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Preparing special educators: Infusing multicultural educational practices and lesson planning in pre-student teaching fieldwork

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PREPARING SPECIAL EDUCATORS: INFUSING MULTICULTURAL EDUCATIONAL PRACTICES AND LESSON PLANNING IN PRE-STUDENT TEACHING FIELDWORK

by

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ABSTRACT

Preparing Special Educators: Infusing Multicultural Educational Practices and Lesson Planning in Pre-Student Teaching Fieldwork

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This study was designed to explore a model of teaching multicultural principles in special education pre-student teaching fieldwork. The ultimate goal was to ascertain the impact of model components on student knowledge, attitudes, and lesson plan design. Data were collected for 13 weeks during the special education pre-student teaching seminar. The data collection instruments were the *Multicultural/Diversity Content Test* (Ambrosio, 2000), the *Multicultural/Diversity Scale-Revised* (Ambrosio, 1998), and the *Lesson Plan Assessment* (Ambrosio, Hogan, & Miller, 1999). The Special Education pre-student teachers participated in 13 multicultural/diversity lectures/lessons as well as 25% of the participants were observed in their pre-student teaching fieldwork.

The data from this study indicate that the prestudent teacher knowledge base concerning diversity and multicultural issues did not significantly increase over the course of the semester. However, the data do indicate that the attitudes of the prestudent teachers concerning diversity issues did change significantly in the positive direction. This indicates that the participants improved their attitudes about multicultural education and diversity issues after participating in the infused seminar and fieldwork. There were no attitude differences found among students from diverse groups and those not from

diverse groups, among students from different age groups, or between male and female students.

Data from the analysis of the prestudent teachers' lesson plans indicated no significant difference in the diversity objectives or the overall quality of the lesson plans over the course of the semester. However, the data analysis did indicate a significant improvement in the lesson plans concerning the multicultural content of the lesson plans over the course of the semester.

TABLE OF CONTENTS

LIST OF TABLES

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CHAPTER ONE

INTRODUCTION

Educators have begun to explore a variety of constructs and methods to provide educational equity and well-rounded curricular support for diverse students in the public schools of the United States (Cook, Murphy, & Hunt, 2000; Banks & Banks, 2004; Ford & Harris, 1999; Oakes, 2002). This movement was set in motion by Horace Mann in the 1800s (Mann, 1846; Takaki, 1993). Mann believed that all children benefited from a free, quality education and that this education could be a powerful instrument for social change in the country (Mann, 1846).

Scholars and historians have identified a variety of problems concerning educational parity, placement, and quality received by children/youth from diverse cultures, ethnic groups, and language groups (Castelleno, 2003; Fine, 2003; Ladson-Billings & Tate, 1995; Oakes, 2002; Webb-Johnson, Artiles, Trent, Jackson, & Velox, 1998). The current literature indicates that the organizational structure of the American educational system can contribute to the perpetuation of racism and separatism (Brandy, 1984; Carigan, Sanders, & Pourdavood, 2005; Voltz & Fore, 2006). Recent research, court cases, and educational policy have reexamined public education in terms of funding inequalities, teacher quality, and access to curricula for students from diverse groups (Campaign for Fiscal Equality vs New York, 2003; Oakes & Saunders, 2004; U.S. Department of Education, 2001; Oakes, 2002).

To facilitate the resolution of these inequalities, teacher education programs have begun training future educators to work effectively in the diverse classrooms found in

public schools. Thus, teacher education is focusing on the provision of quality educational experiences that are meaningful and purposeful for the needs of all students (Cockrell, Placier, Cockrell, & Middleton, 1999; Delpit, 1995; Price & Valli, 2005).

The Changing Demographics of the United States

The United States currently is experiencing a change in its demographic composition (United States Census, 2006a). This change results in more and more students entering school from increasingly different cultural, linguistic, ethnic, and economic backgrounds. This demographic change not only impacts the American educational system, but student achievement and placement in special education as well (Artiles, Barreto, Pena, & McClafferty, 1998; Artiles, Harry, Reschley, & Chinn, 2002; Ford, 1996; Fernández, Gay, Lucky, & Gavilán, 1998). Compounding this demographic shift is the finding that novice teachers indicate they feel unprepared to work with students from diverse backgrounds (Sleeter, 2001).

Student Enrollment in Public Schools

The percentage of Hispanic, African American, Asian, and Native American students in the United States students is projected to grow, while the ethnicity of the teaching force remains unchanged. In the most current *School Staffing Survey* report, 83% of teachers in the United States identify themselves as White non-Hispanic Americans (NCES, 2006), conversely the student population is comprised of 57.6% White non-Hispanic Americans, 15.6% African Americans, 3.7% Asian Americans, 19.7% Hispanic/Latino Americans, .2% Pacific Islanders, .7% Native American, and 2.5% have who identified themselves as two or more races (NCES, 2007a). This ethnic disparity

between teachers and students can result in dissonance among students and teachers (Kea & Utley, 1998). Thus, teacher education programs must prepare a teaching force to effectively teach students from backgrounds that are different from their own.

