and school staffs must learn to work with various cultural groups and also change the approaches used to “create a better fit between the needs of the minority groups and services available” (Cross et al., 1989, p. 21). Cross et al. believed that agencies must understand the impact of oppression on mental health and develop empowering interventions. The same can be said of schools. Teachers and administrators must understand the impact oppression has on education and student development and adapt interventions, strategies, and instructional practices to empower students.

In their work, Cross et al. (1989) also list 24 specific attributes, knowledge areas, and skills that are “essential to the development of cultural or ethnic competence” (p. 35) most of which can also be applied to the field of education. They list the attributes as acceptance, a willingness to work with clients (or students) from different cultural groups, empathy and

warmth, flexibility, commitment to social justice, the ability to articulate and clarify one's own values, stereotypes and biases, and the ability to resolve personal feelings about a profession that has excluded people based on their cultural identity. They go on to list areas of knowledge including knowledge of various cultures; of the impact culture on behavior, attitudes and values; of the role of language and communication styles; of the impact of policies on minority students and families; of resources available to minorities; of the possible conflict between professional values and the needs of minority clients; and knowledge of power relationships within the institution and how they impact clients. In the area of skills required for the development of cultural competence Cross et al. list the following that would also apply to teachers: techniques for learning about cultures, the ability to communicate accurate information on behalf of minority clients, the ability to discuss differences, the ability to assess the meaning ethnicity (or culture) has for individuals, the ability to recognize racism and stereotypes and combat them, the ability to find and utilize resources on behalf of minority clients, and "the ability to utilize the concepts of empowerment on behalf of minority clients and their communities" (p. 37).

It is these attributes, knowledge and skills as well as the five elements of cultural competence and cultural competence continuum that will serve as the theoretical framework for this study. This study will examine through interviews if any of these elements are present in culturally competent teachers, their understanding of cultural competence and its impact on the classroom. This study will also examine the correlation between cultural competence and student academic achievement.

Summary

In the previous section I discussed several models of cultural competence that can be found in the research and connected these ideas to the field of education. Three of the four models were found in healthcare literature (Campinha-Bacote, 1999, 2003, 2007; Campinha-Bacote & Munoz, 2001; Purnell & Paulanka, 2005; Jefferys, 2006) while the remaining model was found in literature pertaining to mental healthcare (Cross et al., 1989). While they were found in research literature not pertaining specifically to education, educators and education researchers can work to apply them. Campinha-Bacote's model aids in the understanding of the skills that need to be developed to become culturally competent. Purnell's model helps practitioners understand the various aspects of a client's life that are impacted by culture so that the practitioner can examine their own cultural beliefs and compare them to others. Jeffreys' model provides a structure to examine how cultural competence is developed within an individual. Finally, the Cross model provides a rubric describing what attitudes and behaviors are exhibited throughout various stages of the development of cultural competence. Using the Cross model of cultural competence as the theoretical framework for this research study, it is argued that the more advanced a teacher is on the continuum, the more effective that teacher will be with students not from the dominant culture.

Conclusion

This review of literature covered seven main topics. It began with a discussion of the achievement gap. This discussion set the stage for the importance of this study. Were there no gap in achievement, one could assume that schools were functioning effectively for all students. However, this is not the case. Next, a discussion was provided to explore the definition of

culture and how cultures differ in a variety of ways. The third section discussed the relationship between culture and education. The subsequent section discussed the concept of cultural dissonance and its impact on the academic achievement of students. Research studies were then presented that demonstrated the impact on academic achievement that can be attained by aligning instructional strategies with the community culture of the students. The next section of the review of literature covered the concept of cultural competence and suggested this theory as a possible way to help teachers and schools provide a more effective education for minority students. An explanation of cultural competence was provided as were several models of cultural competence currently found in the literature. Finally, a detailed description of Cross' Cultural Competence Continuum (Cross et al., 1989) was provided along with an explanation of each level of the continuum. The literature review closed with a rationale as to why this model was chosen as the theoretical framework for this study.

In the following chapter the research design for this study will be discussed. It will include a rationale for utilizing a mixed methods study as well as detailed descriptions of the qualitative and quantitative methods employed, the role of the researcher, the site and participants, the data sources utilized and data collection procedures, methods of data analysis and methods of verification. Chapter three also provides a visual model of the study and an analysis of interview questions.

CHAPTER 3

METHODS

Chapter Introduction

The purpose of this study was to examine the relationship between the cultural competence level of urban elementary school teachers and the academic achievement of their students as measured by standardized testing. Mixed methods were utilized to explore the teachers' understanding of cultural competence; their perceptions of the skills, knowledge and attributes they possess related to cultural competence; and how those contributed to student academic achievement. The specific research questions addressed throughout the course of this study were:

- (1) What is the relationship between the (level of) cultural competence of the teacher and his/her students' academic achievement as measured by standardized testing?

(Quantitative)

- (2) How do urban elementary school teachers understand cultural competence?

(Qualitative)

- (a) How do they define/describe cultural competence?
- (b) What groups do they include in their definition of cultural competence?
- (c) What does cultural competence mean to them?
- (d) What skills, knowledge and attributes do they possess related to cultural competence, especially that impact academic achievement?

This chapter outlines the assumptions and rationale for the research methodology used in this study, the role of the researcher in the process, and the specific design of the study including a

detailed description of the sites and participants, the data collection and analysis procedures, and the methods of data verification.

Mixed Methods Design

Rationale

This study employed an explanatory mixed methods design. Creswell (2005) defined mixed methods research as “a procedure for collecting, analyzing, and ‘mixing’ both quantitative and qualitative data in a single study to understand a research problem” (p. 510). Johnson and Onwuegbuzie (2004) offered a similar definition stating that mixed methods research is “the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts, or language into a single study” (p. 17). Creswell offered three reasons for choosing a mixed methods research design. These included “when...both quantitative and qualitative data ...together, provide a better understanding of [the] research topic. ...if you seek to build on the strengths of both [types] of data. ...and when you want to build from one phase of research to another” (p. 510). I chose a mixed method design for this study because utilizing both types of research methods provided a more in-depth understanding of cultural competence and its relationship to student academic achievement. The quantitative aspect of my study allowed me to identify participants for the qualitative portion of the study, which in turn helped to explain the quantitative data. Using data from one phase of a study to enhance or clarify data from another is one reason to conduct a mixed methods research study (Johnson & Onwuegbuzie). This allowed for triangulation of data, thus increasing the trustworthiness of this study. In addition, mixed methods research is generally reflective of the pragmatic paradigm, which sees truth as determined by practical situations. My study was

reflective of this philosophy in that truth was determined by the usefulness of the results in the field of education and educational administration.

Design of Study

Multiple mixed methods research designs exist in educational research today. Several authors have designed typologies of mixed method research in order to identify various designs (Creswell, 2005; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2006). This study utilized an explanatory mixed method design, also referred to as a two-phase study. Creswell defined this method as one that “consists of first collecting quantitative data and then collecting qualitative data to help explain or elaborate on the quantitative results” (p. 515). Creswell’s rationale for utilizing this approach is that the quantitative data provide a general picture of a given phenomenon, and the qualitative data extend or explain the general picture provided by the quantitative data. Figure 11 illustrates Creswell’s explanation of this model.



Figure 11. The explanatory design of mixed methods research. Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. Creswell, 2005, p. 514. Copyright 2005 by Pearson.

In Creswell’s model, capital letters (QUAN) represent greater emphasis than lower case letters (qual) and the arrow represents two phases of the research process occurring in sequence, as opposed to a (+) symbol which indicates two aspects of a study occurring simultaneously. In this study, I first conducted the quantitative portion by asking a group of approximately 100 participants at a variety of urban schools to complete an instrument that acted as a proxy for

cultural competence. The second phase of my study was qualitative in nature and consisted of interviews of teachers who completed the instrument administered during the initial phase. Through these interviews, I expanded on the findings in the initial phase to describe the relationship between cultural competence and student academic achievement. Figure 12 illustrates the research design of this study.

Quantitative methods

A correlational design was utilized for the quantitative portion of this study. According to Creswell (2005), a correlational design is used to “measure the degree of association (or relationship) between two or more variables using the statistical procedure of correlational analysis” (p. 52). This part of the research design answered research question one (What is the relationship between the (level of) cultural competence of the teacher and his/her students’ academic achievement as measured by standardized testing?). Specifically, an explanatory correlational design was used as opposed to a predictive design in order to examine the relationship between teacher cultural competence and student academic achievement on standardized tests. I chose to use the explanatory design due to the existence of multiple influences on student academic achievement. While cultural competence may be related to student achievement on standardized tests, it is certainly not the only factor involved. Due to the large number of factors impacting student achievement, it is not appropriate to attempt to predict student achievement based solely on cultural competence. In addition, this could potentially introduce an unethical aspect to the research design. It would not be appropriate to place students with teachers demonstrating a lack of cultural competence in an effort to predict their success or failure on standardized tests.

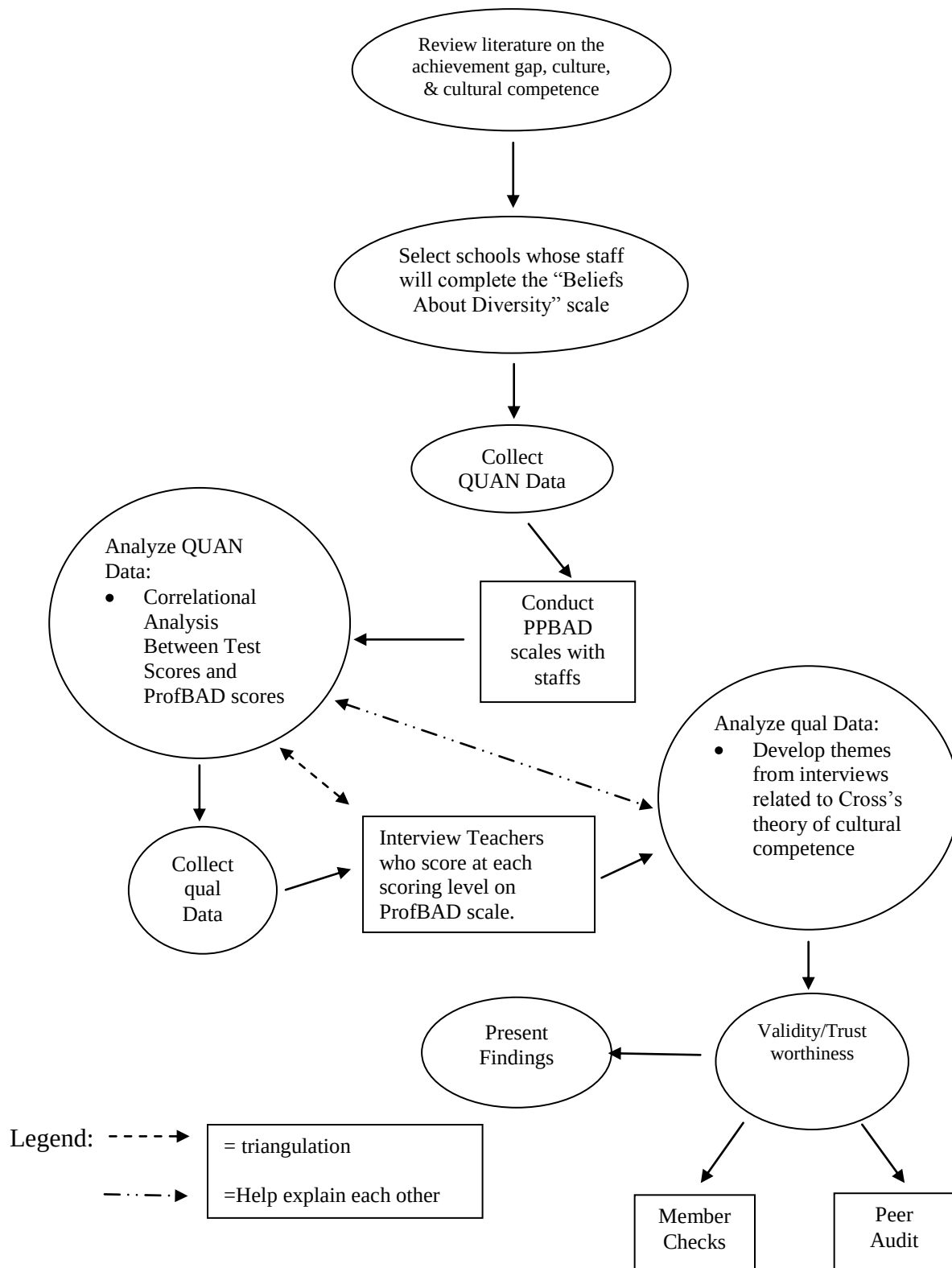


Figure 12. Design of mixed methods research study on the impact of teacher cultural competence on student academic achievement.

Qualitative methods

The qualitative method utilized in this study is that of individual, semi-structured interviews. I conducted interviews of selected participants based on their scores on the “Professional Beliefs About Diversity” scale (ProfBAD) (Pohan & Aguilar, 1999). I interviewed participants whose scores reflected three different levels of cultural competence: those teachers scoring in the highest third on the scales, those scoring in the middle third, and those scoring in the lowest third. Participants were not informed prior to the interview of the range in which they scored. These interviews sought to explain how the selected urban teachers understood the concept of cultural competence and the skills, knowledge and attributes they perceived would impact the academic achievement of their students. According to Merriam (1998), interviewing is the best technique to use “when conducting intensive case studies of a few selected individuals [but] can also be used to collect data from a large number of people representing a broad range of ideas” (p. 72). In this case, I explored a number of different individuals’ views about cultural competence and how they related it to student academic achievement.

Role of the Researcher

Quantitative

During the quantitative phase of this study, my role as the researcher was primarily external with respect to the study. My job included gaining access to the selected schools through the selected school district’s Office of Research and Evaluation in order to administer the scales and demographic questions to teachers in grades three, four and five. I was also required to work closely with personnel from the selected school district in order to link standardized test data anonymously to each completed instrument and demographic questions.

Finally, my role included entering all of the above-described data into SPSS and analyzing it for correlations. In order to ensure reliability and validity in this part of the study, I utilized an instrument that had previously been created and tested for both.

Qualitative

My role as the researcher changed for the qualitative phase of this study. I became, as Kvale (1996) describes, “the main instrument for obtaining knowledge” (p. 117). Merriam (1998) continues that, because the instrument for gathering information is human, “all observations and analyses are filtered through that human being’s worldview, values, and perspective” (p. 22). For this reason, it was important that I remained aware of both ethical considerations and my own biases related to this research. It is appropriate in qualitative research for the researcher to openly admit bias because that bias influences one’s construction of reality (Merriam).

In my case, that bias reflects a strong belief in the need for culturally competent teachers especially in urban settings. It is my belief that culture impacts the educational system in frequently invisible ways and often to the detriment of minority students. It is also my belief that more culturally competent teachers will be more effective when working with students from cultural backgrounds different than their own. At this point, it is important to acknowledge that the term “effective” is quite broad, and extends beyond the obvious inclusion of academic success for students. In my opinion an effective teacher is one who uses the knowledge and skills students bring into the classroom to help them understand the academic content required for a specific grade level. Effective teachers lead students to academic success while at the same time respecting the culture of the students and their families and helping students become

bicultural so they can function successfully in different cultural contexts. I concur with the work of Ladson-Billings (1994) who sees effective teachers of minority students as those who emphasize academic success for their students, honor and respect students' home cultures, and teach students the skills they will need to work toward change for a more inclusive society. In order to do this, teachers and administrators must be aware of the role of culture in education and the process of becoming more culturally competent. It is my belief that making teachers and administrators more aware of the role that culture plays in education could minimize or even eliminate the academic damage to minority students, and academic success can be achieved in all urban schools.

Due to my passionate opinions in this area, it was important that I work to minimize the impact those opinions had on my participants during interviews. I did this through the use of several strategies. First, I asked cohort members to peer review my interview questions and allowed them to give me feedback, especially if a question encouraged a particular answer. In addition, I asked my doctoral committee to review my interview questions, looking specifically for bias. Finally, I used member checks (Creswell, 2005) to ensure that the information I gleaned from each interview was actually what the participant had intended to say.

It was also important for me to be open about my position in the school district in which this research took place. The selected school district is located in the southeastern United States where I also live. I worked within the selected school district as a teacher in an urban school for 17 years and have been an administrator in an urban school in this district for the past three years. It should be noted that the school I worked in while conducting this study was not eligible for participation in the study because it was not located in the empowerment zone. The

Empowerment Zone program is a federal grant/incentive program for community revitalization designed to stimulate the creation of new jobs, empower low-income people and families to become economically self-sufficient, and promote revitalization of distressed areas. Due to the number of years I worked with the school district, I had contacts in many schools and personally knew several of the teachers asked to participate by completing the instrument and/or interview process.

I used two different measures to limit the influence of bias and increase the credibility of this study as a whole, the first of which was member checks. Creswell (2005) describes member checks as the process of “taking the findings back to the participants and asking them...about the accuracy of the report” (p. 252). I also utilized two types of external audits at the completion of my study. I used my cohort members to conduct a peer audit of my study and requested feedback from them on ways my study could have been improved or altered to increase trustworthiness.

In addition, I asked them to read my work and reflect on the following questions:

- Are the findings grounded in the data?
- Are the inferences logical?
- Are the themes appropriate?
- Can inquiry decisions and methodological shifts be justified?
- What is the degree of researcher bias?
- What strategies are used for increasing credibility? (Creswell, p. 253)

By using these two techniques I attempted to minimize the impact of my bias as well as increase the credibility of my study.

Sites and Participants

Quantitative

For the quantitative portion of this study, the sites and participants were chosen via the non-probability sampling method of convenience sampling (Creswell, 2005). According to Creswell, this strategy can be employed when the “individuals...are available, convenient, and represent some characteristic the investigator seeks to study” (p. 149). This sampling strategy was utilized because the sample size was relatively small and therefore an effort was made to include all teachers meeting the criteria of this study (urban elementary school teachers for whom standardized test data were available). Due to the fact that standardized testing in the school district was limited to grades three through five, only teachers in those grade levels were asked to complete the demographic questions and “Personal and Professional Beliefs About Diversity” (PPBAD) scales and interviewed.

The school district chosen for this study was the Cottonwood County School district. This name is a pseudonym for the actual district chosen and will be utilized throughout this research study. The district is located within the southeastern United States and serves urban, rural and suburban areas. It is a large district serving approximately 50,000 students. The specific schools chosen to participate in the quantitative portion of the study included all ten elementary schools within the school district located within the city’s empowerment zone. The district considered these particular schools to be “high needs” schools and, at the time, all qualified for additional funding through the federal government (Title 1) due to the high number of students qualifying for a free or reduced-price lunch. For the purposes of this study, it was important for the student population to reflect as much diversity as possible. These schools were

chosen for this study because the district defined them as urban or inner city schools and they tended to have a student population that was more diverse than the populations of the suburban or rural schools in the district. The 10 urban schools located within the empowerment zone, and therefore qualifying for this study, are listed in Tables 2 and 3 along with the general characteristics of each school. For the purposes of this study, each school was assigned a number such as US1 (which stands for urban school 1) or SS 1 (which stands for suburban school 1). Tables 4 and 5 reflect the same information for a sample of suburban schools within the same district. This information is provided to demonstrate the contrast in student demographic make-up and the free or reduced-price lunch rate between urban/inner city schools and suburban schools within the same district. As is consistently found throughout the rest of the United States, the urban schools in Cottonwood School District served more minority students than their suburban counterparts. The urban schools had an average of 48% of the student population listed as African American while an average of 6.6% of the students in the suburban schools were African American. Similarly, the urban schools had an average Latino population of 7.4% while the suburban schools served 3.2% Latino students on average. The urban schools also served a greater average percentage of students qualifying for free or reduced-price lunch than the suburban schools within the district. On average, 92.0% of the students attending the urban schools qualified for free and reduced-price lunch as compared to 33.5% of students attending the suburban schools. Rural schools were not included as a comparison due the limited number existing within the district.