African American student enrollment. Students identifying themselves as African American comprise 15.6% of the public school population (NCES, 2007a) and 13.4% of the total population of the United States (United States Census Bureau, 2006a). It is projected that African Americans will make up 14.6% of the total population of the country by 2050 (U.S. Census Bureau, 2004a).

Historically, African Americans and their history have been marginalized in the public schools (Hilliard, 1992; Sizemore, 1990). The impact of this marginalization has been documented in the areas of school achievement, learning styles, student adjudication, over-representation in special education, under-representation in gifted education, cultural and self-identity problems, and the low self-esteem of the students (Boykin, Tyler, & Miller, 2005; Fanon, 1967; Ford, 1996; Fordham & Ogbu, 1986)

Hispanic/Latino American student enrollment. The Hispanic/Latino American population is the fastest growing ethnic group in the United States (United States Census Bureau, 2004a). Currently, Hispanic/Latino Americans make up 14.5% of the total population (United States Census Bureau, 2006b) and 19.7% of the school-age population (NCES, 2007a). By 2050, the projected population of Hispanic/Latino Americans in the United States will be 24.4% of the total population (United States Census Bureau, 2004a).

Hispanic/Latino students are a heterogeneous ethnic group representing a variety of cultural groups (e.g. Mexican, Cuban, Puerto Rican). Thus, factors that affect student

experience in school may be impacted by the country of origin, years in United States, educational experience of the parents, languages spoken at home, and the variety of cultural expectations of the group to which the student belongs (Berriz, 2006; Castelleno, 2003).

Asian American and Native Hawaiian/ Pacific Islander student enrollment. Until the 2000 Census, data on Asian Americans also included Americans native to Hawaii and the Pacific Islands. Beginning with the 2000 Census, the historical five categories of race changed to seven, to include Pacific Islander, mixed race, and places for the respondent to specify their native country and the combination of mixed race.

The Asian American population is currently 4.8% of total United States population (United States Census Bureau, 2006b) and 3.7% of school population (NCES, 2006). Projections are that the Asian American population will grow to 8.0% by 2050 (United States Census Bureau, 2004a).

The Asian American population is comprised of people from across the continent of Asia (e.g. Hmong, Vietnamese, Chinese, Korean). Due to the differences in the cultural, linguistic, and economic groups found among the Asian communities, there are very different issues facing Asian American students depending upon the family's culture. A common stereotype of Asian American students, that can be very detrimental, is that they are model students (Ngo, 2006).

The percentage of Native Hawaiians/Pacific Islanders in American school is .2% (NCES, 2007b) and .3% of the total population (United States Census Bureau, 2006b). Projection data have not been calculated for this group.

Native American student enrollment. The percentage of Native American students in American schools is .7% of the school population (NCES, 2006) and 1.8% of the total population of the United States (United States Census Bureau, 2006b). These percentages represent Alaskan Natives and Continental Native Americans. These students, though a small percentage of the country's population, are unique and come to school with issues that differ from other cultural groups (McCarty, Romero-Little, & Zepeda, 2006; Tharp, et al., 1999). Issues specific to this group involve a history of rejection, deception, and abuse from the federal government. Policies adopted have been credited for stripping tribes of their culture, language, values, religion, and land (McCarty, Romero-Little, & Zepeda, 2006; Takaki, 1993).

White Non- Hispanic student enrollment. The White non-Hispanic American population is decreasing in the United States (United States Census Bureau, 2004b). White non-Hispanic Americans represent 57.6% of the school population (NCES, 2006) and 67.4% of the total population of the country (United States Census Bureau, 2006b). Projections indicate a decrease in the White non-Hispanic population to 50.1% by 2050 (United States Census Bureau, 2004a). In addition to ethnic diversity within the White non-Hispanic culture (e.g. Polish, English, Italian), there are other issues of diversity as well. The most profound involves the economic diversity found within the group. The poverty rate for White non-Hispanics is at the 14.4% level of the general population (United States Census Bureau, 2006b).

Linguistically diverse student enrollment. Students with Limited English Proficiency (LEP) and who receive services in the public schools represent approximately 11% of the total school population (NCES, 2006). In the United States, 20% of children, over the age

of five, speak a language other than English at home and 11% receive services in school to assist with English acquisition (NCES, 2007b). Currently, there is an over representation of Limited English Proficient students in special education programs (Artiles, Rueda, Salazar, & Higareda, 2005; Artiles, Trent, & Palmer, 2004; Castelleno, 2003; Garcia & Cueller, 2006).

Composition of the Public School Teaching Force

There are 3,066,272 teachers working in American schools (NEA, 2006). Many of these teachers feel they are not prepared to teach culturally, ethnically, and linguistically diverse students (George & Aronson, 2002). The most recent demographic information indicates that the mean age of the American schoolteacher is 42-years old and that the mean age of first year teachers is 29-years old (NCES, 2005). Many teachers are considered non-traditional and have work experience in other fields prior to becoming educators (National Center for Education Information, 2005).

Ethnicity. The majority of teachers (83.3%) in the United States identify themselves as White non-Hispanic (NCES, 2006). The composition for other ethnic groups is 7.8% African American, 1.4% Asian American, 6.2% Hispanic/Latino American, .2% Pacific Islander, .5% Native American, and .7% identified as more than one ethnic group (NCES, 2007b). This lack of diversity among teachers may impact students through the perpetuation of stereotypes about authority and White non-Hispanic Americans, development of self-esteem, overrepresentation of children from diverse groups in special education, and over representation of White non-Hispanic Americans and Asian Americans in gifted education programs (Ford, 1998).

Gender. Seventy-five percent of the teachers in the United States are women (NCES, 2005; NEA, 2006). While the teaching force is predominately female, school enrollment is comprised of 51.1% male students and 48.1% female students (United States Census Bureau, 2007). Research indicates that male students need male role models during their developmental process (Mills, 2000). The lack of male teachers within the educational system may have an impact on the academic and social success of male and female students in ways that research has yet to determine.

Economics. In 2005, the average yearly salary for teachers was $47,674 (NEA, 2006) while the average yearly salary for non-teachers was $46,037 (United States Census, 2006a). The three-year average income from 2003-2005 in the United States varies among ethnic groups (U.S. Census, 2006b). For example, White non-Hispanic Americans earn $50,677, Asian Americans earn on average $59,877 a year, African Americans earn approximately $31,140 a year, Hispanic/Latino Americans earn $35,467 a year, Pacific Islanders earn $54,318 a year, and Native Americans earn $33,627 (U.S. Census, 2006b). Currently, there are 36,950,000 people living at or below the national poverty level (U.S. Census 2006a). The threshold of poverty for a family of four is $21,200 (U.S. Census, 2007). There are 13,360,273 children (18.5% of the total population) living in poverty in the United States (U.S. Census, 2006b).

These demographic data indicate the diversity in the United States and its public schools. This diversity can result in a cultural, linguistic, ethnic, and economic gap among teachers, families, and students. With the population of the United States projected to become increasingly diverse (U.S. Census, 2004b), it is important for Colleges of Education to begin to address the varied diversity issues that teachers will

encounter in the classroom. The importance of multicultural education in teacher training can not be underestimated (Gay, 2003).

Participants in Teacher Education Programs

Most pre-service teachers have little experience with cultures and/or ethnic groups that differ from their own (Sleeter, 2001). This lack of knowledge makes it difficult for potential educators to address the needs of the culturally, linguistically, and economically diverse students who reside within their care (Howard, 1999; Delpit, 1995; Diller & Moule, 2005). Without validation from their teachers, it is likely that these children/youth will experience a sense of alienation that may lead to poor academic learning, behavior problems, and ultimately dropping out of school (Davison, Guerrero, Howarth, & Thomas, 1999).

This provides teacher education programs with a challenge because the preparation of educators to work with students from diverse cultural, ethnic, and linguistic backgrounds is multifaceted. It involves training teachers to: (a) recognize their own biases while they maintain high expectations for all students, (b) provide environments that are supportive and encompassing of the diversity represented by the students and their families, and (c) work on reducing prejudices that may exist within their school (Stephan & Stephan, 2004). The inclusion of multicultural education in teacher preparation programs provides a theoretical and pedagogical framework through which teachers can participate in the reform of American education in order to provide for educational equality (Banks & Banks, 2004).

Multicultural Education

Multicultural education focuses on the precepts of respect, cultural difference, multiple perspectives, and interconnectivity. The basic tenets that drive multicultural education have evolved as a response to stereotypes, prejudices, and cultural clashes (Banks & Banks, 2004). Multicultural education is a vehicle through which students and teachers have the opportunity to learn about the world from the perspective of diverse groups and address inequalities and social injustices that occur in society (Ladson-Billings, 1995).

Definitions of Multicultural Education

There are a variety of definitions describing multicultural education. The definitions focus on the intersection of ethnicity, class, and gender and the resulting impact on education (Banks & Banks, 2004). The definitions of multiculturalism appear to depend on the research interests of the scholar; however, typically they focus on cultural pluralism, social justice, ethnic studies, and the change of educational curricula in the school environment.

The National Association for Multicultural Education (NAME) defines multicultural education as a philosophical concept built on the ideals of freedom, justice, equality, and human dignity (2003). The goal is to value cultural differences and cultural pluralism as well as promote democratic principles. This includes developing a positive self-concept in students through accurate knowledge about the histories, cultures, and contributions of diverse groups (NAME, 2003).

Gay (1994) views multicultural education in terms of the diverse groups represented. She maintains that there are different multicultural definitions based on the research

perspectives of the author (Gay). However, she believes that cultural pluralism and equality must be focal points of the research. Gay (2004) identifies the common threads of multicultural education as: (a) ideals based upon a common set of assumptions, (b) specific issues and concerns, (c) active guidelines, and (d) the desire to make cultural pluralism and ethnic diversity a priority in the educational process.