The total number of teachers employed at the selected urban schools in the Cottonwood County School District was 468. Standardized test data were only available for those certified

teachers teaching grades three through five, thus eliminating all teachers working in other grade levels. In addition, standardized test data were not available for certified teachers not teaching in regular homerooms (examples include music teachers, physical education teachers and technology teachers), therefore these teachers were eliminated from the sample. Some teachers in grade three through five were also eliminated from the pool of potential respondents due to a lack of standardized test data. Reasons test data were not available included changes in school placements from one year to another, changes in grade level placements and the hiring of new teachers. The final pool of potential respondents with standardized test data available consisted of 93 teachers. Of these 93 teachers, 47 participants responded by completing the scales and demographic questions. This reflected a total response rate of 50.5%. In order to ensure the maximum response rate, the email seeking participation in the study was sent to potential respondents twice. After the first request via email, 39 teachers responded by completing the scales and demographic questions. The second email request resulted in an additional eight teachers responding to the scales and demographic questions for the total of 47 participants. The next section will describe the sites and participants for the qualitative phase of this study.

Table 2

Participating Urban School Characteristics

School Code	Student Population	Free/Reduced Lunch %	Student Demographics (%)					Title 1 (yes/no)
			Black	White	Hispanic	NA	Asian/PI	
US1	432	92.3	41.1	53.6	3.5	.4	1.3	Yes
US2	405	87.4	26.2	66.3	6.5	.7	.2	Yes
US3	519	93.9	27.8	63.1	7.9	.8	.4	Yes
US4	633	>95.0	24.3	68.6	6.0	.5	.6	Yes
US5	315	>95.0	85.1	12.2	1.5	.9	.3	Yes
US6	220	>95.0	46.6	24.7	27.8	0	.9	Yes
US7	188	>95.0	85.0	9.4	5.0	.6	0	Yes
US8	618	>95.0	82.6	13.6	3.5	0	.3	Yes
US9	123	>95.0	21.2	70.3	8.5	0	0	Yes
US10	541	80.1	41.0	55.0	3.6	0	.4	Yes

Note. Information adapted from Tennessee Department of Education 2008 Report Card. Retrieved 10/24/09 from <http://www.state.tn.us/education/reportcard/>. Title 1 Information adapted from Cottonwood County Schools website. Retrieved October 24, 2009 from <http://title.cottonwoodschoools.org>.

Table 3

Teacher Demographic Information for Participating Urban Schools

School Code	# of Teachers Total (K-5)	Teacher Demographics # (%)				
		Black	White	Hispanic	Nat. Amer.	Asian
US1	48	4 (8.33)	44 (91.67)	0	0	0
US2	48	2 (4.17)	44 (91.67)	1 (2.08)	0	1 (2.08)
US3	64	4 (6.25)	60 (93.75)	0	0	0
US4	67	3 (4.48)	62 (92.54)	1 (1.49)	0	1 (1.49)
US5	36	15 (41.67)	21 (58.33)	0	0	0
US6	38	4 (10.53)	34 (89.47)	0	0	0
US7	27	7 (25.93)	20 (74.07)	0	0	0
US8	64	14 (21.88)	49 (76.56)	1 (1.56)	0	0
US9	22	1 (4.55)	21 (95.45)	0	0	0
US10	54	0	54 (100.00)	0	0	0

Note. Information obtained from the Department of Student Information Services within Cottonwood County School District (February, 2011).

Table 4

Suburban School Characteristics

School Code	Student Population	Free/Reduced Lunch %	Student Demographics (%)				
			Black	White	Hispanic	N.A.	Asian/PI
SS1	1090	8.6	2.7	86.0	2.7	.1	8.5
SS2	638	59.0	1.3	92.3	6.0	.2	.3
SS3	429	28.6	5.9	86.8	4.3	.2	2.8
SS4	314	30.2	11.9	80.1	5.8	0	2.3
SS5	428	37.3	1.2	95.1	2.1	.2	1.4
SS6	933	26.0	1.0	96.8	.9	.1	1.2
SS7	499	53.7	1.6	95.5	2.1	.2	.6
SS8	350	50.3	24.3	71.1	3.8	.3	.6
SS9	846	37.6	2.0	93.9	2.9	.4	.8
SS10	633	18.6	7.0	88.1	2.9	.6	1.4
SS11	405	8.5	4.5	89.0	1.0	0	5.5
SS12	391	29.6	7.1	89.3	2.4	0	1.3
SS13	373	33.7	3.4	91.8	4.0	.3	.5
SS14	696	47.1	18.5	73.5	4.3	.3	3.4

Note. Information adapted from Tennessee Department of Education 2008 Report Card. Retrieved October 25, 2009 from <http://www.state.tn.us/education/reportcard/>.

Table 5

Suburban School Teacher Demographics

School Code	# of Teachers Total (K-5)	Teacher Demographics # (%)				
		Black	White	Hispanic	Nat Amer	Asian
SS1	76	1 (1.32)	72 (94.74)	2 (2.63)	0	1 (1.32)
SS2	51	2 (3.92)	49 (96.08)	0	0	0
SS3	36	2 (5.56)	33 (91.67)	0	0	1 (2.78)
SS4	38	2 (5.26)	36 (94.74)	0	0	0
SS5	32	2 (6.25)	29 (90.63)	0	0	1 (3.13)
SS6	66	1 (1.52)	65 (98.48)	0	0	0
SS7	42	1 (2.38)	41 (97.62)	0	0	0
SS8	31	4 (12.90)	27 (87.10)	0	0	0
SS9	68	2 (2.94)	66 (97.06)	0	0	0
SS10	53	3 (5.66)	50 (94.34)	0	0	0
SS11	31	0	30 (96.77)	0	1 (3.23)	0
SS12	28	1 (3.57)	27 (96.43)	0	0	0
SS13	36	2 (5.56)	34 (94.44)	0	0	0
SS14	61	2 (3.28)	58 (95.08)	1 (1.64)	0	0

Note. Information obtained from the Department of Student Information Services within Cottonwood County School District (February, 2011).

Qualitative

Participants for the qualitative portion of this study were not predetermined, as they were selected based on the results of the correlational analysis described above. I selected participants

for this part of the study representing three levels of scores on the “Professional Beliefs About Diversity” scale (ProfBAD): those scoring in the highest third on the instrument, those scoring in the middle third and those scoring in the lowest third on the instrument. The number of participants for this section of the research was flexible but included a minimum of three individuals scoring at each third on the ProfBAD.

Each individual responding to the initial email was given a code number. Once the Supervisor of the Department of Research and Evaluation of Cottonwood County School District linked the names of the participants with his or her test scores I received a spreadsheet with each participant’s code number, his or her responses to the demographic information questions, the PPBAD scales, and the necessary test data. This data were sorted in descending order by the participants’ scores on the ProfBAD scale. The data were then divided into three levels based on that score as previously described and prospective interview participants were randomly selected from each third utilizing a free online number randomizer. After the randomizer selected the first round of potential interviewees, an email was sent to the Supervisor requesting that he contact via email those selected and ask about their interest in participating in an interview. If a given participant agreed to also participate in the interview process his or her code number and name were emailed to me and I contacted them to set up an interview time and location. This process was repeated five separate times until sufficient interviews were conducted. During the first round of requests, nine code numbers were selected and sent interview request emails with three individuals responding in the affirmative. The second round of requests was emailed to six participants with two willing to be interviewed. The third round of requests was sent to five individuals, and again, two of them were willing to be interviewed. The fourth round of requests

was sent to six different participants with two willing to schedule an interview. The final round of requests was sent to five participants with one responding positively to an interview.

Ten total participants were interviewed for this study. Participants were interviewed at the school in which they work and times were found that were mutually agreeable. The average length of an individual interview was approximately 45 minutes. Interviews were audio recorded and emailed to a professional transcriptionist. Transcripts were emailed back to me and were analyzed upon their return. The following paragraphs provide demographic information and descriptions of each interview participant and their classes. Pseudonyms have been used in place of their actual names in order to protect confidentiality.

The participants randomly selected from the highest scoring third on the ProfBAD scale were Sarah Duncan, Paige Smith, and Anita Walker. Ms. Duncan is a White female between the ages of 51 and 60. She has been a teacher for 10 years, but has taught at an urban school for six years, with all of those years being at her current school. Ms. Duncan's fourth grade class consists of 16 students. Of those, 14 are African American and two are White. Her school is located in an economically depressed area and most of her students live in either "projects" or subsidized housing. More than 95% of the students at her school qualify for free or reduced-price lunches based on the income level of their parents. Ms. Smith teaches third grade and is also a White female. She is between the ages of 41 and 50 and is in her sixth year of teaching, with all six years of experience being at her current urban school. Her classroom consists of 19 students with 15 of those being African American, two biracial and two White. In addition, her classroom has a majority of boys. Ms. Walker is an African American female between the ages of 51 and 60. She currently teaches fourth grade. She is in her thirtieth year of teaching and has

taught at her current urban school for 28 years. Ms. Walker's class consists of one White student and 15 African American students. Ms. Walker's students also come from an area that is economically depressed with more than 95% of the school's students qualifying for free or reduced-price lunches. None of these women speak a language other than English. All three of them have at least a Master's Degree with Ms. Smith having completed graduate hours beyond her Master's. All three women have been exposed to classes or workshops on the topic of cultural competence or multicultural education, although none have traveled internationally.

The teachers interviewed from the middle third on the ProfBAD scale were David Jones, Kara Ladson, Jessica Scott, and Jennifer Jackson. David Jones is an African American male between the ages of 51 and 60 who has five years of teaching experience. His first year of teaching was at a suburban school with the last four years of experience at his current school. Mr. Jones came to education as a second career. He currently teaches fifth grade and holds a Master's Degree plus additional graduate hours. His class consists of 19 students. Eight of those students are boys, while the remaining 11 are girls. Two of his girls are White and the remainder of the class is African American. His school is also located in an economically depressed area with more than 95% of the students qualifying for free or reduced-price lunch prices, and most of the students living in subsidized apartment housing. Kara Ladson is a White female between the ages of 20 and 30 with five years of teaching experience, all of which is in her current urban school. In addition to those five years, she completed much of her student teaching and field experiences at her current school. She currently holds a Master's Degree. Her class consists of 20 students (of those 12 are boys and eight are girls). She has one student who is Native American, six are African American and 13 are White. According to Ms. Ladson, her current

class has fewer African American students than in her previous years of experience. Her school is located in a neighborhood, but also draws students from a nearby set of projects as well as other subsidized housing. Approximately 90% of the students at her school qualify for free or reduced-price lunches. Jessica Scott is an African American female teaching fifth grade. She is between the ages of 31 and 40 and has been teaching for 15 years. She spent 11 years teaching at a suburban school and has spent the past four years teaching at her current urban school. Ms. Scott holds an Ed.S. Degree and represents the highest level of educational attainment for those teachers who participated in interviews. Her class consists of seven boys and seven girls. Of the 14 students, one is White, one is biracial, and the remaining 12 are African American. The final teacher representing the middle third of the scores is Jennifer Jackson. Ms. Jackson is a White female teaching fourth grade. She is between the ages of 31 and 40, holds a Master's Degree, and is in her fifth year of teaching with all of those years of experience being at her current urban school. Her class consists of 14 students (seven boys and seven girls). Approximately 33% of her class is White, which according to Ms. Jackson is higher than in her previous classes. The remaining 66% are African American. Her school is also located in an economically depressed area and serves more than 95% of students qualifying for free or reduced-price lunches. Of the four teachers described above, all but Ms. Scott wanted to teach in an urban setting when they began their tenure at their current urban school. In addition, none speak a language other than English and only Ms. Scott and Ms. Ladson have participated in workshops or classes covering the topics of cultural competence or multicultural education, however Ms. Jackson does have experience traveling internationally and Ms. Ladson has travelled domestically.

The final three interviews were conducted with three teachers scoring in the bottom third on the “Professional Beliefs About Diversity” scale. Ms. Carrington is a White female between the ages of 20 and 30 teaching fifth grade. She holds a Bachelor’s Degree and is in her fourth year of teaching as well as her fourth year at her current urban school. Her class is made up of 17 students, one of which is Hispanic and one of which is Iraqi. The rest of her students are approximately half White and half African American. In previous years, her classes have been approximately 75% White and 25% African American. Her school serves nearly 500 students and of those, approximately 88% qualify for free or reduced-price lunches. Ms. Smithdon is also a White female. She is between the ages of 61 and 70 and holds a Master’s Degree. She currently teaches fifth grade and has 22 years of teaching experience. Of those years 19 have been at her current urban school. Her classroom consists of 16 students, evenly divided between boys and girls. Two of her students are Hispanic, and one if from Africa. Of the rest of her students eight are African American and five are White. Ms. Smithdon’s school is located in an impoverished area of the city and serves about 500 students. Approximately 83% of the students qualify for free or reduced-price lunches and many live in a large set of “projects” within walking distance of the school. The final interview participant was Ms. Pamela Stark. Ms. Stark is a White female between the ages of 61 and 70 who teaches fifth grade and holds a Bachelor’s degree in education. She has been teaching for 16 years and has been employed at her current school for 13 years. Her class consists of nine boys and six girls. Of her 15 students, she has one White student and the rest are African American. None of these women speak a language other than English and only Ms. Smithdon wanted to teach in an urban school when she began teaching at her current urban school. Ms. Carrington has taken classes or workshops dealing

with multicultural education or cultural competence and she has experience traveling internationally, but not domestically. Ms. Smithdon has traveled domestically, but not internationally. Ms. Stark has not participated in foreign or domestic travel or in any workshops, or classes dealing with the concept of cultural competence. Information gained through interviews with all 10 of these teachers will be discussed in detail in chapter five. The next section discusses in detail the data sources and methods of collection.

Data Sources and Collection

Quantitative

Prior to data collection this study was approved by the University of Tennessee Institutional Review Board, the participating school system and was subject to approval by the principals of the selected schools. There were four data sources required for the quantitative phase of this study. Three of these sources were the demographic information sheet (Appendix A), the “Personal and Professional Beliefs About Diversity” scales (Appendix B) that were completed by teachers in grades three through five, and the standardized test data provided by the selected school district. For the remainder of this study the scales will be referred to as the PPBAD scales when discussed together and as the PerBAD (“Personal Beliefs About Diversity”) scale and ProfBAD (“Professional Beliefs About Diversity”) scale when discussed separately. I contacted the principals personally through phone calls and email in order to explain this study. In principal-approved schools, data were collected through the distribution of the PPBAD and demographic questions via email. The Supervisor for the Department of Research and Evaluation from Cottonwood School District sent an email containing an explanation of the study and link to the instrument to the selected teachers in grades three through five. This link

included both the demographic information sheet and the questions from the PPBAD scales. The email also included information about confidentiality and informed consent, and had a box for the participant to check stating that he or she understood the information and consented to participation in the study. The demographic information questions asked the teachers for information about age, gender, race/ethnicity, years of experience and cultural experiences. This information was used to provide a thick, rich description of the study participants. A list of the demographic questions is included in Appendix A. Appendix E contains a summary of the demographic information gathered for each interview participant and will serve as a reference guide for the reader when quotation data are presented in Chapters 4 and 5. Upon completion of the instrument and demographic questions an email was sent to the Supervisor for the Department of Research and Evaluation at Cottonwood School District. The Supervisor then linked the demographic question data and scores on the PPBAD scales with the necessary test data and provided that information to me in order to preserve anonymity. The data included standardized test scores reported in average normal curve equivalents (NCEs), as well as the percentage of students per teacher scoring proficient and advanced (combined) on the standardized test for the subjects of reading, math, science and social studies. This data were also broken down by the racial classification of the students. All standardized test data were available only for teachers in grades three through five. The Supervisor also accounted for students who changed classes and were taught by a teacher different from their homeroom teacher for either reading or math to ensure that the appropriate teacher was credited for the students' scores.

Once the above process was established, the demographic questions and PPBAD scales were sent (via email) to 93 potential respondents. Of those potential respondents, 39 participants answered for a response rate of 41.9%. In order to increase the percentage of teachers responding, the Supervisor for Research and Evaluation in the Cottonwood School District resent the email containing the explanation of the study and link to the questions to those teachers who had not responded. This resulted in eight additional participants completing the PPBAD and demographic questions for a total of 47 participants and a total response rate of 50.5%.

The fourth and final source of data was the information for each participating school from the 2009 Report Cards found on the on the Tennessee Department of Education website. This information included a breakdown of students by ethnicity and gender, percentage of students on free or reduced-price lunch, percentage of students learning English as a second language, and percentage of students with disabilities. The participating school district also provided demographic information about the staff of each school including race/ethnicity, years of experience, and degrees held. This information was used to provide a thick, rich description of the schools participating in this study.

Beliefs about diversity scales

The instrument used by the teachers in the selected schools was the “Personal and Professional Beliefs About Diversity” scales developed and validated by Pohan and Aguilar (1999). While the scales do not directly measure teacher cultural competence, this instrument served as a proxy for the construct because it measures the attitudes and beliefs teachers hold toward diversity, both personally and professionally. It is my belief that teachers who hold negative beliefs about diversity will not utilize, or effectively utilize, culturally competent

strategies such as culturally relevant teaching or multicultural teaching. In the words of Banks and Banks (1993), “multicultural and sensitive teaching materials are ineffective in the hands of teachers who have negative attitudes toward different cultural groups” (p. 22). Teachers must first have positive attitudes toward diversity before they can begin to recognize the impact of culture in the classroom and teach in a way that supports students of all cultures within their classrooms.

As the name suggests, the survey consists of two separate scales. The first is the “Personal Beliefs About Diversity” scale (PerBAD), which consists of 15 items dealing with issues of diversity reflecting “race, ethnicity and culture, social class, gender, sexual orientation, exceptionality or disability, and language...” (Pohan & Aguilar, 1999, p. 2). The second scale is called the “Professional Beliefs About Diversity” scale (ProfBAD) and consists of 25 items covering the same range of diversity issues. Each scale uses a five-point Likert scale with responses ranging from strongly disagree (1) to strongly agree (5). On this Likert scale, a score of three indicates “undecided.”

These scales were developed through a series of pilot, preliminary and field tests with both undergraduate education majors and practicing teachers. The instrument went through “12 separate field tests with over 2000 subjects, across five states” (Pohan & Aguilar, 1999) with revisions made at various stages of development based on the reliability and validity data on the instrument as a whole as well as on individual questions. Related to reliability, Cronbach’s Alpha tests were conducted and demonstrated strong reliability. The Alpha scores on both pre and post-tests on both the PerBAD and ProfBAD scales are shown in Table 6.

Table 6

Cronbach's Alpha for "Personal and Professional Beliefs About Diversity" Scales

Scale	Pre-Test	Pre-Test	Post-Test	Post-Test
Personal Scale	.761	.783	.772	.780
Professional Scale	.817	n/a	.855	n/a

Note. Adapted from "The Personal and Professional Beliefs about Diversity Scales: Users Manual and Scoring Guide" by C. Pohan and T. Aguilar, 1999, pp. 20-21. Copyright 1999 by Pohan and Aguilar.

Several tests were utilized to ensure validity. First, content validity was established by having the scales examined by three professors with at least four years of multicultural education or psychological measurement experience. The professors were asked to evaluate the proper placement of questions within the scales, the clarity of the questions and the comprehensiveness of measuring beliefs about diversity (Pohan & Aguilar, 1999). In addition, five graduate students evaluated the scales and gave feedback on item and administrative clarity and gave recommendations for improvement.

Tests of predictive validity were also completed. These tests utilized an analysis of variance (ANOVA) and correlational analysis. The level of significance for these tests was $p \leq .05$. ANOVAs were conducted with age and gender, multicultural course work, cross cultural experiences, and multicultural knowledge. All of these criteria except age and gender were expected to influence the scores on the tested scales. It was found that age was not related to beliefs, however gender did seem to influence beliefs with women demonstrating greater openness toward diversity. While the difference was not statistically significant, there was a generally positive relationship between the number of multicultural courses taken and more accepting scores on both scales. Multicultural knowledge was related to more accepting scores

on both scales, while cross-cultural experience was related to more accepting beliefs personally, but not professionally (Pohan & Aguilar, 1999).