Multiculturalism involves multiple studies of culture and cultural practices as well as the exploration of the relationships between ethnicity, class, and gender according to Ladson-Billings (2004). Ladson-Billings uses *Critical Race Theory* (CRT) to provide a structure for understanding inequality and the traditional roles of hierarchy in a society (Ladson-Billings, 2005*). Critical Race Theory* is based on four major precepts: (a) racism as part of the normative structure of American society, (b) the emphasis of society on property rights rather than human rights, (c) the relationship and intersection of ethnicity and property, and (d) the intersection of people of color and White non-Hispanic Americans (Ladson-Billings, 1995, 1999, 2004). The theory also uses personal narratives and stories to provide multiple perspectives for the analysis of inequalities (Ladson-Billings, 1999).

Multicultural education is defined as anti-racist education by Nieto (2003). She maintains that educators must challenge all forms of discrimination in school and society in order to affirm cultural pluralism. When implemented properly, multicultural education creates an environment in which students, teachers, families, and community work together to create a new societal standard (Nieto).

These definitions indicate that multicultural education is many things. Primarily it challenges traditional thought and urges educators to work toward an understanding of

existing biases and prejudices. The ultimate goal is to provide an equitable and encompassing education for all students.

Components of Multicultural Education

In 1987, Banks created a model of multicultural education comprised of five components: (a) content integration, (b) knowledge construction, (c) equity pedagogy, (d) school culture and its social structure, and (e) prejudice reduction. Content integration occurs when teachers use examples from a variety of cultures to make key points and generalizations. The knowledge construction process involves participates in the investigation of the formation of biases and the impact of biases on the production of information. Equity pedagogy involves teachers in recognizing and modifying their instruction to meet the needs of culturally and linguistically diverse students to promote achievement.

Empowering the school culture and social structure is defined as the reformation of attitudes, beliefs, curricula, assessments, and modes of instruction to promote the equal status of all groups who exist within the school. Prejudice reduction is the incorporation of activities and information to promote positive images of racial, ethnic, and cultural groups. Through these components, students and teachers are provided with multiple viewpoints of history in order to develop positive self-images of people, reduce prejudice, and be prepared to participate in a world that is interdependent (Banks & Banks, 2004).

Sleeter and Grant (1994) identified the components of multicultural education as: (a) teaching exceptionality and cultural differences, (b) human relations, (c) single group studies, and (d) socially reconstructionist thinking. These components recognize the differences among cultures, the stories and perspectives of people from these cultures,

and the development of the needs of students from a variety of groups. The goal is to provide teachers and students with the tools to analyze oppression, injustice, and inequalities as well as the skills to participate in social change.

Another view of multicultural education maintains that it is a tool for social change and transformation (Howard, 1999). Howard addresses the needs of White non-Hispanic American educators as they work toward personal transformation and recognizing the effects of *whiteness* on their experiences. The transformative process involves discussions of the negative past and present experienced by marginalized groups and the impact of white dominance and power. The purpose is to inform and empower teachers and students so that they challenge the discrepancies of social justice and inequalities in the United States.

While the definitions of multicultural education are based on the various philosophies of scholars, there is a common thread that ties the definitions together. They all focus on training educators and students in the development of awareness, acceptance, and personal action. Multicultural education also gives voice to groups of people who have been silenced through the traditions of dominant culture while bringing to light the privilege and practices that have silenced these groups. The ultimate aim is to create educators who take responsibility for social justice in the schools in which they teach. Addressing diversity and multicultural education in pre-service training prepares teachers to reach students from diverse backgrounds, recognize their personal biases, and provide knowledge and resources to meet the needs of culturally linguistically diverse students (Cho & Ambrosetti, 2005). Multicultural education benefits White non-Hispanic students as well as it gives students who may not have the context or information to explore other

cultures. This in turn can provide the venue to discuss issues like inequality, racism, sexism and the effects of institutions to promote critical thinking and social justice (Willis, 1996).

Standards for Teacher Education and Diversity Training

National teacher accreditation groups and professional organizations have developed standards regarding multicultural education, cultural competence, and diversity (NCATE, 2002; CEC, 2003; TEAC, 2006; INTASC, 1992). The standards address guidelines for teacher preparation programs to follow pertaining to assessment, language, curricula, working with diverse groups, field experiences, and research. These national associations recognize the importance of respect, acceptance, and diversity on the academic and social outcomes of students and families.

National Council of Accreditation of Teacher Education Standards

The National Council of Accreditation of Teacher Education (NCATE) is one of the major national accreditation organizations of Colleges of Education. Standard Four of NCATE was adopted in 1987 to address the need for teacher education programs to design units, implement lessons, evaluate curricula, and provide experiences that facilitate the learning of all students. This standard requires teacher education programs to create experiences and classes that focus on working with diverse faculty, peers, and students. Specifically, the standard deals with students from diverse racial, ethnic, and economic groups. Specific foci are the influence of culture on learning and teaching styles, the importance of being culturally responsive, and the impact of equity and fairness on all students (NCATE, 2002).

The Teacher Education Accreditation Council

The Teacher Education Accreditation Council (TEAC) is a non-profit organization that oversees the accreditation of teacher education programs. Multicultural Perspectives are recognized as dimensions of the first TEAC quality principle, *Evidence of Student Learning.* In this principle, preservice teachers are required to present evidence of their understanding of the influence of race, gender, and individual difference on educational outcomes as well as the significance of these factors in relation to ethnicity, cultural perspectives, and education (TEAC, 2006).