Finally, Pohan and Aguilar (1999) tested construct validity by studying the relationship of the scales to social desirability and dogmatism. It was theorized that respondents to the scales would answer honestly and not base their responses on social desirability. When this theory was tested using the “Marlow-Crowne Social Desirability Scale,” it was supported. Respondents did not tend to answer in socially desirable ways. In addition, when the authors administered the Dogmatism scale to respondents, the scores on this scale were negatively correlated to the scores on the “Beliefs About Diversity Scale.” This was an expected result in that the dogmatism scale is designed to measure the openness or lack of openness of an individual’s belief system. All of this information taken together demonstrates an acceptable level of validity for both the “Personal and Professional Beliefs About Diversity” scales (Pohan & Aguilar).

Qualitative

Data for the qualitative phase of this study were collected utilizing semi-structured interviews (see Appendix C for a complete list of interview questions) with 10 teachers from eight different elementary schools. Using a semi-structured interview allows the researcher to respond to individual situations and to the worldview of the participant (Merriam, 1998). I chose this type of interview because the topic of cultural competence necessitated the utilization of open-ended questions and a flexible ordering of the questions based on the participant’s responses. The research questions for this study were specific enough that an unstructured interview might not have obtained enough information to answer the specific research questions.

Interviews were chosen as the data collection style because the researcher cannot directly observe many aspects related to cultural competence such as beliefs and attitudes. Patton (1990) wrote,

We cannot observe feelings, thoughts, and intentions. We cannot observe behaviors that took place at some previous point in time.... We cannot observe how people have organized the world and the meanings they attach to what goes on in the world. We have to ask people questions about those things. The purpose of interviewing, then is to allow us to enter into the other person's perspective. (p. 196)

Interview participants were chosen through the use of stratified random sampling based on their scores on the "Professional Beliefs About Diversity" scale. Creswell (2005) describes stratified random sampling as a form of probability sampling in which the "researchers divide the population on some specific characteristic and then, using simple random sampling, sample from each subgroup of the population. This guarantees that the sample will include specific characteristics that the researcher wants included in the sample" (p. 148). I utilized this form of sampling in order to ensure that I had interview participants scoring in each third on the ProfBAD.

All participants' scores on the ProfBAD scale were entered in an excel spreadsheet and sorted in descending order. The teachers' scores were then divided into three "levels"—those scoring in the highest third on the instrument (or most open to diversity), those scoring in the middle third and those scoring in the lowest third on the instrument (or least open to diversity). The teachers' code numbers from each level were then entered separately into a free online randomizer. The code numbers selected were sent to the supervisor for the Department of

Research and Evaluation for Cottonwood School District. The supervisor then sent a pre-drafted email to each participant selected asking for an interview and provided the researcher with the names of those responding affirmatively. This process was repeated five separate times until a sufficient number of interviews were conducted. Interviews were audio recorded utilizing a digital audio recorder. The electronic files were emailed to a professional transcriptionist who transcribed them and emailed them back in a Microsoft Word document. The transcribed interviews were analyzed using the constant comparative method.

Interview questions were designed to address aspects of the research questions unanswerable by analysis of quantitative data. Some interview questions explored each teacher's understanding of cultural competence and how that understanding was developed. Other questions examined how teachers' cultural knowledge and competence impacted his or her instructional decisions and general classroom management. Table 7 contains a matrix showing which interview questions sought to answer each part (a-d) of the second research question. Appendix C contains the interview protocol utilized in this study.

Different types of interview questions were used to elicit different types of information from participants. According to Patton (1990) all questions can be generally categorized. Patton's typology includes six types of questions including those dealing with behaviors or experiences, opinions or values, feelings or emotions, knowledge, sensory data, and background or demographics. Table 8 demonstrates how the interview questions utilized in this study can be divided into these categories.

Table 7

Matrix of Interview Questions Divided by Research Question 2

Research Question	Interview Question Number
2. How do urban elementary school teachers understand cultural competence?	
a. How do they define/describe it?	2
b. What groups do they include in their definition?	3
c. What does it mean to them?	1, 4, 5, 6, 7, 8, 13
d. What skills, knowledge and attitudes do they possess related to cultural competence?	9, 10, 11, 12, 14, 15, 16, 17

Table 8

Matrix of Interview Questions by Type of Question

Question Type	Interview Question Number
Behavior/Experiences	4, 7, 8, 10, 11, 12
Opinion/Values	1, 3, 6, 13, 14, 15, 16, 17
Feelings	5
Knowledge	2, 6, 9

Data Analysis

Quantitative

After the data were collected from the PPBAD, demographic information questions and school district, they were entered into SPSS and an extensive database was developed. Fields in the database included all information from the demographic information questions such as teacher race/ethnicity, gender and years of experience, as well as the scores on the “Personal and Professional Beliefs About Diversity” scales and test scores in both average NCEs and percentage of students scoring proficient and advanced for each teacher. A correlational analysis was conducted on the “Personal and Professional Beliefs About Diversity” scales scores and the standardized test data for each teacher using the Pearson Product Moment Correlation Coefficient. The Pearson Correlation Coefficient was utilized because only one independent variable was being studied and I assumed a normal distribution of data (Creswell, 2005).

Qualitative

Qualitative information gained via the interview process was analyzed through the constant comparative method. According to Merriam (1998), the constant comparative method of data analysis involves constantly comparing different sets of data.

The researcher begins with a particular incident from an interview, field notes, or document and compares it with another incident in the same set of data or in another set. These comparisons lead to tentative categories that are then compared to each other or to other instances. (p. 159)

Data were entered into Microsoft Word in order to assist in analysis and establish initial codes. Then data from one interview were compared across questions and across other interviews in

order to determine common themes that addressed the research questions. These themes were developed and deepened as the process of data analysis continued.

Methods of Verification

While mixed methods research studies still struggle with which terminology to use in this area, I chose to use the terminology espoused by Merriam (1998). She uses terminology from the quantitative paradigm, but defines it specifically for the qualitative paradigm. This consistent language is beneficial for a mixed methods research study because the same terms can be applied to both “sides” of the research design.

According to Merriam (1998), internal validity describes the degree to which research findings are consistent when matched with reality. This can be achieved via six different methods. I employed four of the six methods within this research study. First, I employed triangulation of data sources to enhance internal validity. Data sources for this study included the quantitative data gained through administration of the PPBAD scales, the qualitative data gained through the interview process, and the standardized test data provided by the school district. The PPBAD scales data helped explain the relationship between the teachers’ cultural competence and the students’ academic achievement on standardized measures, while the interview data helped explain the reasons for such a relationship. The interview data helped explain why teachers scored at a particular level on the scale and how their understanding of cultural competence influenced their classroom practices, which in turn impacted academic achievement. Figure 13 gives a graphic representation of this triangulation of data sources.

The second strategy I used was member checks. I took the results of the qualitative portion of this research back to the interview participants and asked them verify my

interpretations. The third strategy I utilized was that of peer examination. I asked fellow members of my doctoral program to examine my findings and offer feedback throughout the research process. Finally, I reflected on and acknowledged the biases I brought to the research. More information on this can be found in the section describing the role of the researcher. For the quantitative portion of this study, I enhanced the internal validity by selecting an instrument that had been tested for validity. See the section describing instrumentation for a detailed description of the validity of the scales.

“Reliability refers to the extent to which research findings can be replicated” (Merriam, 1998, p. 205). While there is discussion in the theoretical world as to whether or not replication is beneficial or even possible in the qualitative world, it is important to note that reliability can be enhanced in qualitative work, and is viewed positively in quantitative work. . In order to improve reliability in this research study, I used several strategies. First, for the quantitative side of the study, I chose an instrument that had been tested for its reliability. See the instrumentation section of this work for details concerning the reliability of the scales used. Second, the triangulation described above also increases the reliability of the qualitative side of this study. In addition, an audit trail was developed for this study detailing the selection of participants, collection of data, development of themes, and explanation of decisions made throughout the study. This trail should benefit others who hope to design similar studies.

External validity can also be described as generalizability (Merriam, 1998). Generalizability is viewed differently in qualitative research, and is typically viewed as the way this study might generalize to a similar situation. I attempted to increase the external validity

through the use of thick, rich descriptions of the sites and participants, and through the use of multiple sites in this study.

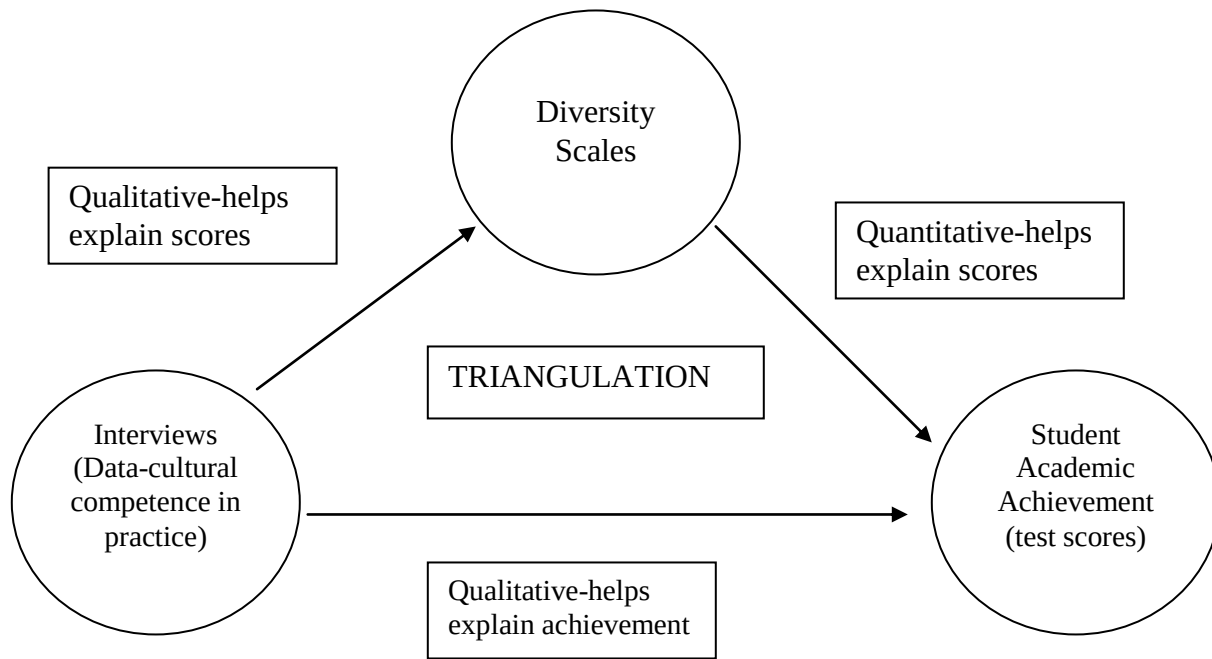


Figure 13. Triangulation of Data Sources

Conclusion

The research method employed in this study was described as an explanatory mixed methods design in which the two phases of the study occur sequentially (QUAN → qual) and in which the quantitative phase of the study was more dominant. This chapter described the participants of this study, as well as the role of the researcher, data collection procedures, and data analysis procedures. In addition, this chapter described strategies I utilized to increase the internal validity, external validity, and reliability of this research study. The results of the data analysis are divided into two chapters. Chapter four will address the findings for the quantitative phase while chapter five will present the findings for the qualitative phase of this study.

CHAPTER 4

QUANTITATIVE DATA ANALYSIS AND FINDINGS

Due to the nature of the research questions and methodology, both quantitative and qualitative data were utilized in this mixed-methods study. This chapter includes a discussion of the quantitative findings in order to answer the first research question: What is the relationship between the (level of) cultural competence of the teacher and his/her students' academic achievement as measured by standardized testing? In the next chapter, the discussion of the qualitative findings will answer the second research question and the sub-questions contained therein: How do urban elementary school teachers understand cultural competence? (Qualitative)

- (a) How do they define/describe cultural competence?
- (b) What groups do they include in their definition of cultural competence?
- (c) What does cultural competence mean to them?
- (d) What skills, knowledge and attributes do they possess related to cultural competence, especially that impact academic achievement?

The data sources utilized to answer the first research question were the participants' answers to the demographic questions, their scores on the "Personal and Professional Beliefs About Diversity" scales (As discussed in chapter three, these scales are referred to as the PPBAD scales when discussed together but as PerBAD and ProfBAD scales when discussed individually.), and the standardized test data available for the students of the participating teachers. Appendix A contains a complete list of the demographic questions and Appendix B provides a copy of the PPBAD scales. Prior to a discussion of the results for the PPBAD, several

other studies that have utilized the same instrument are discussed in order to provide a rationale for the way the data are reported.

Findings from Demographic Data

Demographic data for the 47 individuals were reflective of the literature (Delpit, 1995; Diller & Moule, 2005; Teel & Obidah, 2008) on urban education in that the majority of teachers participating were under 40 years old, White, monolingual and female. Thirty-three of the participants, or 70.2%, were 40 years of age or younger at the time of the survey, with 14 of those being 30 years of age or younger. In reference to race/ethnicity, 37 individuals (78.7%) classified themselves as White, seven individuals (14.9%) classified themselves as Black/African American, one individual (2.1%) selected Hispanic/Latino, one individual (2.1%) chose Native American/Alaskan Indian, and one individual (2.1%) chose not to answer the question. Forty-four, or 93.6%, of the respondents indicated that they were female, while only three participants indicated that they were male. When asked about fluency in a language other than English, one participant indicated having this skill.

The literature (Lippman, L., et al., 1996) also indicates that teachers in high poverty schools (usually urban or rural) tend to be less experienced than their suburban counter-parts. The demographic information from this study supported this assertion. The majority of participants (72.3%) had less than 10 years of teaching experience in any setting, and that percentage rose to 80.9% when teachers were asked specifically about their teaching experience in urban schools. In fact, 57.4% of the participants were within their first five years of teaching in an urban setting. When asked about teaching experience at their current school placement, 83.0% of the participants had five years or less of experience. When asked about their desire to

teach in an urban school, 74.5% of the respondents indicated that they desired an urban school placement when beginning their tenure at their current school.

The participants were evenly distributed over the three grade levels represented in the sample (third, fourth, and fifth). Of the 47 respondents, 14 taught third grade, 17 taught fourth grade and 16 taught fifth grade (29.8%, 36.2%, and 34.0% respectively). Participants also answered a question about their level of education attainment with the most participants indicating attainment of a Master's degree (48.9%). Table 9 shows the number and percentage of respondents at each degree level.

Table 9

Educational Attainment of Participants by Degree

	Bachelors	Masters	Masters+	Ed.S.	Ph.D./Ed.D.
# of Participants	15	23	6	3	0
Percentage	31.9	48.9	12.8	6.4	0.0

The final demographic questions asked participants to quantify the amount of experience they had in the area of culture and cultural experiences. The majority of respondents (70.2%) had participated in a class or workshop on the topic of multicultural education, cultural competence, or a similar topic. Nearly half of the participants (48.9%) had participated in foreign travel of some kind while 44.7% had participated in domestic travel. Four (8.5%) of the participants had worked or gone to school in another country, and one individual had served in the Peace Corps.

“Personal and Professional Beliefs About Diversity” scales

The second part of the data collection involved the use of a previously designed scale designed to measure the participants’ beliefs about diversity in both personal and professional settings. Pohan and Aguilar’s (1999) instrument entitled the “Personal Beliefs About Diversity” scale (PerBAD scale), found in Appendix B, utilizes 15 questions to measure an individual’s beliefs about diversity in the context of daily life. It includes questions related to race/ethnicity, gender, social class, sexual orientation, language, and ability. In addition to the measurement of each participant’s personal beliefs (PerBAD) with respect to diversity, this study utilized a similar instrument to measure professional beliefs, also designed by Pohan and Aguilar. The “Professional Beliefs About Diversity” scale. “...measures one’s beliefs regarding policies, practices, and/or procedures related to issues of diversity within schools” (1999, p. 1). This scale includes questions related to the same diversity concepts as the previous scale examining personal beliefs, but also includes questions related to religion, multicultural education and pluralism. Scores on both instruments were derived by summing the numerical response from each question to obtain a raw score. It is important to note that several questions on each instrument are asked in negative form and must be reverse scored. These questions are specified in the scoring guide for this assessment. The raw scores on each of the scales (PerBAD and ProfBAD) are independent of each other and are not combined in any way. Scores on the PerBAD range from a minimum of 15 (indicating the most closed beliefs about diversity) to a maximum of 75 (indicating the most open personal beliefs about diversity). Scores on the ProfBAD range from 25 to 125, with the higher score indicating more open beliefs about

diversity in a professional setting. Table 10 shows the descriptive statistics for both scales for the 47 participants involved in this study.

Table 10

Descriptive Statistics for “Personal and Professional Beliefs About Diversity” Scales

	N	Minimum	Maximum	Mean	Standard Deviation
Personal Beliefs	47	44	73	58.49	6.96
Professional Beliefs	47	55	121	90.83	9.96

Several other studies have employed the use of Pohan and Aguilar’s (1999) “Personal and Professional Beliefs About Diversity” scales (Giambo & Szecsi, 2007; Kershaw, Benner, Scherff, Brommel, Suters, Barclay-McLaughlin, 2004; Middleton, 2002; Taylor 2000). Three of these studies utilized a pre-test/post-test methodology to determine the impact of diversity training on the diversity beliefs of various groups (Giambo & Szecsi, 2007; Kershaw et al., 2004; Middleton, 2002). Middleton reported results as a mean score and standard deviation for each section of students who participated. The mean score for each section was between one and five, reflecting the Likert scale used to answer each question. Middleton first performed a Spearman correlation analysis to determine if there was a correlation between the students’ scores on the PerBAD and their scores on the ProfBAD. The data analysis also included a paired sample *t*-test using the pre- and post-test data to determine if participation in the diversity course significantly impacted the beliefs about diversity of pre-service teachers.

Kershaw et al. (2004) reported the results of the surveys as a total raw score for the PerBAD and a total raw score for the ProfBAD as suggested in the scoring guide for both

instruments. Pre-test results were used to assist teacher educators in the planning of instruction based on the diversity needs of the students, while post-test results were used to determine the impact of the urban teacher preparation experience on diversity attitudes of the pre-service teachers. Only post-test raw score results were reported and were compared to the sample mean for two groups of students (i.e., elementary education pre-service teachers and secondary education pre-service teachers).

Giambo and Szecsi (2007) grouped together questions from both scales dealing with similar issues. The categories agreed upon for data analysis included questions dealing with race/ethnicity, special education/ability, sexual orientation, socio-economic status (SES), gender, language, and cultural diversity. The authors determined an overall raw score for each scale as well. They correlated both the overall scores as well as the scores for each subcategory with the demographic data they collected in order to answer their first research question concerning demographic factors that impact beliefs about diversity of pre-service teachers. In addition, Giambo and Szecsi performed a one-sample *t*-test using a test value of 3.5 on the scores of each subcategory to determine if the participants' scores were significantly above or below a score of 3.5. The third research question the authors sought to answer dealt with the relationship between the participants' personal and professional beliefs about diversity. To answer this question, the authors utilized a paired sample *t*-test to compare the pre-test results on the PerBAD with the ProfBAD in relationship to the aforementioned subcategories. Finally, the Giambo and Szecsi utilized a paired sample *t*-test on the pre-test and post-test data to determine if the students' participation in the diversity course impacted their scores on the scales and thus their openness to diversity.

Taylor (2000) used an earlier version of Pohan and Aguilar's (1995) instrument entitled "Beliefs About Diversity Scale" (BADs) to address research related to differences between pre-service teachers and teacher educators in the area of cultural diversity. The research questions sought to determine whether the two different groups scored at a culturally sensitive level when asked about various subgroups such (race, gender, sexual orientation, social class, ability) and if there were statistically significant differences between the scores of the pre-service teachers and teacher educators. Taylor reported scores on the scales by giving both an overall mean as well as a mean score for the questions relating to each subgroup. In the research, a score above 3.00 was viewed as the participant having positive beliefs about diversity while a score below 3.00 demonstrated the opposite.

As one can ascertain from the above research, multiple formats exist for reporting the data from both the PerBAD and ProfBAD. This study reported both a raw score and a mean score for each participant. Table 11 shows the scores of each participant on each scale. Raw scores for each participant were derived by summing the scores for each question on each separate scale (PerBAD and ProfBAD). Mean scores for each scale for each participant were calculated with scores below 3.0 indicating more negative beliefs about diversity while scores above 3.0 indicated more positive beliefs about diversity (Taylor, 2000). Using Taylor's method, the majority of participants scored above 3.0 on both instruments, indicating more positive beliefs about diversity in both personal and professional situations. Of the 47 participants, 45 (95.7%) had mean scores above 3.0 on the PerBAD scale, while 43 (91.5%) had mean scores above 3.0 on the ProfBAD scale. On the PerBAD scale, one participant had a mean

score below 3.0 and one participant scored exactly 3.0. On the ProfBAD scale, one participant had a mean score of exactly 3.0 while three participants' mean scores were below the 3.0 mark.

Table 11

Diversity Scales Scored by Participant

Participant	School	Raw Score	Raw Score	Mean Score	Mean Score
Code	Code	(PerBAD)	(ProfBAD)	(PerBAD)	(ProfBAD)
T01	US8	68	95	4.53	3.80
T02	US1	59	85	3.93	3.40
T03	US1	71	96	4.73	3.84
T04	US8	64	96	4.27	3.84
T05	US1	57	97	3.80	3.88
T06	US1	60	89	4.00	3.56
T07	US4	53	91	3.53	3.64
T08	US3	58	91	3.87	3.64
T10	US5	62	96	4.13	3.84
T11	US8	73	121	4.87	4.84
T12	US8	52	86	3.47	3.44
T14	US4	59	94	3.93	3.76
T15	US6	52	88	3.47	3.52
T17	US5	50	97	3.33	3.88
T18	US5	64	101	4.27	4.04
T19	US1	45	74	3.00	2.96
T20	US8	50	82	3.33	3.28
T22	US10	55	90	3.67	3.60

Table 11 Continued

Participant	School	Raw Score	Raw Score	Mean Score	Mean Score
Code	Code	(PerBAD)	(ProfBAD)	(PerBAD)	(ProfBAD)
T23	US1	61	80	4.07	3.20
T24	US9	50	55	3.33	2.20
T25	US10	51	83	3.40	3.32
T26	US6	53	90	3.53	3.60
T28	US1	47	75	3.13	3.00
T29	US8	55	96	3.67	3.84
T30	US7	60	100	4.00	4.00
T32	US5	72	104	4.80	4.16
T33	US10	64	96	4.27	3.84
T34	US1	60	93	4.00	3.72
T35	US4	66	90	4.40	3.60
T37	US3	50	73	3.33	2.92
T38	US6	65	94	4.33	3.76
T39	US4	63	92	4.20	3.68
T42	US5	66	98	4.40	3.92
T43	US4	44	82	2.93	3.28
T44	US6	57	91	3.80	3.64
T46	US3	60	87	4.00	3.48
T48	US1	61	96	4.07	3.84

Table 11 Continued

Participant	School	Raw Score	Raw Score	Mean Score	Mean Score
Code	Code	(PerBAD)	(ProfBAD)	(PerBAD)	(ProfBAD)
T49	US8	61	90	4.07	3.60
T54	US5	57	94	3.80	3.76
T55	US8	66	95	4.40	3.80
T56	US5	54	91	3.60	3.64
T57	US6	63	100	4.20	4.00
T58	US8	66	104	4.40	4.16
T59	US10	58	91	3.87	3.64
T61	US4	61	93	4.07	3.72
T63	US8	56	82	3.73	3.28
T64	US4	50	85	3.33	3.40

Standardized test data

Standardized test data were obtained from the Supervisor of the Research and Evaluation Department of Cottonwood School District. The test data available were the results of the Tennessee Comprehensive Assessment Program achievement tests (TCAP) given in the spring of 2009. These tests are given yearly to students in grades three through eight and cover the subjects of reading, math, science and social studies. The Supervisor of Research and Evaluation provided the results of these tests in several forms. First, each participating teacher had a mean score for his or her students for each subject (i.e., reading, math, science and social studies)

reported in normal curve equivalents (NCEs). These scores were reported as an overall mean for all students tested in a particular subject, but were also disaggregated by student race. Due to the limited number of students identified as Asian/Pacific Islander and Native American/Alaskan Indian, mean scores for these subgroups were not disaggregated and analyzed separately, but were included in the overall scores for each teacher. Data analysis was conducted on the overall mean as well as the subgroups of students identified as White, African American and Hispanic.

Scores for each teacher were also reported as the percentage of students in each subject who scored in the proficient and advanced ranges combined. These scores were also disaggregated by student race, so that percentages were available for White students, African American students and Hispanic students for each teacher where students of that race or ethnicity participated in TCAP testing. For the purposes of this study, the overall percentage of students scoring proficient and advanced were summed in order to determine the total percentage of students passing in each subject for each teacher. The percentages of students scoring proficient and advanced were also summed for each racial/ethnic group for each teacher. Table 12 shows the mean score for each teacher for each subject reported in NCEs, as well as the percentage of students scoring proficient and advanced in each subject. Appendix D contains the test data reported in both NCEs and percentage of students proficient and advanced, disaggregated by student race/ethnicity for each subject. What follows is a discussion of the results of the data analysis.

Table 12

TCAP Scores by Participant

Participant		Mean NCE			% of Students Proficient/Advanced			
Code	Reading	Math	Science	Social Studies	Reading	Math	Science	Social Studies
T01	27.5	29.1	20.4	24.7	66.7	61.1	22.2	38.9
T02	43.8	46.0	39.9	37.4	87.5	93.8	68.8	75.0
T03	30.7	27.9	30.7	26.2	66.7	61.9	52.4	52.4
T04	31.5	31.9	29.9	26.0	71.4	71.4	42.9	28.6
T05	29.8	30.2	32.8	25.2	76.5	82.4	58.8	35.3
T06	36.5	43.7	37.6	35.5	71.4	90.5	66.7	71.4
T07	40.4	38.0	41.9	36.3	75.0	75.0	66.7	60.0
T08	33.3	41.1	25.6	22.6	70.0	90.0	20.0	30.0
T10	42.5	45.8	37.4	37.7	71.4	71.4	42.9	57.1
T11	33.1	33.7	28.6	29.5	68.4	68.4	47.4	42.1
T12	42.1	40.6	36.3	36.3	100.0	92.3	53.9	69.2
T14	40.1	43.1	38.5	32.6	75.0	87.5	75.0	68.8
T15	44.1	44.0	42.4	40.9	100.0	93.8	62.5	75.0
T17	25.3	29.1	24.6	26.1	66.7	72.2	35.3	41.2
T18	29.3	35.9	29.3	25.9	62.5	81.3	43.8	37.5
T19	32.4	33.9	29.2	26.7	70.6	70.6	47.1	23.5
T20	49.1	47.8	51.8	43.5	100.0	100.0	100.0	69.2
T22	34.7	32.2	31.5	33.9	82.4	76.5	41.2	58.8

Table 12 Continued

Participant		Mean NCE			% of Students Proficient/Advanced			
Code	Reading	Math	Science	Social Studies	Reading	Math	Science	Social Studies
T23	30.1	30.5	28.3	28.1	57.9	63.2	42.1	36.8
T24	43.1	37.8	36.4	36.2	76.5	70.6	64.7	64.7
T25	36.7	39.5	31.9	36.2	84.2	89.5	42.1	57.9
T26	44.5	45.9	46.9	43.4	100.0	93.3	86.7	73.3
T28	33.6	34.1	28.6	27.7	72.2	88.9	55.6	33.3
T29	38.5	37.9	34.7	34.9	79.0	84.2	63.2	57.9
T30	34.3	35.4	29.5	39.7	83.3	75.0	41.7	66.7
T32	43.8	42.1	31.0	29.9	82.4	82.4	35.3	35.3
T33	45.2	46.1	42.2	40.3	94.7	94.7	79.0	79.0
T34	63.0	66.3	57.0	65.8	92.9	100.0	92.9	100.0
T35	46.8	45.3	45.8	40.6	92.3	76.9	73.1	69.2
T37	49.7	45.8	33.0	30.5	100.0	100.0	50.0	58.3
T38	35.9	45.0	40.3	40.3	72.7	90.9	72.7	72.7
T39	38.1	45.5	34.4	34.0	70.6	88.2	52.9	70.6
T42	30.1	39.2	31.3	30.9	73.3	73.3	46.7	40.0
T43	38.3	43.5	37.5	38.2	72.2	88.9	66.7	70.6
T44	40.7	47.4	44.6	38.1	86.7	100.0	73.3	60.0
T46	34.3	36.6	23.6	27.8	75.0	75.0	25.0	31.3
T48	29.4	28.2	29.3	22.3	82.4	70.6	58.8	23.5

Table 12 Continued

Participant		Mean NCE			% of Students Proficient/Advanced			
Code	Reading	Math	Science	Social Studies	Reading	Math	Science	Social Studies
T49	48.6	53.5	47.3	43.7	92.9	100.0	78.6	71.4
T54	27.7	26.9	24.2	23.3	68.4	73.7	47.4	31.6
T55	31.6	37.2	29.8	30.9	90.9	100.0	45.5	54.6
T56	29.8	29.6	23.3	21.8	68.8	62.5	37.5	37.5
T57	49.6	47.3	53.6	49.9	87.5	87.5	87.5	87.5
T58	37.6	36.9	30.4	33.3	73.3	80.0	40.0	53.3
T59	37.1	40.5	32.4	32.9	73.7	73.7	52.6	47.4
T61	36.7	36.3	39.8	29.5	60.0	73.3	60.0	53.3
T63	31.2	30.8	27.4	26.7	61.1	57.9	42.1	36.8
T64	31.9	33.5	31.8	29.9	64.7	64.7	35.3	41.2

Quantitative Findings

Once the data were obtained from the Supervisor of Research and Evaluation of Cottonwood School District, it was entered into a statistical analysis program (SPSS) and several correlational analyses were conducted using the Pearson Product Moment Correlation Coefficient. First, the raw scores for each teacher from both the PerBAD and ProfBAD scales were correlated with the overall mean score for each teacher for each subject reported in NCEs. The raw score for each scale was also correlated with the overall percentage of students scoring proficient and advanced in each subject. In addition, the raw score for each scale was correlated

with the test data disaggregated by student race/ethnicity. This was done with test data reported both as NCEs and as percentages of students who scored proficient and advanced in each subject. Disaggregated scores were available for three subgroups: White students, African American students and Hispanic students. As previously stated, the number of students identified in other racial/ethnic groups was too small to include in this study. Additional correlation calculations were conducted to determine the relationship between the test data (in both NCEs and percentages of students scoring proficient and advanced) and the teachers' mean scores on both the PerBAD and ProfBAD scales. Finally, a correlational analysis was conducted to examine the relationship between the teachers' mean score on each scale and the student data, again disaggregated into the subgroups of White, African American and Hispanic students. The descriptive statistics for the scales and the test data are listed in Table 13.

The null hypothesis for the first research question in this study stated that no significant relationship existed between the teachers' scores on the diversity scales and the standardized test data of their students ($H_o: \rho = 0$). The data analysis conducted failed to reject the null hypothesis. The relationship between both the teachers' raw scores and mean scores on the PerBAD scale and their students' scores on standardized tests in reading, math, science and social studies reported in both NCEs and percentages of students scoring proficient and advanced were not significant at the .05 level. The same analysis that was run between both the raw scores and the mean scores on the ProfBAD scale and the students' scores in reading, math, science and social studies reported in both NCEs and percentages yielded the same result. In addition, correlation calculations run between both the teachers' raw and mean scores on the PerBAD scale and student test data (in NCEs and percentages scoring proficient and advanced)

disaggregated by student race showed no significant relationship. The same was true for the correlation of both the raw and mean score on the ProfBAD scale and the disaggregated student test data. Table 14 includes the Pearson r -value and significance levels for each correlation using the PerBAD scale while Table 15 includes the same information for all correlations involving the ProfBAD scale. Correlations were conducted using both the teachers' total raw scores on each scale as well as their mean score for each scale. Therefore r -values and significance levels are shown for both scores in Tables 14 and 15. In summary, no significant relationships were found between the teachers' score on either scale and the student test data in any form. Discussion of these results follows in the next section.

Table 13

Descriptive Statistics for Diversity Scales and Standardized Test Data

Data Source	Mean	Standard Deviation	N
PerBAD Raw Score	58.49	6.96	47
ProfBAD Raw Score	90.83	9.96	47
PerBAD Mean Score	3.63	.40	47
ProfBAD Mean Score	3.90	.46	47
Reading Overall Mean NCE	37.54	7.56	47
Math Overall Mean NCE	39.12	7.76	47
Science Overall Mean NCE	34.78	8.28	47
Social Studies Overall Mean NCE	33.49	8.19	47
Reading Mean NCE (Black Students)	34.60	7.99	47

Table 13 Continued

Data Source	Mean	Standard Deviation	N
Reading Mean NCE (Hispanic Students)	34.86	15.47	30
Reading Mean NCE (White Students)	40.88	13.52	46
Math Mean NCE (Black Students)	37.00	8.50	47
Math Mean NCE (Hispanic Students)	39.74	15.19	31
Math Mean NCE (White Students)	41.00	13.65	47
Science Mean NCE (Black Students)	30.68	8.41	47
Science Mean NCE (Hispanic Students)	30.30	15.72	29
Science Mean NCE (White Students)	39.64	12.84	47
Social Studies Mean NCE (Black Students)	30.74	9.57	47
Social Studies Mean NCE (Hispanic Students)	32.59	16.80	29
Social Studies Mean NCE (White Students)	36.98	13.19	47
Reading % Prof/Adv (overall)	.78	.12	47
Math % Prof/Adv (overall)	.81	.12	47
Science % Prof/Adv (overall)	.55	.18	47
Social Studies % Prof/Adv (overall)	.54	.18	47
Reading % Black Students Prof/Adv	.77	.17	47
Reading % White Students Prof/Adv	.80	.21	46
Math % Black Students Prof/Adv	.80	.17	47
Math % White Students Prof/Adv	.84	.21	46

Table 14

Pearson *r*-Values and Significance Levels Calculated for PerBAD (calculated at $p \leq 0.05$)

Personal Beliefs Scale Correlated with:	Raw Score		Mean Score	
	<i>r</i> -value	Significance	<i>r</i> -value	Significance
Reading Overall Mean NCE	-.074	.623	-.171	.249
Math Overall Mean NCE	-.005	.971	-.069	.644
Science Overall Mean NCE	-.066	.659	-.068	.650
Social Studies Overall Mean NCE	-.045	.766	-.037	.805
Reading Mean NCE (Black Students)	.109	.467	.109	.465
Reading Mean NCE (Hispanic Students)	.159	.403	.158	.404
Reading Mean NCE (White Students)	-.205	.171	-.206	.170
Math Mean NCE (Black Students)	.182	.220	.183	.219
Math Mean NCE (Hispanic Students)	.317	.083	.317	.082
Math Mean NCE (White Students)	-.070	.642	-.070	.639
Science Mean NCE (Black Students)	.073	.627	.073	.624
Science Mean NCE (Hispanic Students)	-.085	.660	-.085	.660
Science Mean NCE (White Students)	-.136	.361	-.137	.359
Social Studies Mean NCE (Black Students)	.049	.744	.049	.745
Social Studies Mean NCE (Hispanic Students)	-.031	.871	-.031	.872
Social Studies Mean NCE (White Students)	-.120	.424	-.120	.421
Reading % Prof/Adv (overall)	-.148	.319	-.115	.442
Math % Prof/Adv (overall)	-.166	.265	-.086	.567
Science % Prof/Adv (overall)	-.129	.389	-.113	.450

Table 14 Continued

Personal Beliefs Scale Correlated with:	Raw Score		Mean Score	
	<i>r</i> -value	Significance	<i>r</i> -value	Significance
Social Studies% Prof/Adv (overall)	-.030	.841	-.056	.709
Reading % Black Students Prof/Adv	.036	.809	.059	.696
Reading % White Students Prof/Adv	-.101	.504	-.050	.740
Math % Black Students Prof/Adv	.101	.498	.130	.383
Math % White Students Prof/Adv	-.120	.428	.024	.874

Table 15

Pearson *r* Values and Significance Levels Calculated for ProfBAD (calculated at $p \leq 0.05$)

Professional Beliefs Scale Correlated with:	Raw Score		Mean Score	
	<i>r</i> -value	Significance	<i>r</i> -value	Significance
Reading Overall Mean NCE	-.171	.249	-.074	.622
Math Overall Mean NCE	-.069	.644	-.006	.970
Science Overall Mean NCE	-.068	.650	-.066	.658
Social Studies Overall Mean NCE	-.037	.805	-.045	.764
Reading Mean NCE (Black Students)	.063	.673	.063	.673
Reading Mean NCE (Hispanic Students)	-.020	.915	-.020	.915
Reading Mean NCE (White Students)	-.197	.190	-.197	.190
Math Mean NCE (Black Students)	.155	.298	.155	.298
Math Mean NCE (Hispanic Students)	.230	.212	.230	.212
Math Mean NCE (White Students)	-.070	.641	-.070	.641
Science Mean NCE (Black Students)	.148	.319	.148	.319
Science Mean NCE (Hispanic Students)	-.084	.667	-.084	.667

Table 15 Continued

Professional Beliefs Scale Correlated with:	Raw Score		Mean Score	
	<i>r</i> -value	Significance	<i>r</i> -value	Significance
Science Mean NCE (White Students)	-.053	.725	-.053	.725
Social Studies Mean NCE (Black Students)	.061	.684	.061	.684
Social Studies Mean NCE (Hispanic Students)	-.011	.956	-.011	.956
Social Studies Mean NCE (White Students)	.014	.927	.014	.927
Reading % Prof/Adv (overall)	-.115	.442	-.148	.321
Math % Prof/Adv (overall)	-.086	.567	-.165	.266
Science % Prof/Adv (overall)	-.113	.450	-.129	.387
Social Studies% Prof/Adv (overall)	-.056	.709	-.031	.837
Reading % Black Students Prof/Adv	.059	.696	.038	.801
Reading % White Students Prof/Adv	-.050	.740	-.102	.502
Math % Black Students Prof/Adv	.130	.383	.102	.494
Math % White Students Prof/Adv	.024	.874	-.119	.432

Discussion

As previously noted, statistical analysis of the above data did not yield any significant relationships between any of the variables correlated. While this is a surprising result based on the literature reviewed (see Chapter 2), several possibilities may help in the understanding of these results. First, the instrument used in this study was not a direct measure of cultural competence, but served as a proxy for it. As stated in chapter 3, Pohan and Aguilar's (1999) "Personal and Professional Beliefs About Diversity" scales were chosen as the instrument for this study because it was one of the few instruments with detailed information on both the

validity and reliability relative to its development. It is possible, however, that a different instrument might yield different results. It is also possible that teacher cultural competence might better be investigated through the use of a solely qualitative approach involving interviews and classroom observations, as it may be more difficult to quantify than originally anticipated in this study. Observations would eliminate the differences in understanding between the researcher and the teachers about the concept of cultural competence. This type of a study would not, however, fill the gap in the literature that exists in the area of quantitative analysis of cultural competence and its link to academic achievement.