The Interstate New Teachers Assessment Consortium

The Interstate New Teachers Assessment Consortium (INTASC) is a group of state and national educational agencies and organizations that are working on reforming teacher preparation programs, state licensing, and professional development for educators. Principle Three of INTASC's Professional Standards focuses on the need for teachers to be able to identify and design instruction for students with diverse needs. The knowledge section of this standard identifies students with diverse needs as students with diverse abilities, students whose first language is not English, and students with culture and community differences. Within the disposition section, INTASC supports teachers holding high expectations for all students and the teacher being committed to excellence, respect, and valuing human diversity (INTASC, 1992).

Council for Exceptional Children Standards

The Council for Exceptional Children (CEC) is a professional organization that advocates for the education of children with disabilities. One of the policies of CEC is to address the needs of students from diverse ethnic and linguistic backgrounds (CEC,

2003). This includes the need to provide culture-free assessments, the provision of assessment in the student's dominate language by an examiner fluent in the language and familiar with cultural norms, curricular adaptations that include diverse and multicultural perspectives, and the use of culturally relevant materials (CEC, 2003). Other provisions include requirements for children with disabilities who come from migrant families in terms of planning, graduation credits, research, training, family support, and transference of records.

Current Multicultural Practices in Colleges of Education

Since the addition of the diversity standard by NCATE, all NCATE accredited Colleges of Education have made curricular and field experience changes to meet the needs of pre-service educators (NCATE, 2007). However, there is a lack of consistency throughout the country with a variety of diversity/multicultural models being used to meet the requirements (Brown, 2004a). Some colleges have added a multicultural class to the core courses taken by education majors (Melnick & Zeicher, 1998). While other colleges have changed fieldwork experiences to ensure that pre-service teachers have experiences in diverse settings (Brown, 2004b). It appears that Colleges of Education are exploring instruction, curricula, and attitudes surrounding the premise of multicultural education as they move to include it (Brown, 2004b; Ambrosio, Seguin, Hogan, & Miller, 2001; Anast & Ambrosio, 2002).

Colleges of Education have attempted to meet the requirements of the accreditation organizations for diversity, multicultural education, and cultural competency though a variety of means (Bennett, 2001; Brown, 2004b; Gerstein, 2000). These include stand-

alone multicultural education courses, infused curricula, and hybrid courses that include fieldwork and practica experiences in diverse schools (Cho & DeCastro-Ambrosetti, 2005; Bennett, 2001; Brown, 2004b; Gay, 1997; Gerstein, 2000; Wasonga & Piversal, 2004).

Infused Multicultural Curricula

In the infused multicultural model, instruction and curricular practices are infused across coursework. This is based on the belief that students are likely to emulate the teaching style of their college professors in their own classroom teaching (Gay, 1997). The infusion of multicultural curricula includes the opportunity for pre-service teachers to learn the integration of multicultural instructional and curricular principles through observation of their professor teaching and the subsequent modeling of the behavior (Wasonga & Piversal, 2004). Jenks, Lee, and Kanpol (2001) suggest that infused curricula not be limited to classes within the College of Education, but expanded throughout the university community to include speakers, service learning projects, and organizational projects that promote cross-cultural pluralism and social transformation.

Stand-Alone Multicultural Courses

The stand-alone multicultural model involves one course being designated as the multicultural course. This course addresses issues related to cultural diversity and presents basic information concerning the learning and teaching styles of students based on culture as well as an overview of linguistic, ethnic, gender, disability, economic, and sexual orientation information. Often students reflect upon their own culture and how it impacts their education, career, lifestyle, values, and interests (Singer & Smith, 2003).

Fieldwork and Multicultural Training

When multicultural training is included in fieldwork, student teachers are placed in classrooms in a variety of settings to enhance exposure to different ethnic, economic, and language groups. In these classrooms students observe teachers instructing in culturally responsive ways while they adapt their instructional style to fit the learning style of students (Jenks, Lee, & Kanpol, 2001). Experiences allow preservice teachers to participate in the reality that teachers encounter while still having support and access to their university instructor and classmates.

Statement of the Problem

With the changing demographics of the United States and the lack of change within the teaching profession, there is a continuing gap between teachers, students, and families based on culture, ethnicity, economics, and language. This gap can impact student achievement, parental involvement, and teacher expectations (Delpit, 1995; Kea & Utley, 1998; Klingner et al., 2005).

Currently, teacher education accrediting and professional organizations require Colleges of Education to focus on the needs of diverse student populations (CEC, 2003; NCATE, 2002; INTASC, 1992; TEAC, 2006). The goal of this requirement is to produce educators who recognize the similarities and differences of the children and families with whom they work. These similarities and differences include ethnicity, language, economics, disabilities, sexual orientation, religion, and culture. Even though the accrediting organizations have recognized the principles of multicultural education as *best practice,* pre-service teachers report that they are under-prepared to teach diverse learners upon graduation (Valentin, 2004).

Colleges of Education have incorporated multicultural education in a variety of ways (e.g. infused, stand-alone courses, fieldwork). Research indicates that preservice teachers exposed to diversity issues through interactive experiences (e.g. field experiences, self-reflection) develop more positive attitudes concerning multicultural issues (Brown, 2004b). However, research also indicates that pre-service teachers still lack the desire to become culturally competent in their instructional practices (Dee & Henkin, 2002). Because teacher education programs are comprised of students who are predominately White non-Hispanic American and public school classrooms are becoming increasingly more diverse, Colleges of Education have an ethical responsibility to train teacher candidates to meet the needs of the students they teach. This involves a focus on culturally relevant practices, the principles of multicultural education, and the understanding of the academic achievement of culturally and linguistically diverse students.

This study will extend the present research through the: (1) analysis of pre-student teacher attitudes concerning multicultural education practices, (2) provision to pre-student teachers of a model to use in including diverse and multicultural components into their lesson plans, and (3) provision of lectures designed to challenge pre-student teacher's current views and attitudes concerning multicultural education and diversity.

Research Questions

The research questions that will be addressed in this study are:

Research Question One. Does participation in multicultural training during fieldwork impact special education pre-student teacher's multicultural teaching knowledge?

Research Question Two. Does participation in multicultural training during fieldwork have an effect on the inclusion of multicultural components into the lesson plans of special education pre-student teachers?

Research Question Three. Does participation in multicultural training during fieldwork impact special education pre-student teacher's attitudes toward diversity?

Research Question Four. Are there differences in the multicultural attitudes of special education pre-student teachers who are from culturally and linguistically diverse backgrounds and those who are not?

Research Question Five. Is age a factor in the multicultural attitudes of special education pre-student teachers?

Research Question Six. Is gender a factor in the multicultural attitudes of special education pre-student teachers?

Significance of the Study

This research is important for several reasons. It contributes to the knowledge base of teacher education concerning: (a) training special education pre-student teachers in terms of the theories, purposes, and goals of multicultural education, (b) providing practices that address accreditation diversity standards, (c) training special education pre-student teachers to integrate multicultural components into curricular and classroom practices, (d) providing curricular modifications that are aligned with the goals of multicultural education, and (e) tracking the use of multicultural lesson plans throughout special education pre-student teaching. Results from this study will provide special education

programs insight into methods concerning the integration of multicultural education into fieldwork.

Limitations

The limitations of this study are:

1. The study is limited to special education pre-student teachers. Training with different groups of students (e.g. elementary education, secondary education, or students at other stages of program completion) may result in different findings.

2. The study is limited to thirteen instructional sessions. More lessons may result in different findings.

3. The special education pre-service teachers who participated in this study were a non-random sample. Students participating in the study were enrolled in a special education pre-student teaching course. Students chosen from a random sample may yield different findings.

4. The small size of the sample may affect the results of the study. A larger sample size may yield different results.

5. Students that participated in this study had already taken a stand alone multicultural course in a previous semester; they may have felt that they knew the information being presented in the lecture. This could have impacted the results of the students' knowledge acquisition. Students that have not participated in previous multicultural training may yield different results. .

Summary

Teacher education programs are attempting to develop the best multicultural format to fulfill the diversity standards of NCATE, CEC, INTASC, and TEAC as well as prepare pre-service teachers to meet the changing demographics of the classroom. Programs have offered stand-alone multicultural classes, infused multicultural courses, and multicultural field experiences to prepare pre-service teachers. However, these experiences can be fragmented and may not result in student understanding of diversity issues (Gay, 2003). Recent suggestions concerning the preparations of pre-service teachers for an increasingly diverse classroom include fieldwork and ongoing multicultural experiences (Valentin, 2006).

This study will focus on the inclusion of multicultural education in special education fieldwork. The goal is to provide training for special education pre-student teachers focusing on diversity issues and the inclusion of these issues in lesson plans and classroom instruction. The training provided in this study is based on the need for teachers to become culturally responsive educators as they work to address the issues of equality in their classrooms (Diller & Moule, 2005).

Definitions

The following terms are used in this study. Their interpretations are important to the understanding of the study.

Assessment. Assessments are testing procedures implemented for the purpose of making data-based decisions. Methods of assessment include norm-referenced, criterion referenced, surveys, interviews, observations, and informal assessment (Sattler, 2001).

Bias. Bias occurs when one group (e.g. ethnic, disability, age, gender) is favored or portrayed inaccurately. Forms of bias include invisibility, stereotyping, imbalance, selectivity, unreality, fragmentation, linguistic, and cosmetic (Sadker, 2007).

Community. A community is formed based on relationships that provide shared emotions, common interests, ideas, history, purpose, beliefs, values, and perspectives (MacQueen, et al., 2001).

Culture. Culture is defined through shared history, religion, language, geographical region, ability, socioeconomic level, and values of a group of people (Gollnick & Chin, 1994).

Cultural competence. Cultural competence is a set of behaviors, attitudes, and policies that coalesce among professionals in a school and become the standards of a school when addressing cross-cultural issues (Cross, Bazron, Dennis, & Isaacs, 1989).

Cultural hegemony. Cultural hegemony involves basing curricular and educational standards on the rules and customs of a dominant group in terms of ethnicity, class, ability, sexual orientation, and gender (Sleeter, 2001).