Another possibility is that standardized test scores are influenced by so many factors that the impact of the teacher's cultural competence is too small to determine. Other factors that can impact student academic achievement include participation in pre-K programs, teacher quality (including expectations, preparedness, and professional development), teacher characteristics (such as quality of teacher training), socioeconomic status, attendance, and a variety of other home-related factors (West Virginia Department of Education, 2009).

It is also possible that the impact of the teacher's cultural competence could be seen in other aspects of the daily classroom routine and organization, but not be significantly related to student achievement on standardized tests. In this case, it would be important to conduct a study that viewed academic achievement through a wider lens, perhaps including student work samples, grades, grade point averages (if applicable), and other assessment measures.

A final descriptive fact regarding the above data is that while not statistically significant, Pearson *r*-values were almost always positive in relation to disaggregated data for African American students, though not for White or Hispanic students. Teachers' raw scores and mean

scores on both scales were correlated with the TCAP data in each subject (i.e., reading, math, science, and social studies) reported in average NCEs for three subgroups: African American students, White students, and Hispanic students. African American students' scores in all subject areas were positively correlated with both the raw and mean score on both the "Personal Beliefs About Diversity" scale and the "Professional Beliefs About Diversity" scale. For White students, the only positive *r*-value was found in the correlation of the ProfBAD raw and mean scores and the White students' average NCE score in social studies. Hispanic students' scores in math were positively, though not significantly, correlated with both the teachers' raw scores and mean scores on both scales (PerBAD and ProfBAD). Hispanic students' mean NCE scores in reading were also positively correlated with the PerBAD raw score and mean score. In addition, TCAP data were reported as a percentage of each subgroup scoring proficient and advanced. Again, when data analysis was conducted, the percentage of African American students in both reading and math scoring proficient and advanced was positively correlated with both scores (raw and mean) on both the "Personal and Professional Beliefs About Diversity" scales. In contrast, the percentage of White students scoring proficient and advanced only showed a positive correlation in the subject of math and only when correlated with the mean score of the PerBAD scale and the raw score of the ProfBAD. The percentage of students scoring proficient and advanced was not calculated for Hispanic students due to the smaller sample population. While these positive correlations were not statistically significant, it is important to note their existence. It is possible that further study might need to be conducted relating cultural competence more specifically to African American students in this school district.

This chapter discussed the quantitative data collected for this mixed methods study, specifically the relationship between the level of teachers' cultural competence and the academic achievement of their students as measured by standardized testing. The previous sections discussed the nature of the quantitative data collected, the specific analysis that was conducted, and the results of that analysis. In Chapter 5, the qualitative data will be discussed. In particular, Chapter 5 will address the understanding teachers have about cultural competence and how they believe it impacts academic achievement.

CHAPTER 5

QUALITATIVE DATA ANALYSIS AND FINDINGS

The previous chapter discussed the results of the quantitative data analysis of this mixed methods study. This chapter will provide the analysis and findings for the qualitative data collected and answer the qualitative research questions investigated for this study. The specific question answered herein is: How do urban elementary school teachers understand cultural competence? This question includes four specific sub-questions:

- (a) How do they define/describe cultural competence?
- (b) What groups do they include in their definition of cultural competence?
- (c) What does cultural competence mean to them?
- (d) What skills, knowledge and attributes do they possess related to cultural competence, especially that impact academic achievement?

These questions are meant to further develop the quantitative findings discussed in Chapter 4. In order to answer the qualitative questions, interviews were conducted with 10 teachers about their perceptions of cultural competence. Data from the interviews were analyzed and themes were developed in response to each of the four sub-questions. Prior to the discussion of these themes, the context for this study is articulated.

Context

The school district chosen for this mixed-methods study was the Cottonwood County School District. The district is located in a mid-size city within the southeastern United States and serves urban, rural and suburban areas. It is a large district serving approximately 50,000 students, and employing approximately 5,000 certified teachers. The focus of this study was the

urban region of the district, with teachers from five different schools participating in the interview process. The specific schools given the opportunity to participate in the qualitative portion of the study included all 10 elementary schools within the school district located within the city's Empowerment Zone (see Tables 3 & 4 on pp. 101-102). The Empowerment Zone program is a federal grant/incentive program for community revitalization designed to stimulate the creation of new jobs, empower low-income people and families to become economically self-sufficient, and promote revitalization of distressed area. The district considers these particular schools to be "high needs" schools and, at the time of this study, all qualified for additional funding through the federal government (Title 1) due to the high number of students eligible for a free or reduced-price lunch. Teachers from five of the 10 urban schools participated in the interview process. Due to the fact that participation in the interview process was voluntary, it was not possible to interview teachers representing all 10 urban schools. A brief description of each school represented in the interview process follows.

One teacher from Urban School 1 (US1) participated in the interview process. US1 is located within the city limits at the base of a large development of subsidized housing. Many of the students living in this area walk daily to and from school. This school serves just over 400 students. Approximately 50% of the students are White and just over 92% qualify for free or reduced-price lunches. One teacher from Urban School 4 (US4) was interviewed for this study. US4 is located on the southern side of the city and serves over 600 students from both single-family homes and low-income apartment housing. More than 95% of these students qualify for free or reduced-price lunches and nearly 70% are White. Three teachers participated from Urban School 5 (US5), which is located in the inner city. It serves approximately 300 students, more

than 95% of whom qualify for free or reduced-price lunch based upon the income level of their parents. Of the 300 students, just over 10% are White. The school serves predominantly students who reside in low-income apartments rather than single-family homes. Four teachers were interviewed from Urban School 8 (US8). US8 is located about three miles from the city center and serves approximately 600 students. Of those students, approximately 14% are White and greater than 95% qualify for free or reduced-price lunches. While the school is located in a neighborhood setting, it serves an economically depressed area of single-family homes as well as low-income apartments. One teacher from Urban School 10 (US 10) participated. US 10 is located on the eastern side of the district within the city limits and within a neighborhood. It serves approximately 500 students. Of those, about 80% qualify for free or reduced-price lunches, and 55% are White. Nine of the 10 teachers from the above schools were interviewed at their schools during or just after the school day ended. One teacher was interviewed at a local coffee shop per her request. Tables 2 and 3 (see pp. 100-101) provide more information about the general characteristics of each school included in this study, including the percentage of students qualifying for free or reduced-price lunch and demographic data about both the student and teacher populations.

Qualitative Findings

Research question 2a: Teacher definition of cultural competence.

The first sub-question asked teachers to define or describe the concept of cultural competence. After compiling the interview data, four themes were developed. The first three themes each applied to a different scoring level on the ProfBAD. The theme “Unaware” related to those teachers scoring in the lowest third. The theme “Just the Basics” applied to the

participants in the middle third, and “Moving Beyond” was the theme developed to describe the definitions provided by those in the highest third. In addition, one theme “The Lost Puzzle Piece,” applied to teachers scoring at all three levels on the ProfBAD.

Unaware

The theme “Unaware” described the teachers scoring at the lowest level on the ProfBAD because of their lack of awareness of cultural competence and inability to define or describe it. Participants scoring in the lowest third were either not able to provide a definition for cultural competence that incorporated any of the components espoused by Cross et al. (1989), or were not able to provide a definition. Examples include the comments of Ms. Smithdon and Ms. Stark, both White teachers. Ms. Smithdon referred to cultural competence as “being confident within society,” while Ms. Stark declined to provide a definition, later clarifying that she was unsure how to define or describe the concept of cultural competence.

Just the basics

The theme “Just the Basics” applied to the teachers scoring at the middle third on the ProfBAD because the definitions they provided included one of the basic components of cultural competence: awareness of others. Teachers scoring in the middle third limited the concept of cultural competence to awareness of the cultures of others. However, none of the participants discussed awareness of their own culture as part of their definition. The following examples were typical of the comments made by these participants:

Ms. Ladson: “Cultural competence to me means understanding that students and people in general come from different cultures made up of a lot of different things that impact how they see things, how they act and react to each other, to authority, and things like that.”

Ms. Scott: “It is partly just being aware of what different cultures are around you and even in the classroom setting, what different cultures you have in there, what some of the belief systems would be in those cultures.”

One anomaly in this middle group was Ms. Jackson’s response to the question asking her to define cultural competence. Rather than provide a definition, she provided a non-example. She said that cultural incompetence “could be...taking a group of people and kind of labeling them as a group.” While her statement did not include a direct reference to awareness, the idea of not stereotyping groups of people could still be considered a basic assumption of cultural competence, thus supporting the theme of “Just the Basics.”

Moving beyond

Finally, the theme “Moving Beyond” described the educators scoring in the highest third on the ProfBAD. The name “Moving Beyond” was utilized to describe this group because these educators provided definitions that moved beyond those given by the teachers in the middle third, but still lacked a key component of cultural competence. The participants in the highest third moved beyond simple awareness of the existence of other cultures and incorporated the idea of self-reflection into their definitions. Quotes from Ms. Smith and Ms. Walker demonstrate this theme.

Ms. Smith: “It is being cognizant of your own culture but also of others, and knowing things about their culture such that you don’t offend them. It is knowing different parts of the culture and how to handle that and how to deal with people from different cultures.”

Ms. Walker: “Cultural competence means one has the ability to relate to different races.”

Ms. Smith directly mentioned awareness of her own culture, a key difference from the participants scoring in the middle third. While Ms. Walker did not directly mention her own

culture, “the ability to relate” implies more than awareness, thus supporting the theme of “Moving Beyond.”

The lost puzzle piece

The over-arching theme of “The Lost Puzzle Piece” was so named because every interview participant scoring at all three levels on the ProfBAD omitted a key component of the definition of cultural competence provided by Cross et al. (1989): the ability to work effectively. It is noteworthy that while most of the participants were able to explain that cultural competence implied the need to be aware of other cultures, none of the participants mentioned working effectively with students from other cultures in the definitions they provided. Yet, working effectively with students is synonymous with high quality teaching and learning.

The data showed that the definitions provided by the participants in this study could be categorized based on their scoring level on the ProfBAD. As the level of one’s score increased, so did the depth of the definition provided during the interview. However, participants did not include the idea of effectiveness into their definitions, thus separating the idea of cultural competence from academic achievement. Table 16 offers a summary of the themes used to answer the first sub-question. The next sub-question will address which groups the teachers consider when discussing cultural competence.

Table 16

Themes Related to Teacher Definitions of Cultural Competence

	Unaware	Just the Basics	Moving Beyond
Teachers Included in Theme	Lowest third on ProfBAD	Middle Third on ProfBAD	Highest Third on ProfBAD
Definition Included:	unable to define	awareness of other cultures	awareness of other cultures Self -reflection
Included Effectiveness in Definition	No	No	No

Research question 2b: Teacher description of included cultural groups.

During the interview process, teachers were asked what groups came to mind when they reflected on the idea of cultural competence. Analysis of the data led to the development of two themes. The first theme, “Staying Close to Home,” applied to all participants. In contrast, the second theme, “A Focus on Language,” applied only to the teachers scoring in the lowest third on the ProfBAD.

Staying close to home

The educators in this study demonstrated that the cultural groups they identify when considering cultural competence “Stay Close to Home.” In other words, they named groups with whom they had classroom experience. This was true regardless of the level the teachers scored on the ProfBAD. For example, Ms. Ladson (middle third) had a Native American student in her

class for two years in a row and also listed Native Americans as a cultural group she considered when discussing cultural competence. Ms. Duncan (highest third) mentioned differences in socioeconomic status, and teaches in a school where more than 95% of the students qualify for free or reduced-price lunch. Other examples include

Mr. Jones (middle third): “Well in my classes we’ve got basically Blacks, men and women, and folks that are in a poor economic situation.”

Ms. Ladson (middle third): “African American comes to mind strongly just because I deal with a lot of African American students and their families.”

Ms. Carrington (lowest third): “Hispanic usually comes to mind. We have quite a few students who have come in that are ELL (English Language Learners) every year that I’ve been here.”

Mr. Jones teaches in a school where approximately 98% of the students are African American and greater than 95% qualify for free or reduced-price lunch. Ms. Ladson’s school has an African American student population of just over 25%. Figure 14 offers a graphic depiction of the various groups identified by the interview participants.

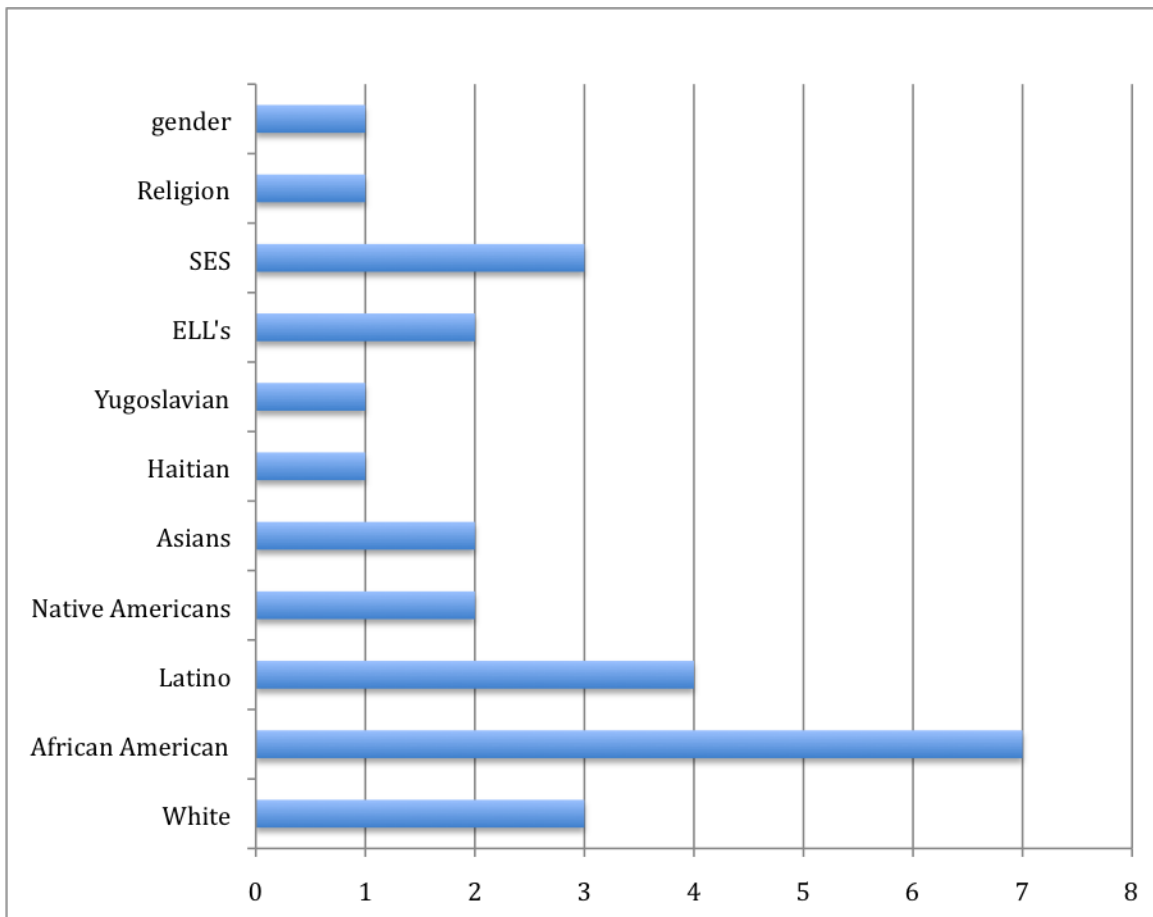


Figure 14. The number of teachers mentioning each cultural group during the interview process.

A focus on language

The second theme developed from the data was that of “A Focus on Language.” This theme applied only to the group of teachers who scored in the lowest third on the ProfBAD. These teachers were the only participants in this study to mention ELL (English Language Learners) students as a group they consider in relationship to cultural competence. No other participants mentioned this particular group. The following quotes support this assertion:

Ms. Carrington: “We have quite a few students who have come in that are ELL every year that I have been here. I’ve had at least one child [each year] who comes from a Spanish speaking family. We have had a couple of kids who came from Yugoslavia. We actually have a little girl who is from Haiti and speaks French Creole.”

Ms. Smithdon: “I have two Hispanic students, and I have one from Africa [Burundi]. I do look at some of the ELL kids as maybe having a slight disadvantage because all teachers don’t speak their language.”

The one anomaly to both themes was Ms. Stark who did not list any cultural groups. When asked if any particular cultural groups came to mind when thinking about cultural competence, she stated, “No, I am still not sure exactly what you are talking about. I kind of need a broken down definition.” Once prompted with a definition, she discussed the age difference between her and her students.

The data showed that regardless of their score level on the ProfBAD the teachers “Stayed Close to Home” in relationship to the groups they considered when discussing cultural competence. With only one exception (Ms. Stark), the participants discussed groups with whom they were familiar through their teaching experiences. In addition, the teachers scoring in the lowest third had a “Focus on Language.” They were the only participants to mention ELL students as a cultural group. Table 17 offers a summary of the themes used to answer this sub-question. The next sub-question will delve into the meaning the teachers attribute to cultural competence.

Table 17

Summary of Themes Related to Teacher Description of Cultural Groups

	Staying Close to Home	A Focus on Language
Applied to:	All participants	Participants in lowest third
Key Points:	Discussed cultural groups with whom they were familiar through their teaching experience	Only group to mention ELL students

Research question 2c: Teacher meaning attributed to culture and cultural competence.

Through the interview process, participants also revealed what meaning cultural competence had for them. In order to understand what meaning teachers attributed to cultural competence, participants were asked questions relating to their views of classroom diversity, their perceptions of the impact of culture and teacher cultural competence on education and academic achievement, and any differences that existed between themselves and their students. Multiple themes were developed from this data. The theme best describing the teachers who scored in the lowest third on the ProfBAD was “Embracing Color Blindness.” “Removing the Blinders” was the theme applied to the teachers who scored in the middle third and “Starting to See” was the theme used to describe those scoring in the highest third. Finally, two themes applied to all participants including “Relationships, Relationship, Relationships” and “Developing Cultural Competence: A Personal Matter.” Each theme is described in detail below.

Embracing color blindness

This theme best described the participants scoring in the lowest third on the ProfBAD. These teachers were not able to distinguish differences between themselves and their students, yet expressed the opinion that diversity in their classrooms was rewarding after some initial challenges. These teachers verbally embraced diversity, but then were not able to identify its existence within their own classrooms. For example when discussing whether diversity was rewarding or challenging, both Ms. Stark and Ms. Carrington noted that initially upon their

arrival in an urban school the diversity in their classrooms had been challenging, but since then it had been rewarding.

Ms. Smithdon: "Sometimes I have seen it as challenging, but mostly as rewarding"

Ms. Carrington: "My first year I would have said it was very challenging and that I was not prepared for it.... Now I love it because there are so many different backgrounds."

In contrast, when asked to identify differences between themselves and their students, statements such as the following were given:

Ms. Smithdon: "I don't see a lot. I think that we've kind of bridged the gap. I don't see them differently. Basically, I don't even see the color."

Ms. Carrington: "I don't have any that stick out."

Ms. Stark: "Culturally I don't think there is any difference between me and them."

These statements were made in spite of the fact that these women each identified themselves as White but taught in classrooms where many of the students were not White. Ms. Stark's classroom consisted of 14 African American students and one White student, while Ms. Smithdon's classroom is made up of 16 students, most of whom are Black, two are Hispanic and one is African. This "Color Blindness" also carried over into the teachers' views of how culture might impact education. They believed culture had no impact on education. Ms. Smithdon did not answer the question related to this topic and Ms. Stark simply said, "No." These teachers appeared to be limited in their ability to identify and discuss diversity within their own classrooms. They frequently failed to "see" it, thus remaining "Color Blind" in their professional lives. These teachers could be seen as functioning at the cultural blindness level of Cross et al.'s (1989) cultural competence continuum. At this level, individuals and agencies express the philosophy of being unbiased and "color blind" in their dealings with those of different cultures.

People functioning at this level tend to believe that culture plays no role and that all people are the same, which in turn disserves people of different cultures because it ignores a very central aspect of who they are.

Removing the blinders

The theme “Removing the Blinders” was applied to the teachers who scored in the middle third on the ProfBAD. These teachers embraced diversity and expressed a desire for its presence in their classes, but also moved beyond the color blindness seen in the lowest third by identifying differences between themselves and their students. A key difference between this group and the previous group was the ability of these teachers to begin including racial differences in the discussion of cultural competence, and to understand the impact of culture on education.

The educators scoring in the middle third on the ProfBAD agreed with those who scored in the lowest third that diversity in their classrooms was rewarding. The key difference was that these teachers did not ever describe diversity as challenging. Supporting data included:

Ms. Jackson: “It is rewarding because you get to get different perspectives from the kids versus... having an all Caucasian class.”

Ms. Scott: “I find it rewarding. Even in my personal life I like having a lot of different friends around. I’ve always been curious about different cultures...so having a culturally diverse class has always been a perk for me.”

Ms. Ladson: “...it has grown me so much, not only as a teacher but as a person.”

One way these teachers were able to move beyond colorblindness was seen in their ability to identify various cultural differences that existed within their classrooms. For example:

Ms. Jackson: “Well obviously there are a lot of cultural differences externally. I am White and a lot of my kids are Black.”

Mr. Jones (Black): “The only difference is based on economics. In this school, I believe 90% of the kids are on free and reduced-price lunch.”

A key difference between this group and the previous group was their ability to discuss racial differences as well as other cultural differences, as evidenced by the above quotes. It is important to note that two of the teachers scoring at this third were African American, teaching in classes that were predominantly African American. When asked to identify differences between themselves and their students, they did not mention race. They did, however, discuss race when asked which groups they considered when reflecting on cultural competence. Ms. Scott listed differences in race, ethnicity, socio-economic status (SES) and religion. Mr. Jones listed African Americans as a cultural group as well as SES and gender differences.

Another way these teachers had “removed the blinders” was through their ability to name some of the ways culture could impact education within their classrooms. For example, Ms. Ladson discussed the difference for her students between the “rules of school and the rules of home” when she stated,

“We tell them here ‘Don’t hit,’ but their reality is they’re at home, they’re in the neighborhood, they’re at the bus stop, if somebody hits them and they don’t hit back, not only are they totally up a creek with that person, but with every other person that saw it happen.”

Ms. Jackson and Ms. Scott both reflected on language and communication differences that might surface due to cultural difference.

Ms. Jackson: “...when we are teaching grammar, there seems to be a real issue with subject-verb agreement [in African American culture].”

Ms. Scott: “In some cultures to look somebody in the eye is disrespectful, whereas here it is disrespectful not to. You have to be aware that those things exist when you are teaching.”

In relationship to cultural competence, these educators appear to be moving beyond the stage of cultural blindness toward the next level on the Cultural Competence Continuum (Cross, et al., 1989), cultural pre-competence.

Starting to see

The teachers who scored in the highest third on the ProfBAD were best characterized by the theme “Starting to See.” The theme was so named because these teachers had moved beyond those who scored in the middle third. Like the teachers in the previous two groups, they expressed the opinion that diversity within the classroom was rewarding. Similar to the second group, they were also able to identify differences between themselves and their students, including racial differences. They moved beyond the previous group to more specifically discuss the impact of culture on education and suggest ways they had begun to adapt themselves to the cultures of their students.

Most of the teachers in this group expressed the opinion that diversity in their classrooms was rewarding. Ms. Duncan and Ms. Walker both viewed diversity as rewarding or at least not a challenge.

Ms. Duncan: “I see it as rewarding...because their family traditions are so varied. There is a lot of diversity within this classroom about the way they think, the way they do things, the way they act, which is fun.”

Ms. Walker: “I don’t see it as being challenging. You know, kids are just kids to me.”

Ms. Smith was an anomaly in this group. She admitted that it was challenging for her at times, particularly when dealing with conflict between one of her White students and one of her Black students, since she is White. She explained that at times her students would think she was siding with a particular student because they were the same color.

Similar to the previous group of educators, those in the highest third were able to identify differences between themselves and their students. For example, Ms. Duncan cited socio-economic and age differences as the primary differences, while Ms. Smith cited racial differences as well as differences in communication style such as noise level. These teachers also identified their own cultural group when asked to list cultural groups they considered when discussing cultural competence. Examples include:

Ms. Smith (White): "...because of where I work it's the Black/White aspect that it comes down to."

Ms. Walker (Black): "Latino, Mexican, White, and Black."

Ms. Duncan (White): "Well, you are going to look at the White, middle class because that is usually what America looks at to be socially competent. That is not the way I look at it, but that is usually what most people will think if you ask them."

Their understanding of the impact of culture on education and their ability to adapt were the key differences separating this group from those in the "Removing the Blinders" group. Ms. Duncan and Ms. Smith both cited learning style differences as one way that culture impacts education, and articulated ways they adapted to accommodate these differences. Ms. Smith focused on adjustments she has made in the area of language/communication styles and learning styles:

"Our kids are much more kinetic, much more into the musical aspect of things. The arts and music is not my thing, but I know I'm going to have to adjust because that is the way they learn."

Ms. Smith continued by describing how she and another teacher taught subjects and predicates through the use of rap. She also described the way she "compromised" with her students in the realm of noise level:

“For me there is very much a difference in what’s acceptable noise level. We have two totally different perspectives. I have had to adjust myself on that, but at the same point I know that they adjust themselves because they know I’m not going to be happy if it gets too loud.”

Ms. Duncan focused on the different experiences her students bring with them to school and how she accommodates for those:

“In order to understand my children and their families, I have to understand what is meaningful in their lives, what is important in their lives and how they feel about things.”

“What I know about the culture of my kids does impact my instruction. Their background knowledge, especially in reading, and their vocabulary is limited because they have not been exposed to certain situations. We have to talk a lot about things they have not been exposed to so that they have some kind of knowledge about the subject.”

She continued that these different experiences put her students at a disadvantage on standardized tests. Her belief is that test developers “are aiming at the middle-class child who has had lots more experiences than socially disadvantaged children. The test is not written with their experiences in mind.” The one teacher who did not fit within this theme was Ms. Walker who stated that she didn’t think culture impacted education. She explained, “Not to me. When I’m teaching, I’m just teaching. That doesn’t seem to make any difference to me.” Similar to the teachers in the previous group, the educators in this group (with the exception of Ms. Walker) appear to be moving toward the stage of cultural pre-competence (Cross et al., 1989). They are aware of cultural differences, are able to understand the impact culture has on education, and most importantly demonstrate the ability to adapt to the cultural needs of their students.

Relationships, relationships, relationships

This theme applied to the participants in this study regardless of their scoring level on the ProfBAD. This name was used because it was the singular focus of the participants when

discussing the impact of teacher cultural competence on student academic achievement. Teachers were asked if they believed that the cultural competence of the teacher was at all related to student academic achievement. This interview question resulted in the highest rate of agreement among the participants. All of the teachers, with the exception of Ms. Smithdon, stated that they believed teacher cultural competence had an impact on student academic achievement. They agreed that the primary connection between the two was the relationships they had with their students. By respecting and understanding their students' cultures, these teachers felt they could build better relationships with the students and their families and thus provide a safe, community oriented learning environment for the children. Several quotations demonstrate this point.

Ms. Duncan (highest third): "In order to teach children, you have to know where they are coming from. I have to understand what is meaningful in their lives, what is important in their lives, and how they feel about things."

Ms. Smith (highest third): "If you can't put yourself in that child's shoes to understand where they're coming from, then there may be things that you will butt heads over and not ever make progress."

Ms. Walker (highest third): "I talk to the kids about the experiences I had because most of the kids in here come from this neighborhood, and I grew up in this neighborhood. So when I talk to them like that they can get some of my wisdom from knowing all those things I went through as a kid."

Ms. Ladson (middle third): "If you are not willing to be open, it creates a negative relationship with the parent, which then creates a negative relationship with the child. In addition to that, kids know [when a teacher does not like them or is intimidated by them]."

Ms. Scott (middle third): "If you don't feel like that your teacher respects you, then it is going to be an uncomfortable relationship. If you feel like your teacher is there for you, wants you to do well, has your back, then you are going to want to do well for her."

Ms. Stark (lowest third): "You need to know your kids in order to know why they are like they are."

Another aspect of this theme of relationships was the idea of building a community within the classroom. Both Ms. Ladson and Ms. Jackson provide examples of this effort to have quality relationships through a community within the classroom.

Ms. Ladson: "...I see every year like we are a family for a year. Like we are our own multicultural, diverse [family].

Ms. Jackson: "I always try to build kind of a community family with the class. I listen to them. That is all they need sometimes. When you take time to connect, it seems to help no matter what the cultural boundaries are."

The one teacher who did not support the developed theme was Ms. Smithdon who scored in lowest third. Ms. Smithdon responded that she did not know if teacher cultural competence impacted student academic achievement.

While the teachers focused mainly on cultural competence as a tool for improving relationships with students and families, it is an important starting point for those teachers who desire to grow in the area of cultural competence. If the overwhelming sentiment existed that teacher cultural competence had no impact, teachers would be less open to growth in this area.

An important omission was related to academic achievement. While all but one of the teachers (Ms. Smithdon) believed cultural competence could influence student academic achievement through its impact on their relationships with students and their families, not a single teacher in this study discussed the link of their own cultural competence to instruction. This is in direct contrast to the theme "Starting to See." As discussed in that section, the teachers who scored at the highest third were able to describe the ways culture could impact education and provide examples of their ability to adapt classroom instruction and management to student culture. Yet they did not do this when asked directly about how their own cultural competence could impact student academic achievement. It is possible the teachers are unaware of their own

level of cultural competence and how this translates into an ability to alter instruction for students. It is also possible that they do not believe their own cultural competence has much of an impact on student achievement. This is an area that suggests further research is necessary.

Developing cultural competence: A personal matter

This theme developed from the data and applied to all participants in the process regardless of their score level on the ProfBAD. This theme is indicative of the idea that the teachers in this study developed their cultural competence through personal rather than professional means. Participants were asked during the course of the interview which professional and personal experiences they had had that helped to shape their beliefs about culture and cultural competence. The answers they provided demonstrated that the teachers were typically left to develop these understandings on their own with little guidance from the school or district.

The professional experiences discussed by the participants from all three scoring levels on the ProfBAD were very limited. The most commonly mentioned professional experience shaping their beliefs about culture and cultural competence was their placement as a teacher in an urban school. For Ms. Carrington, Ms. Jackson, Ms. Scott, and Ms. Smith, it was the only professional experience they could recall that had shaped their beliefs. Examples include,

Ms. Jackson (middle third): “In a professional setting obviously teaching here [at her current urban placement]. It has really prepared me to have lots experiences with culture. I’ve always had a pretty broad range of children in the class which was great.”

Ms. Carrington (lowest third): “Professional, I guess, just the kids that come in and they have the same.”

Ms. Scott (middle third): “As far as my teaching experience, the schools I’ve been at have really different. I went from rural and affluent to a little more urban to the other

side of town, which was predominantly White and more affluent. Now I am at what I call the camera negative. The socioeconomic status is a total flip and the population of kids is totally opposite.”

Ms. Smith (highest third): “When I first came here I was very naïve about a lot of stuff, so I will have to say that my kids have taught me a lot as far as their culture. I think part of it [of the way I learned] was seeing other teachers screw up and then not handling things that way.”

Four other participants, Ms. Stark, Ms. Ladson, Mr. Jones and Ms. Duncan, discussed other professional experiences that had shaped their beliefs about culture and cultural competence. The discussion about these other professional experiences was brief, lacked detail and elicited little emotional impact.

Ms. Stark (lowest third): “There was one workshop that we had by a lady who wrote a book. I have it, but I do not remember what the name of the book was. I was kind of an eye-opener. It was something I actually knew but she gave it words.”

Ms. Duncan (highest third): “Well, you know when [name of principal] was here we had a lot of in-services on cultural differences and that kind of thing, so that was a good start. Mr. Jones (middle third): “I’ve gone to a couple of workshops where they bring these folks in that have ‘worked the miracle,’ but I don’t take very stock in those workshops because every school is different.”

The data showed that the teachers in this study were provided with little to no professional training in the areas of culture and cultural competence prior to or during their tenures in urban schools. In addition, based on the lack of detail about workshops or professional development, the training they received appeared to have a minimal impact on their understanding of culture and cultural competence.

In contrast to the limited detail provided by teachers about professional experiences, the teachers in this study spoke extensively about personal experiences that impacted their beliefs about culture and cultural competence. This was true for teachers scoring at all levels on the ProfBAD. A variety of different personal experiences were discussed. Ms. Carrington (lowest

third) reflected on a trip she took with her husband to Italy. Prior to the trip she learned several important cultural expectations through her research, including that wearing camouflage was considered a symbol of degrading the military and that wearing shorts to the churches in Italy was considered rude. Understanding these cultural expectations impacted the way she packed for her trip. Ms. Smithdon (lowest third) discussed a family member who married someone from outside the United States and did not speak English. She described the change in her feelings the following way:

“I guess the biggest thing is really personal to me. I have a brother that was in the service and he married a girl from Panama. I looked at those people differently I think until she came into our family....”

Ms. Duncan (highest third) described her move from the northern United States to the south:

“It is like coming from New York to here. When I moved from New York to here, I couldn’t understand a word anybody said, except that everybody was saying ‘God bless my little heart’ all the time.”

Ms. Ladson (middle third) spoke about several personal experiences including an interracial marriage that took place in her family and discussed what a powerful moment it was for her to enter the church and see one side of the church almost completely comprised of White people and the other side of the church comprised almost entirely of Black people. For her it was “a moment of actually grasping that segregation is not just a big vocabulary word.” Ms. Jackson (middle third) reflected upon her time spent growing up in Chicago and occasionally going to work with her father in a predominantly African American school in the 1970s.

“I had to go with him to his school [when the babysitter was sick], so I got experience being the only White kid in a group of Black kids at a very young age, and that kind of opened me up to a different world of friendships. It was great.”

Mr. Jones (middle third) reflected on his experience in the military saying:

“When I was in the military, I was around people of all colors, all ethnic backgrounds, all cultures, and that showed me how good it would be to be involved in a school system that was culturally diverse.”

Finally, Ms. Scott (middle third) discussed her experiences with diversity growing up in a small town in the south.

“I grew up in a small town and, surprisingly, it was kind of diverse. In my graduating class of 56 [students] we had about 20 Black kids. We had one Asian and we even had some exchange students. One came from Denmark and one from Sweden. We had a few Japanese kids spread out in the other grades.

She also explained that there was diversity in the socioeconomic status of the students in her high school in addition to the racial and ethnic diversity. She commented that, “I have always liked having different people around me, but I contribute some of that to my upbringing.”

The above data showed that the personal experiences of these teachers had a greater impact on their conceptions of culture and cultural competence than any professional experiences. The personal experiences they shared were extensive, detailed and quite varied between participants. Conversely, while all participants could name a professional experience, the ones they shared were short, lacked detail and were similar between participants with the most common experiences being “working in my current school” and participation in workshops. These teachers have generally relied on their personal experiences to learn about the culture of the students in their classrooms. It is possible that high-quality professional development geared specifically toward expanding their views of culture and cultural competence as they relate to education could help these teachers better understand and meet the academic needs of their students.

Themes were developed from the data to answer the question about the meaning teachers attribute to cultural competence. A summary of these themes can be found in Table 18. The

theme “Embracing Color-Blindness” applied to teachers scoring in the lowest third and demonstrated that they had little understanding of culture and cultural competence as they apply to education. The teachers in the middle third began “Removing the Blinders,” and attributed more meaning to cultural competence. Finally, the teachers in the highest third, “Starting to See,” attributed the most meaning to cultural competence and even demonstrated the ability to adapt to the students’ culture. The other two themes, “Relationships, Relationships, Relationships” and “Developing Cultural Competence: A Personal Matter,” applied to all participants. The participants generally believed that the link of cultural competence to academic achievement was through relationships with students and their families. They also demonstrated that their growth in the area of cultural competence had come almost exclusively through personal rather than professional experiences.

Table 18

Summary of Themes About Teacher Meaning Attributed to Cultural Competence

	Applied to	Key Points
Embracing Color-Blindness	Lowest third	Diversity was rewarding Not able to identify differences between students and selves No impact of culture on education
Removing the Blinders	Middle third	Diversity was rewarding Able to identify differences between students and selves including racial differences Name ways culture impacts education
Starting to See	Highest third	Diversity was rewarding Able to identify differences between students and selves including racial differences Name ways culture impacts education Adapted to culture of students
Relationships, Relationships, Relationships	All participants	Connection between cultural competence and academic achievement is through relationships with students and families
Developing CC: A Personal Matter	All participants	Impact of professional development minimal Understanding of culture and cultural competence developed through personal experiences

Research question 2d: Teacher attributes, knowledge, and skills.

Cross et al. (1989) specified 24 attributes, skills and areas of knowledge that “are essential to the development of cultural competence” (p. 35). While some of these are specific to the field of social work and mental healthcare, most would also be essential for teachers working with culturally diverse students. Table 19 lists the attributes, knowledge and skills that apply to the field of education.

During the interviews, the participants were asked several questions designed to determine their understanding of the attributes, skills and knowledge required for teachers working with diverse students. Two themes were developed through the analysis of these data. These themes were named “The Narrow Road” and “On the Rise.” The first theme applied to the participants scoring in the lowest third on the ProfBAD and was so named because of the narrow view they maintained of the attributes, skills and knowledge necessary for working with those culturally different from themselves and the limited number of these they possessed. The second theme, “On the Rise,” applied to teachers who scored in both the middle and upper third on the ProfBAD. This name was used because these teachers had a much better understanding of the attributes, skills and knowledge they would need in order to work effectively with those culturally different from themselves and possessed many more of them. Their understanding was “On the Rise,” but not yet fully developed.

The narrow road

The teachers who scored in the lowest third on the ProfBAD scale were limited in their responses when asked about the skills teachers need to work with students different from themselves. Ms. Stark answered, “I don’t think so” when asked if teachers needed any specific

skills related to culture or cultural competence, and Ms. Smithdon focused solely on the need to speak a second language. When asked about their strengths related to culture and cultural competence, their narrow view was again evident. Ms. Smithdon listed fairness as her strength and Ms. Stark commented that discipline was her strength. Ms. Carrington added flexibility as a necessary skill but when she discussed her own instructional flexibility, it was limited in reference to holiday situations that were superficial in nature. She gave the example of altering the name of an activity in her grade level to make it less reflective of Halloween due to the religious beliefs of a student. The name of the activity was changed from being a Jack-O-Lantern to a Math-O-Lantern. Based on this example, instructional flexibility was limited to changing the name of the activity, but not the actual instructional activity itself. No opportunity was given to the student to participate in a different activity meeting the same instructional objectives.

These teachers also demonstrated their narrow view of the skills needed to work with diverse students when they were asked to discuss areas related to culture and cultural competence where they needed growth. Ms. Carrington expressed that she would need to explore and become more familiar with more cultural backgrounds.

Ms. Smithdon: “The only thing I see a deficiency in is not having that language [speaking a second language].”

Ms. Stark: “I don’t know. At my age and as long as I’ve been here, I don’t know if I need to grow in anything.”

Ms. Carrington: “A weakness might be that I need to explore more cultural backgrounds instead of just waiting until that child comes [to my class].”

Based on the data, the teachers in this group demonstrated a narrow view of the attributes, knowledge, and skills necessary for the development of cultural competence. Ms.

Stark and Ms. Smithdon did not address any of the attributes, knowledge and skills listed by Cross et al. (1989) directly or indirectly and Ms. Carrington was able to address only one (the ability to learn about culture). She demonstrated this when she stated, “I have done a little bit of reading on some of the cultural beliefs they [an Iraqi student and her family] have.” Her view was an anomaly within her group, but still narrower than that of the teachers in the next group.