Cultural pluralism. Cultural pluralism is based on the principles of equity, human rights, and social justice. The focus is on the maintenance of culture, language, and heritage by diverse groups (Bennett, 2001).

Culturally and linguistically diverse. The term culturally and linguistically diverse (CLD) encompasses people for whom English is not their first language and people whose culture is not White non-Hispanic based (NCEL, 2004).

Culturally relevant. Cultural relevance is teaching through student strengths, prior experiences, and culture (Ladson-Billings, 1995).

Culturally valid. Culturally valid instruments or strategies consider the impact of socio-cultural norms (e.g. language, norms, and values) upon students (Solano-Flores, 2000).

Critical consciousness. Critical consciousness is the process by which an educator evaluates and analyzes his/her cultural beliefs pertaining to their culture and other cultures and how the beliefs impact their teaching and learning in school (Gay & Kirkland, 2003).

Critical pedagogy. Pedagogy that is critical uses teaching methods that facilitate the questioning and challenging of beliefs and practices of the dominate society (Friere, 1970).

Diversity awareness. Diversity awareness involves an individual in a variety of explorations based on diversity (e.g. language, race, ethnicity, gender, social economic status, sexual orientation, geographic area) (Valentin, 2006).

Educational equality. Educational policies that equalize resources and opportunities for students and communities by providing needed resources are educational equity (Banks & Banks, 2004).

Integration of multicultural components. The process of infusing multicultural principles into curricula, learning environments, and the culture of an institution is integration of multicultural components (Banks & Banks, 2004).

Lesson Plan. The lesson plan includes the objectives of the lesson, method of instruction, opportunities for modeling, practice, mode of evaluation, and accommodations for students with special needs (Spooner et al., 2007).

Multicultural component. A multicultural component is a section of a curriculum that focuses on multicultural education, diversity, and/or cultural competency (Banks & Banks, 2004).

Multicultural education. Multicultural education focuses on action-based social justice and democratic principles (Nieto, 2003).

Multicultural instructional methods. Multicultural instructional methods uphold the principles of multicultural education (e.g. goals of social justice, cultural competency) (Banks & Banks, 2004).

Teacher education. Teacher education based at a university/college prepares teachers within a degree-seeking program that includes coursework (i.e. general studies, content, studies pedagogical, fieldwork experiences) (NCATE, 2007).

Teacher expectations. Teacher expectations evolve from beliefs held by teachers and ultimately influence the level of encouragement and promotion of achievement for students (Richards, Brown, & Forde, 2007).

Teacher philosophies. A teacher's philosophy guides their personal beliefs pertaining to teaching and learning and directs their decisions, relationships, and instruction in the classroom (Schowotter, Sokal, & Taylor, 2002).

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The relationship between the diverse populations of the United States has been a topic of discussion since the arrival of the early explorers (Adelman, 2003). Typically, public schools have been the place in which different cultural, linguistic, and economic groups intersect in terms of student achievement, academic tracking, bias in school, curricula, and over-representation/under-representation in educational programs (e.g. special education, gifted education) (Artiles & Trent, 1994; Ford & Harris, 1998). Over the last few decades, education has attempted to address the inequalities found in public schools (Brown v. Board of Education, 1954; Campaign for Fiscal Equality vs New York, 2003; Oakes & Saunders, 2004; Orfield, Losen, Wald, & Swanson, 2004). Colleges of Education are addressing the creation of culturally competent educators through training programs as well as fieldwork (CEC, 2003; INTASC, 1992; NCATE, 2002; TEAC, 2006).

Issues That Support Multicultural Education

Over the last forty years, reports and research regarding the achievement and opportunities for African American, Hispanic American, and Native American children/youth indicate that inequities continue to exist in public education (Heller, 1969; NCCREST, 2006). The data indicate achievement gaps between African American students and their White non-Hispanic peers as well as among children/youth from different economic groups (Chatterji, 2006; Chapin, 2006). The research also indicates

inequitable discipline practices for children/youth from diverse groups (Gregory & Mosely, 2004), overrepresentation of African Americans, Hispanic Americans, and Native Americans in special education, and under-representation of these students in gifted education (Artiles & Trent, 1994; Coutinho & Oswald, 2000; Ford, Grantham, & Whitling, 2008; Zhang & Kitsiyannas, 2002).

In response to these findings, efforts to identify solutions and isolate variables that impact all student achievement have focused on teacher practices in the classroom. Research indicates that there may be a mismatch of curricula, teaching practices, and teacher attitudes to student needs (Lovelace & Wheeler, 2006; Skiba et al., 2005). Another factor that exacerbates this mismatch between teachers and students is the homogenous make up of educators. While the student population is increasingly diverse (NCES, 2006), 83% of the teachers have identified themselves as White non-Hispanic, 75% as female, with incomes in the middle-class range. It may be that the homogeneity of the teaching force impacts educators' ability to recognize their own biases or prejudices concerning the ethnicity or income level of their students (Cartledge & Kourea, 2008; Ford, Grantham & Whitling, 2008; Sleeter, 2001).