On the rise

This group consisted of teachers scoring in both the middle and upper thirds on the ProfBAD. These teachers did not address all of the knowledge, skills and attributes discussed by Cross et al. (1989), however they did demonstrate an understanding that rose above that of the previous group. The data showed these teachers addressed the following attributes, knowledge and skills: willingness to work with students from other cultures, the ability to respond flexibly, possession of techniques for learning about other cultures, knowledge of various cultures, knowledge of the role of communication and language, and the ability to discuss differences.

While the educators in this group referred to it several different ways, they all discussed being willing to work with students who are culturally different as a necessary skill for teachers and as something they saw as a strength for themselves. The following examples were typical and demonstrate this point.

Ms. Jackson (middle third): “I am willing to work with the kids and learn about them.”

Ms. Duncan (highest third): “A necessary skill is willingness...to let themselves [teachers] open up to understand other people. An area that I see as strength for myself is my willingness.”

Cross et al. (1989) stated that “a capacity to respond flexibly” is another essential attribute for those developing cultural competence. This ability to respond with flexibility was

also seen as important by the group of educators. In her interview, Ms. Scott (middle third) discussed accommodations made to instructional activities for students with varying religious beliefs about Halloween:

“One [student] told me, ‘You know we don’t really celebrate or observe Halloween.’ I said, ‘I have a back up poem for you.’ It was still kind of the same thing so it is not completely different than everybody else, but it had nothing to do with Halloween. You have got to be as sensitive as you can and just modify for it [culture].”

Ms. Ladson (middle third) provided a more general statement about the need for teachers to respond with flexibility to accommodate students’ cultures:

“If you are not going to understand [students’ cultures] and try to change what you know, how you feel, how you see things, are you really going to get anything out of that kid academically? No, I don’t think so.”

Ms. Smith (highest third) provided another example when asked what skills she thought were necessary for teachers in relationship to culture and cultural competence:

“I would say the main skill is to adapt, to adapt and learn whatever it is. You are not going to come in knowing everything, but be willing to know and learn and adapt to whatever it is.”

Ms. Jackson (middle third) also discussed the need for flexibility in instruction when she said “I can’t run my class cut and dry. I mean it [instruction] just really fits the needs of the kids.”

Cross et al. (1989) also listed the possession of techniques for learning about culture as a necessary skill for those developing cultural competence. The teachers in this group demonstrated a variety of methods for learning about culture. The overwhelming response from most of the participants involved learning from their students. Ms. Ladson (middle third) stated that she listens to her students and utilizes them as experts during instruction if it is appropriate. Mr. Jones (middle third) stated that he asks his students at the beginning of the year to complete

a writing assignment about themselves and their families. He gives this assignment specifically for the purpose of learning about his students. Other teachers provided additional data:

Ms. Jackson (middle third): “I go right to the source and ask the kids if I’m not sure about something they are doing.”

Ms. Smith (highest third): “I don’t know if they’ve [the students] had people freak out in the past [when discussing difference], but I guess that further enlightened me that you’ve got to have discussions with your kids at times. It is going to come up and you might as well just go ahead and have the discussion and not avoid it.”

Ms. Duncan (highest third): “I do talk to them about their families. A lot of teachers have morning work or seat work at their desks. I don’t. I have open time. They can come to me and they can talk to me and that is our time to just kind of get to know each other.”

Ms. Scott (middle third): “I ask the kids [when I want to learn about their culture].

Other sources of information related to gaining knowledge about culture included other trusted adults or fellow staff members, the news and the internet, parents of students and classes taken during their teacher preparation.

Ms. Ladson (middle third): “I interact with parents. I took multicultural course at the university [during her teacher preparation training] and I have attended workshops. I also try really hard every year to get them [the students] to bond with each other and to bond with me. If they want to tell me stories about their day or about their dad or if J. [a student] wants to tell stories about things from the reservation, I think that is important. We talk about that as much as we can, and you know there are ways to work it into [academic] discussions.”

Mr. Jones (middle third): “When the parent comes in (I love to talk to the parent) I have the parent tell me something that their kid likes or dislikes, so I try to get a connection between the parents and the kids. Another thing I do at the beginning of the year is go through their CR’s [student records] so when a kid comes to my classroom, I already know about that kid. I try to learn as much about the kid before he or she comes through my door to help me better relate to that kid. ”

Ms. Scott (middle third): “I am kind of a nerd, so I will research it on the internet. I don’t have so much pride in myself that I think I am the authority on everything. I’m the one to say, ‘I don’t know so let’s go find out.’”

Ms. Smith (highest third): “Well I guess if I don’t know, I ask the question. You know some people will try and bluff through. I don’t want to look stupid later when it comes up that really don’t know what I’m talking about. I guess my strength is that I will ask the question. I’ll say, ‘I’m a White girl from middle-class Berea so I don’t know.’ If I don’t ask the question, apparently nobody is, and we are all going to sit here and not know, so my strength is that I will ask the question.”

Regardless of method, the data showed that most of the teachers interviewed in this group had developed techniques for learning about the cultures of those they serve. In addition, the above data also showed that these teachers were able to discuss differences with their students, colleagues and parents. If they were not able to discuss differences, they would not be able to seek knowledge about their students through others as they have done.

The teachers who were “On the Rise” were also aware of various language and communication style differences that could exist between themselves and students from different cultures. What follows are examples of data demonstrating the differences these teachers saw in language and communication styles between different cultures.

Ms. Jackson (middle third): “Sometimes certain language needs to come out. You need to phrase it in a certain way...like their mommas would.”

Ms. Scott (middle third): “In some cultures to look somebody in the eye is disrespectful, whereas her it is disrespectful not to. You have to be aware those things exist when you are teaching.”

Ms. Ladson (middle third): “When you are disciplining a child or addressing a child you want them to look at you, but that is a big no-no for them [her Native American students].”

Ms. Ladson (middle third): “I’m not going to get mad at you because you say ‘White girl’ [for example]. As long as they are not using anything offensive, it is how they speak. It is how they see an experience and I like for them to talk about that.”

Ms. Smith (highest third): “That [the noise level] has been a big adjustment and also how they speak to each other. What sounds to me like...we are going to have a fight is them just ragging on each other.”

When asked in what areas they needed to grow, these teachers mentioned needing more knowledge of various kinds related to their students' cultures. For example,

Ms. Jackson (middle third): "There is always more to know. I would like to learn more about better strategies specifically for my African American boys and reading."

Mr. Jones (middle third): "Being a male, I can relate to the boys a lot better than I can to the girls, so I've got to try to better relate to the girls in my class."

Ms. Ladson (middle third): "It has been easy in the past to be strongly focused on only my African American students and their culture. I think that I am just learning the past year or so that they are not the only different culture I have, and that I need to focus on other as well such as my Native American kids. We have had an influx of Indian students. We have some Burundian refugee kids that have come here, and I think I need to be more aware of those cultures."

Ms. Duncan (highest third): "The area I would like to grow in is that I don't have enough knowledge [of different cultural groups]."

It is important to note that the teachers in this group could identify areas of weakness. This was a contrast to those described under the theme "The Narrow Road." This demonstrates the ability to reflect and self-assess, one of Cross et al.'s (1989) five essential elements for the development of cultural competence.

Two themes were developed to answer the research question about the knowledge, attributes and skills these teachers possessed in relationship to cultural competence. The first group, "The Narrow Road," did not possess any of these deemed by Cross et al. (1989) as necessary. The second group possessed several of the attributes, knowledge and skills, but did not discuss them all. Table 19 lists all of the attributes, knowledge and skills as defined by Cross et al. (1989) and summarizes those discussed by the participants in the second group.

Table 19

Attributes, Knowledge and Skills Necessary for the Development of Cultural Competence

Attributes	Knowledge	Skills
Acceptance	Of various cultures **	Techniques for learning about culture **
A willingness to work with Students from different cultural groups **	Of the impact of culture on behavior, attitudes, and values	Ability to communicate accurate information on behalf of minority clients (students)
Empathy and warmth	Of the role of language and communication styles **	Ability to discuss differences **
A commitment to social justice	Of the impact of policies on minority students and their families	Ability to assess the meaning culture has for individuals
The ability to articulate and clarify one's own values, stereotypes and biases	Of power relationships within the institution and how they impact clients (students)	Ability to recognize and combat racism
The ability to resolve personal feelings about a profession that has excluded others based on cultural identity		Ability to find and utilize resources on behalf of minority clients (students)
A capacity to respond flexibly **		Ability to utilize the concepts of empowerment on behalf of minority clients/communities

Key: **Discussed by teachers during interviews

Conclusion

This chapter has addressed the qualitative data collected in this mixed methods study, and answered the second research question consisting of four sub-questions. First, it explained the way the teachers in this study defined cultural competence. The themes developed to answer this question were the following: “Unaware,” “Just the Basics,” “Moving Beyond,” and “The Lost Puzzle Piece.” The next sub-question discussed the groups these teachers considered when they reflected on the concept of cultural competence. Two themes were developed from the data to answer this question. They were “Staying Close to Home” and “A Focus on Language.” The third sub-question described the meaning teachers attributed to cultural competence. Five themes were developed to address this question including “Embracing Color-Blindness,” “Removing the Blinders,” “Starting to See,” “Relationships, Relationships, Relationships,” and “Developing Cultural Competence: A Personal matter.” Finally, this chapter addressed the attributes, knowledge and skills these teachers possessed or deemed necessary related to culture and cultural competence. Two themes were developed from this data. They were “The Narrow Road” and “On the Rise.” The next chapter discusses lessons learned through this study, how this study related to the current research on cultural competence, and finally suggests possible future studies in this field.

CHAPTER 6

CONCLUDING DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

This chapter provides the concluding discussion for this study. The first part of this chapter will address how the findings of this study fit with the current research and theory related to cultural competence. The second part of this chapter will address lessons learned through this study as well as how these lessons might be beneficial to practicing administrators. The next part of this chapter will address potential future studies. The final section provides concluding thoughts.

Much literature has documented the existence of the achievement gap that exists between White students and their minority counterparts (Cataldi et al. 2009; Constantine & Sue, 2006; KewalRamani et al. 2007; Ladson-Billings, 1994; Lyman & Villani, 2004; Teel & Obidah, 2008; Vanneman et al., 2009; White-Clark, 2005). One explanation for the existence of the achievement gap is cultural dissonance theory, which focuses on the cultural differences between students and schools as the reason minority students struggle academically more than their dominant culture peers. This theory contends that if schools work to change so that they are less reflective of the dominant culture, they will be more successful with a more diverse population of students (Delpit, 1995; Diller & Moule, 2005; Nieto, 1999; Teel & Obidah, 2008).

Development of cultural competence within schools is one possible solution to cultural dissonance theory. This mixed methods study addressed the relationship between the cultural competence of teachers and the academic achievement of their students. Much research has been conducted to explore this link (Au & Jordan, 1981; Diamond & Moore, 1995; Dick, Estell, & McCarty, 1994; Gay, 2000; Krater, Zeni, & Cason, 1994; Matthews & Smith, 1991; Mohatt &

Erickson, 1981; Moore-Hart, Diamond, & Knapp, 2003; Tharp & Gallimore, 1988), however much of this research is 10 or more years old. In particular, some studies that provided quantitative data (like that of Au and Jordan) are more than 20 years old. In addition, these other studies explored the link between specific teaching strategies utilized by teachers during instruction, rather than the level of cultural competence teachers bring with them into the classroom. This study sought to fill this gap in the literature by providing updated data, both quantitative and qualitative in nature, which related the teachers' cultural competence to student academic achievement. In addition, this study explored the conceptions teachers have of cultural competence rather than specific teaching strategies implemented by a school or program.

Findings

Research question one

The first research question in this study was quantitative in nature and investigated the correlation between the cultural competence of the teacher and his/her students' academic achievement. Specifically the question was "What is the relationship between the (level of) cultural competence of the teacher and his/her students' academic achievement as measured by standardized testing?" In order to answer this question, a population of urban elementary school teachers in grades three through five were asked to complete the "Personal and Professional Beliefs About Diversity" scales and additional demographic questions. The scores on the scales were then correlated with the standardized test data available in the subjects of reading, math, science and social studies (average score in normal curve equivalents and percentage of students scoring proficient and advanced) using the Pearson Product Moment Correlation Coefficient. According to the correlation data, no significant relationship existed between the teachers' scores

on the PPBAD scales and the student academic achievement data, even when correlations were performed with the test data disaggregated by student race/ethnicity.

This finding appears to conflict with much of the previous research involving cultural competence and related concepts such as culturally relevant teaching, culturally congruent teaching and culturally responsive pedagogy. Several explanations exist for this discrepancy. First, it is possible that the impact of the cultural competence of the teacher on academic achievement test scores is so indirect that it cannot be accounted for through a correlation study. Second, it is possible that a different instrument might more directly measure cultural competence, thus providing a different outcome. Another possible explanation is that much of the previous research was conducted with individual cultural groups such as predominantly Hawaiian children or predominantly Native American children (Au & Jordan, 1981; Diamond & Moore, 1995; Dick, Estell, & McCarty, 1994; Matthews & Smith, 1991; Mohatt & Erickson, 1981). This study examined school populations that included smaller sets of more than one cultural group. Finally, it is possible that teacher cultural competence truly does not impact student academic achievement.

While no significant relationship was found, an interesting finding should be noted. Though not rising to the level of significance, the data showed that the *r*-values for African American students were always positive. This is in contrast to both White and Hispanic students, for whom the *r*-values fluctuated between being positive and negative. This may indicate that teachers with increased cultural competence are more successful specifically with African American students. This would support the research of Ladson-Billings (1994).

Research question two

The second research question was qualitative in nature and sought to expand on the quantitative findings. It investigated the teachers' understanding of cultural competence, and asked specifically, "How do urban elementary school teachers understand cultural competence?" Four sub-questions were asked to answer this research question:

- (a) How do they define/describe cultural competence?
- (b) What groups do they include in their definition of cultural competence?
- (c) What does cultural competence mean to them?
- (d) What skills, knowledge and attributes do they possess related to cultural competence, especially that impact academic achievement?

The findings used to answer this research question expanded on the current data concerning cultural competence. Most of the research involving cultural competence is reflective of the fields of healthcare, mental healthcare or social work (Betancourt, Green, Carrilo, & Ananeh-Firempong, 2003; Campinha-Bacote, 1999, 2003, 2007; Campinha-Bacote & Munoz, 2001; Cross et al., 1989; Jefferys, 2006; Leavitt, 2004; Purnell & Paulanka, 2005). In education, research has been on the related topics such as multicultural education (Banks & Banks, 2007), culturally relevant teaching (Ladson-Billings, 1994, 2001), and culturally responsive pedagogy (Gay, 2000). Studies of cultural competence that do exist in the field of education tend to occur in higher education settings in order to determine the impact of a course on the cultural competence of prospective teachers (Kershaw et al., 2004; Middleton, 2002). This work adds to the current literature because it attempts to bring the concept of cultural competence further into

the field of education by examining the impact of teacher cultural competence directly on student academic achievement.

The qualitative side of this study investigated the understanding teachers have of cultural competence and how it impacts student academic achievement. The interview participants generally agreed that the cultural competence of the teacher impacts academic achievement through the development of relationships with students. If teachers are more culturally competent, they will be better able to understand students and relate to them. As students feel understood, improved relationships and trust will form, and the student will be more successful academically because they are more engaged.

Multiple themes were developed to answer the sub-questions. As teachers increased in cultural competence as measured by the ProfBAD, they were better able to define the concept and explain what it meant to them. However, only the teachers scoring in the highest third demonstrated the ability to adapt themselves to their students' cultures. One interesting finding that contrasts with the research on cultural competence is that none of the teachers in this study discussed the idea of effectiveness with students when defining cultural competence. However, this is a key component of the definition by Cross et al. (1989).

The second sub-question addressed the groups the teachers considered when discussing cultural competence. The data demonstrated that nearly all of the teachers involved in this study focused on the cultural groups with whom they worked in their professional settings. If teachers had a student from a particular cultural group in their classrooms, then they considered that child in the discussion. An additional finding was that teachers who scored in the lowest third on the ProfBAD were the only teachers who focused on ELL students as a cultural group.

The third sub-question sought to understand the meaning teachers attributed to cultural competence. Teachers scoring at all three levels on the ProfBAD saw diversity in their classrooms as rewarding, however those scoring in the lowest third were unable to identify many of the differences that existed within their classroom. They also did not believe that culture impacted education. As teachers increased in cultural competence, so did their ability to identify differences within their classrooms and discuss ways culture impacts education. Those teachers who scored in the highest third were also able to discuss ways they had adapted themselves or their instruction to fit their students' cultures. In addition all participants, regardless of scoring level, believed that the link of cultural competence to academic achievement was through their relationships with their students. Finally, for all participants, the meaning attributed to cultural competence and culture had been learned more through their personal experiences than through their professional experiences.

The final sub-question answered for this study related the teachers' attributes, knowledge and skills possessed by the participants to those Cross et al. (1989) listed as necessary for the development of cultural competence. The majority of the differences found between the three groups of educators (those scoring at the highest third, middle third, and lowest third on the ProfBAD scale) were between those scoring in the lowest third and those teachers scoring in the upper two-thirds. Those teachers who scored in the lowest third did not discuss any of the knowledge, skills, or attributes found in the research by Cross et al. (1989). The teachers who scored in the upper two-thirds demonstrated a desire to work with students culturally different from themselves, flexibility, knowledge of other cultures and of the role of language/communication styles, the ability to learn about other cultures and the ability to discuss

differences. Several of the other attributes, knowledge and skill (such as the ability to articulate personal biases and stereotypes and voicing a commitment to change the current state of racism and poverty in schools) were not reflected in the interview data and could provide a starting point for any participants desiring to grow in their cultural competence.

Lessons Learned

The qualitative data indicated a link between cultural competence and academic achievement through teacher relationships with their students. The teachers in this study were nearly unanimous in their opinion that the cultural competence of the teacher can impact student academic achievement by improving relationships with their students. They believed that better relationships with students would result in students being more willing to work, learn, and be engaged in the classroom, thus leading to increased academic achievement.

Additionally, the concept of an “effective teacher” is quite broad and incorporates more than student standardized test scores. Effective teachers demand academic success of their students, but also teach them the skills they need to succeed in life. They teach students how to interact with others, how to deal with stressful situations, and how to organize and manage themselves. They relate learning to the life experiences of their students and build on the knowledge that students already have, and use more than standardized test data to monitor the academic progress of their students. Ladson-Billings (2001) described the attributes of effective teachers of minority students as having a focus on academic success for their students through the belief that all students can learn and maintaining high expectations for all students. These effective teachers view the culture of the community and the students’ families as a resource and

strength and teach students to maintain it. Finally, they empower students with sociopolitical consciousness and encourage them to work against the status quo for a more just society.

This study underscores the need for deliberate professional development for educators in the area of cultural competence, especially for those teachers scoring in the lower third on the ProfBAD scale. It might even be appropriate to utilize the instrument in this study to assess the current cultural beliefs of a staff so as to better plan professional development. The findings of this study demonstrate that the teachers in this study learned more about culture and cultural competence through personal experiences rather than professional experiences. It is one responsibility of the building level administrator to provide his or her staff with the training and skills necessary to effectively teach their students. Cultural competence development may be one such area of need an administrator could address by providing structured professional development throughout the year. Professional development should be structured to provide teachers with knowledge of how culture impacts or may impact the school experience of many students, as well as knowledge of the specific cultural groups the school serves. In addition, administrators should plan learning activities for teachers focused on the dynamics of difference. Finally, professional development should be structured such that it challenges the biases and stereotypes that teachers might have regarding different cultural groups, but also incorporates the attributes, knowledge and skills necessary for the development of cultural competence (Cross et al., 1989).

School administrators can also learn from this study about the importance of dealing with cultural issues in a direct and sensitive way. The data from this study show that many of the interview participants did not acknowledge the obvious differences between themselves and their

students. Based on this finding, administrators (especially those in more diverse urban settings) need to be prepared to lead by example in dealing with cultural issues with both the staff and the school community. Administrators need to be willing to ask questions and learn about the culture of those different from them. They need to be willing to participate in discussions about cultural differences that are uncomfortable or considered socially awkward by the dominant culture in order to better understand and build relationships with all families within the school community.

Finally, administrators can learn from this study how to incorporate questions into interviews to better understand the cultural competence of prospective employees. For example, questions from the PPBAD scales could be included during the job interview as well as questions from the qualitative interview protocol utilized in this study. These could be useful tools when trying to build a staff of culturally competent educators.

Future Studies

This study has many implications for future studies in the area of cultural competence. First and foremost, additional research is needed to understand the link between the cultural competence of the teacher and the academic achievement of the students. While the correlation between those two variables in this study showed no significant relationship, studies should be conducted that utilize different measures of teacher cultural competence. Another important study that should be conducted involves the cultural competence of the teacher and the academic achievement of African American students. The data from this study indicated that, while not statistically significant, all correlations between the teachers' scores on the ProfBAD scale and student standardized test data were positive. It is possible that teacher cultural competence has a bigger impact on some cultural groups than others, so it might be important to repeat this study

looking at one cultural group within the school district at a time. In addition, a study that utilizes TVAAS (Tennessee Value-Added Assessment System) data rather than achievement data could be conducted. This would allow the researcher to examine the relationship between the cultural competence of the teacher and the amount of growth students experience over the course of an academic year. In addition, a study could be conducted that utilizes regression analysis to account for the impact of cultural competence once other variables (such as socio-economic status) have been factored out. Another suggested study involves the inclusion of teachers in urban, rural, and suburban schools in order increase the sample size and examine the differences in cultural competence between these teachers.

Another study beneficial to the field would be the development of a cultural competence instrument. The concept of cultural competence in education is fairly new and, as of yet, there is not an instrument designed to directly measure the cultural competence of teachers. Finally, a solely qualitative study that utilizes multiple measures of student academic achievement would be beneficial to the field of education. In this study, interviews were the only qualitative data collected. Future studies might include classroom observations and samples of student work. Such a study might better demonstrate the link between teacher cultural competence and student academic achievement.

Conclusion

This mixed-methods study demonstrated that while teacher cultural competence, as measured by the PPBAD scales, did not have a significant relationship to student academic achievement, qualitative data showed it was important in developing relationships between teachers and students and their families, and could impact student academic achievement through

this link. While these results were not what I had hoped for, important findings still resulted and lessons for practitioners were still evident. Especially in urban schools, the cultural differences between teachers and their students can be extreme. It is important for teachers to understand and acknowledge these differences in order to better serve their students. It is also important for administrators to be cognizant of such differences and lead teachers toward more open views of diversity as it relates to the education of students. This is especially important as the demographic nature of our country continues to change and become more diverse.

Teachers are in a unique position to educate students about acceptance of others different from themselves, but they can only do this if they themselves possess such skills. Administrators are in a position to help teachers develop the attributes, knowledge, and skills necessary for this task. It is only through a better understanding of cultural differences that we can work toward a society that is more just and equitable for all its citizens. This responsibility resides with all of us, but educators have a unique responsibility to provide students with the tools they need to work for just such a society.

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APPENDICES

APPENDIX A

DEMOGRAPHIC INFORMATION QUESTIONS

1. What is your age? 20-30 31-40 41-50 51-60 61-70 70+
2. What is your race/ethnicity?

Black/African American White Hispanic/Latino Asian/Pacific Islander

Native American/Alaskan Indian
3. What is your gender? M F
4. How many years of experience do you have as a teacher?

0-5 6-10 11-15 16-20 21-25 26-30 30+
5. How many years of experience do you have teaching at an urban school?

0-5 6-10 11-15 16-20 21-25 26-30 30+
6. How many years of experience do you have at this current urban school?

0-5 6-10 11-15 16-20 21-25 26-30 30+
7. Did you desire to teach in an urban school when you began your tenure at your current placement? Yes No
8. What grade level are you currently teaching? 3rd 4th 5th
9. What is your highest level of educational attainment?

BS MS MS+ EDS Ph.D./Ed.D
10. Are you fluent in a second language? Yes No Please list_____
11. Have you had classes or workshops in multicultural education or cultural competence?

Yes No If yes, how many classes/workshops? _____
12. Have you participated in any cultural/cross cultural experiences?

Foreign travel	Yes	No	
Domestic travel	Yes	No	
Work/school in another country			Yes No
Peace Corps	Yes	No	
Other	Yes	No	Please list_____

APPENDIX B

PERSONAL BELIEFS ABOUT DIVERSITY SCALE

This scale measures your beliefs about diversity. Indicate the degree to which you agree or disagree with each item below by circling the number corresponding to your selection. Please answer every item, and use the following scale to select your answers:

(1) Strongly Disagree (2) Disagree (3) Undecided (4) Agree (5) Strongly Agree

- | | | | | | |
|---|---|---|---|---|---|
| 1. There is nothing wrong with people from different racial backgrounds having/raising children..... | 1 | 2 | 3 | 4 | 5 |
| 2. America's immigrant and refugee policy has led to the deterioration of America | 1 | 2 | 3 | 4 | 5 |
| 3. Making all public facilities accessible to the disabled is simply too costly..... | 1 | 2 | 3 | 4 | 5 |
| 4. Accepting many different ways of life in America will strengthen us as a nation. | 1 | 2 | 3 | 4 | 5 |
| 5. It is not a good idea for same-sex couples to raise children..... | 1 | 2 | 3 | 4 | 5 |
| 6. The reason people live in poverty is that they lack motivation to get themselves out of poverty..... | 1 | 2 | 3 | 4 | 5 |
| 7. People should develop meaningful friendships with others from different racial/ethnic groups..... | 1 | 2 | 3 | 4 | 5 |
| 8. People with physical limitations are less effective as leaders than people without physical limitations..... | 1 | 2 | 3 | 4 | 5 |
| 9. In general, white people place a higher value on education than do people of color..... | 1 | 2 | 3 | 4 | 5 |
| 10. Many women in our society continue to live in poverty because males still dominate most of the major social systems in America: | 1 | 2 | 3 | 4 | 5 |

11. Since men are frequently the heads of households, they deserve higher wages than females.....	1	2	3	4	5
12. It is a good idea for people to develop meaningful friendships with other having a different sexual orientation.....	1	2	3	4	5
13. Society should not become more accepting of gay/lesbian lifestyles.....	1	2	3	4	5
14. It is more important for immigrants to learn English than to maintain their first language.....	1	2	3	4	5
15. In general, men make better leaders than women.....	1	2	3	4	5

PROFESSIONAL BELIEFS ABOUT DIVERSITY SCALE

This scale measures your beliefs about issues of diversity as they relate to policies and practices within educational settings. Indicate the degree to which you agree or disagree with each item below by circling the number corresponding to your selection. Please answer every item, and use the following scale to select your answers.

(1) Strongly Disagree (2) Disagree (3) Undecided (4) Agree (5) Strongly Agree

- | | | | | | |
|---|---|---|---|---|---|
| 1. Teachers should not be expected to adjust their preferred mode of instruction to accommodate the needs of all students.... | 1 | 2 | 3 | 4 | 5 |
| 2. The traditional classroom has been set up to support the middle class lifestyle..... | 1 | 2 | 3 | 4 | 5 |
| 3. Gays and lesbians should not be allowed to teach in public schools..... | 1 | 2 | 3 | 4 | 5 |
| 4. Students and teachers would benefit from having a basic understanding of different (diverse) religions..... | 1 | 2 | 3 | 4 | 5 |
| 5. Money spent to educate the severely disabled would be better spent on programs for gifted students..... | 1 | 2 | 3 | 4 | 5 |
| 6. All students should be encouraged to become fluent in a second language..... | 1 | 2 | 3 | 4 | 5 |
| 7. Only schools serving students of color need a racially, ethnically and culturally diverse staff and faculty..... | 1 | 2 | 3 | 4 | 5 |
| 8. The attention girls receive in school is comparable to the attention boys receive..... | 1 | 2 | 3 | 4 | 5 |
| 9. Tests, particularly standardized tests, have frequently been used as a basis for segregating students..... | 1 | 2 | 3 | 4 | 5 |
| 10. People of color are adequately represented in most textbooks today..... | 1 | 2 | 3 | 4 | 5 |
| 11. Students with physical limitations should be placed in the regular classroom whenever possible..... | 1 | 2 | 3 | 4 | 5 |

12. Males are given more opportunities in math and science than females.....	1	2	3	4	5
13. Generally, teachers should group students by ability levels.....	1	2	3	4	5
14. Students living in racially isolated neighborhoods can benefit socially from participating in racially integrated classrooms.....	1	2	3	4	5
15. Historically, education has been monocultural, reflecting only one reality and has been biased toward the dominant (European) group.....	1	2	3	4	5
16. Whenever possible, second language learners should receive instruction in their first language until they are proficient enough to learn via English instruction.....	1	2	3	4	5
17. Teachers often expect less from students from the lower socioeconomic class.....	1	2	3	4	5
18. Multicultural education is most beneficial for students of color.....	1	2	3	4	5
19. More women are needed in administrative positions in schools.....	1	2	3	4	5
20. Large numbers of students of color are improperly placed in special education classes by school personnel.....	1	2	3	4	5
21. In order to be effective with all students, teachers should have experience working with students from diverse racial and ethnic backgrounds.....	1	2	3	4	5
22. Students from lower socioeconomic backgrounds typically have fewer educational opportunities than their middle class peers.....	1	2	3	4	5
23. Students should not be allowed to speak a language other than English while in school.....	1	2	3	4	5
24. It is important to consider religious diversity in setting public school policy.....	1	2	3	4	5

25. Multicultural education is less important than reading, writing, arithmetic, and computer literacy.....	1	2	3	4	5
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APPENDIX C

INTERVIEW QUESTIONS

1. What does the term cultural competence mean to you?
2. How would you describe cultural competence?
3. What groups come to mind when you think of cultural competence? Why?
4. What, if any are the cultural differences between you and your students?
5. Do you see diversity in the classroom as challenging or rewarding? Why?
6. Do you think that culture impacts education? If so, how?
7. What personal experiences have you had that impact your beliefs about culture and cultural competence as they relate to education?
8. What professional experiences have you had that impact your beliefs about culture and cultural competence as they relate to education?
9. Where do you obtain knowledge about cultures different from your own? What groups do you seek that knowledge about?
10. What do you do, if anything, to learn about the culture of the students in your classroom?
11. Does what you learn about your students' cultures impact instruction in your classroom?
If so, how?
12. How does that cultural knowledge impact your classroom in general (procedures, interactions with families, teaching strategies, etc.)?
13. Do you think cultural competence is related to student academic achievement? If so, how?

14. Do teachers need to possess any specific skills related to culture or cultural competence?

If so, specify them.

15. In relationship to cultural competence, what do you see as areas of strength for yourself?

16. In relationship to cultural competence, what do you see as areas to strengthen?

17. Do you consider your students academically successful? If so, in what ways?

APPENDIX D

STANDARDIZED TEST DATA BY TEACHER

Teacher #	Reading Mean			Math Mean		
	NCE			NCE		
	Black	Hispanic	White	Black	Hispanic	White
Teacher 01	27.1	37.5	20.0	29.9	39.5	13.0
Teacher 02	39.0	39.7	45.3	47.0	42.0	46.9
Teacher 03	29.7		33.2	28.5		26.2
Teacher 04	31.6		31.0	31.1		36.5
Teacher 05	22.7		34.8	25.3		33.1
Teacher 06	35.7	30.5	39.9	46.4	35.5	44.5
Teacher 07	34.0	6.0	44.9	31.3	26.0	40.7
Teacher 08	36.3	30.0	5.0	41.8	38.7	14.5
Teacher 10	35.6	14.0	75.0	38.1	12.0	82.7
Teacher 11	33.9		30.3	32.1		39.8
Teacher 12	42.1		42.0	40.8		39.5
Teacher 14	24.5	15.5	46.8	26.0	29.0	48.3
Teacher 15	34.8	43.5	51.3	40.0	46.0	46.5
Teacher 17	25.3		25.0	30.4		18.5
Teacher 18	27.5	35.0	26.0	35.8	34.0	25.0
Teacher 19	27.4	32.0	33.0	35.3	22.0	29.5
Teacher 20	44.3		59.8	43.6		57.5
Teacher 22	34.3	1.0	38.8	32.3	35.0	31.9
Teacher 23	31.2		29.1	29.6		31.4
Teacher 24	24.5	36.0	49.9	19.8	27.0	44.8
Teacher 25	25.3	39.0	44.3	31.1	47.0	43.8
Teacher 26	45.3		46.8	39.0	46.8	46.1
Teacher 28	34.3	31.0	33.0	32.1	30.0	37.6
Teacher 29	34.2	48.0	48.0	36.9	36.0	41.0
Teacher 30	31.6		48.0	31.5		55.0
Teacher 32	48.5	48.0	23.0	45.2	52.0	37.5
Teacher 33	51.3		41.7	48.0		45.0
Teacher 34	63.8	48.0	64.1	53.3	63.0	72.9
Teacher 35	43.0		47.3	41.3		45.8
Teacher 37	44.1	44.0	66.3	42.9	38.0	56.3
Teacher 38	32.4	53.0	38.3	44.1	61.0	41.7
Teacher 39	33.0	52.0	40.6	47.9	59.0	42.1
Teacher 42	27.8		37.0	59.0	37.8	38.0
Teacher 43	36.2		39.2	45.2		42.8
Teacher 44	27.0		44.1	36.0		50.3
Teacher 46	32.0	31.5	51.0	36.8	28.8	51.0
Teacher 48	31.2	27.0	27.6	31.8	35.0	24.7
Teacher 49	38.8	68.0	65.8	47.6	81.0	60.0
Teacher 54	26.8	43.0		27.1	24.0	
Teacher 55	32.5	44.0	22.0	34.5	67.0	33.0
Teacher 56	26.6	47.0	56.0	26.5	42.0	61.0
Teacher 57	39.5		53.0	55.5		44.5
Teacher 58	34.0		47.5	33.1		47.3
Teacher 59	39.1	8.0	38.5	41.3	13.0	42.5
Teacher 61	43.8	13.0	36.2	41.5	34.0	34.4
Teacher 63	30.5	43.0	30.3	32.1	30.5	24.7
Teacher 64	32.2	37.5	29.7	30.6	48.0	33.2

Science Mean

Social Studies Mean NCE

Teacher #	NCE Black	Hispanic	White	Black	Hispanic	White
Teacher 01	19.9	32.0	12.5	24.1	36.5	16.5
Teacher 02	16.0	33.3	43.5	47.0	32.7	37.8
Teacher 03	28.9		35.3	25.7		27.5
Teacher 04	28.8		36.5	25.3		30.0
Teacher 05	25.0		38.2	19.4		29.3
Teacher 06	37.6	27.5	39.5	32.3	31.5	39.5
Teacher 07	34.3	17.0	46.3	29.0	8.0	40.9
Teacher 08	19.5	20.7	11.0	24.0	22.0	5.5
Teacher 10	29.3	1.0	76.3	30.5	15.0	69.3
Teacher 11	29.0		27.0	29.3		30.3
Teacher 12	35.4		41.5	36.8		33.5
Teacher 14	21.0	1.5	47.6	20.0	8.0	38.8
Teacher 15	37.7	38.5	46.9	33.7	49.5	44.3
Teacher 17	23.6		40.0	25.0		44.0
Teacher 18	26.5	28.0	46.0	24.6	28.0	23.0
Teacher 19	28.4	26.0	27.2	28.0	20.0	21.8
Teacher 20	43.8		70.0	37.8		56.5
Teacher 22	25.7	31.0	36.0	31.4	37.0	35.6
Teacher 23	26.3		30.1	28.0		28.1
Teacher 24	17.5	37.0	42.6	23.8	35.0	40.4
Teacher 25	22.4	40.0	36.9	27.1	40.5	41.7
Teacher 26	49.3		45.5	51.2		39.9
Teacher 28	28.9	27.0	28.4	28.2	27.0	27.1
Teacher 29	31.3	54.0	39.6	30.7	59.0	41.2
Teacher 30	26.0		47.0	34.1		67.5
Teacher 32	35.8	23.0	19.0	33.5	19.0	26.0
Teacher 33	42.1		42.3	39.9		40.6
Teacher 34	57.0	45.0	60.9	62.3	50.0	69.9
Teacher 35	39.3		46.7	44.0		40.2
Teacher 37	28.9	25.0	46.7	25.9	27.0	44.0
Teacher 38	34.9	63.0	45.3	41.0	66.0	30.0
Teacher 39	32.3	43.0	35.1	31.9	46.0	34.3
Teacher 42	29.8		27.0	29.2		30.0
Teacher 43	33.8		38.9	38.0		38.3
Teacher 44	26.7		49.1	21.7		42.2
Teacher 46	25.1	14.8	34.0	2.1	21.3	39.0
Teacher 48	29.4	7.0	30.3	25.2	10.0	20.2
Teacher 49	38.2	48.0	67.5	35.4	48.0	61.3
Teacher 54	23.5	37.0		21.9	47.0	
Teacher 55	29.1	35.0	30.0	30.9	44.0	24.5
Teacher 56	20.9	48.0	32.0	18.2	61.0	33.0
Teacher 57	47.0		55.8	42.0		52.5
Teacher 58	26.7		40.5	29.8		43.0
Teacher 59	34.7	8.0	33.2	38.7	10.0	31.3
Teacher 61	40.0	27.0	41.0	34.0	12.0	29.4
Teacher 63	28.1	22.5	27.0	26.9	28.5	24.3
Teacher 64	26.4	55.0	32.2	26.9	52.5	27.0

APPENDIX E

INTERVIEW PARTICIPANT DEMOGRAPHIC DATA

Teacher Name	Smithdon	Carrington	Stark	Ladson	Jackson	Scott	Jones
Score Range on ProfBAD	Lowest	Lowest	Lowest	Middle	Middle	Middle	Middle
Age Range	61-70	20-30	61-70	20-30	31-40	31-40	51-60
Gender	Female	Female	Female	Female	Female	Female	Male
Race/Ethnicity	White	White	White	White	White	Black	Black
Years Experience	22	4	19	5	4	15	5
Years Urban Experience	19	4	13	5	4	4	4
Educational Attainment	Masters	Bachelors	Bachelors	Masters	Masters	ED.S.	Masters+
Desire for Urban Position	Yes	No	No	Yes	Yes	No	Yes
Second Language Fluency	No	No	No	No	No	No	No
Cultural Experiences	Foreign & Domestic Travel	Workshops Foreign Travel	None	Workshops, Domestic Travel	Foreign Travel	Workshops	Peace Corps, Military

Teacher Name	Smith	Walker	Duncan
Score Range on ProfBAD	Highest	Highest	Highest
Age Range	41-50	51-60	51-60
Gender	Female	Female	Female
Race/ Ethnicity	White	Black	White
Years Experience	6	30	10
Years Urban Experience	6	28	6
Educational Attainment	Masters+	Masters	Masters
Desire for Urban Position	Yes	Yes	Yes
Second Language Fluency	No	No	No
Cultural Experiences	Workshops	Workshops Domestic Travel	Workshops

VITA

Amy Louise Brace was born in Davis, California, but has lived the majority of her life in Knoxville, Tennessee. She completed her undergraduate studies in the field of physical education at the University Tennessee, Knoxville in 1991. For the next 17 years, she worked as a physical education teacher at Sarah Moore Greene Magnet Academy, an urban school in Knoxville, Tennessee. During that time she completed her Master's Degree in Curriculum and Instruction and began work on her Doctor of Philosophy in Education degree also at the University of Tennessee, Knoxville. She worked for one year as the Magnet Lead Educator at Sarah Moore Greene Magnet Academy and Green Magnet Math and Science Academy before becoming the Assistant Principal at Inskip Elementary School, where she has been for the past three years.