The field of multicultural education attempts to address many of these issues through the ideals of social justice, cultural pluralism, ethnic studies, and changing the school curricula in order to foster cultural relevancy (Ambe, 2006; Banks & Banks, 2004; Terrill & Mark, 2000). Accreditation agencies and professional organizations recognize multicultural principles as best teaching practices and encourage teacher education programs to focus on culturally and linguistically relevant teaching for preservice educators (CEC, 2003; INTASC, 1992; NCATE, 2002; TEAC 2006). These tools provide

new teachers with effective teaching practices, information, and experiences relating to the variables linked to positive student outcomes such as achievement, referrals to special education, drop out rate, and the cycle of poverty (Artiles & Trent, 1994; Cartledge & Kourea, 2008; Hermes, 2005).

Academic Achievement

In an attempt to address the growing achievement gap between students from diverse groups and White non-Hispanic students, research has focused on the unique learning characteristics of the various groups (Coutinho & Oswald, 2000; Zhang & Katsiyannis, 2002; NCCREST, 2006). The goal of the research is to identify the various components impacting academic equity and success among the various populations (NCCREST, 2006).

Students from Diverse Backgrounds. The National Early Childhood Longitudinal Study (NECL) attempted to identify variables that impact student reading achievement (Chatterji, 2006). Using a series of one-way, random ANOVAs and hierarchical linear models to determine variance, as well as item-response theory to develop scaled scores, data from 2,296 students in 184 schools were reanalyzed to isolate variables and identify specific demographic groups most impacted by low reading achievement. The focus of the study was to identify: (a) the size of the achievement gap in reading by ethnicity, gender, and socio-economic group as well as whether or not the gap increased between kindergarten and first grade; (b) the impact of the pre-kindergarten reading level on the first-grade reading level after socio-economic variables were controlled for and whether subgroup membership resulted in within school differences; (c) the school variables that

influence first grade reading achievement; and, (d) the difference in achievement based on subgroup membership.

Responses from a questionnaire completed by teachers, administrators, and parents to identify the school factors impacting student achievement were analyzed. The sample for this study was extracted from the initial data set comprised of three points of reading achievement (kindergarten, beginning of first grade, and end of first grade), data on gender, and poverty level. Scores from the end of first grade were used as the dependent variable, while scores from kindergarten were used as predictors in student achievement (Chatterji, 2006).

The analyses indicated that all students, regardless of ethnicity, made gains in reading achievement (Chatterji, 2006). However, African Americans, boys, and students living in poverty were identified as having greater educational needs than the other subgroups (e.g. Asian Americans, Hispanic Americans, girls, White non-Hispanics, students from families with high incomes). African American students were half of a standard deviation lower in reading scores than White non-Hispanic students in the first grade when poverty and gender were controlled. For this group of students the academic gap between the beginning of first grade and the end of first grade grew larger. Hispanic American students did not have a significant gap in achievement once gender and poverty were controlled for, while Asian American students began kindergarten with a reading score that was higher than scores of White non-Hispanic students, but lost this advantage after first grade. Students living in poverty, when ethnicity and gender were controlled, were half a standard deviation below their peers in reading scores than those in higher economic groups. By the first grade, students living in poverty scored significantly below

in academics compared to their peers not living in poverty. The reading scores of boys were lower than girls upon entering kindergarten and again at the end of first grade.

Other statistically significant data focused on attendance, parent/student reading time, African American students, and all other ethnic groups. Schools with higher attendance rates had higher academic scores for African American children. However, after the completion of the first grade, African American students were still three instructional units behind their peers. In terms of the amount of time parents reported reading with their child, the data indicated that as parental reading time increased, the reading scores of the African American students increased (Chatterji, 2006).

The findings of this study indicate schools that increase reading time had higher reading achievement (Chatterji, 2006). The author suggested that schools employ models of reading with more opportunities to read and provide scaffolded instruction in learning to support the reading development of African American children and students who live in poverty.

Using data from the National Educational Longitudinal Study (1990), Stewart (2007) explored the individual and school characteristics of African American students thought to impact achievement. The study focused on data from 1,238 tenth grade African American students from 546 schools. The study was based on research questions dealing with academic achievement and student effort, academic achievement and parental involvement, academic achievement and high school cohesion, academic achievement and school social problems, academic achievement and enrollment of culturally and linguistically diverse students, academic achievement and urban location, and academic achievement and school poverty.

The data analyzed were the results of a survey conducted during the National Educational Longitudinal Study (1990). The survey was completed by students, administrators, and teachers. Student effort data were collected through survey questions relating to school environment, attachment to school, and commitment to school. The involvement section on the survey focused on student involvement in school-based activities (e.g., honors, club, band) with the choices of *did participate or did not participate.* The attachment subscale measured students' positive feelings about school. The school commitment subscale measured the student commitment to their education. The subscale concerning association with positive peers measured student beliefs about having peers who were engaged in school and valued school. The parent-school involvement scale focused on parents volunteering and coming to school meetings. The parent-child discussion subscale measured the frequency of conversations between the parent and the student concerning school related issues. Demographic information collected focused on poverty, family structure, and socio-economic status.

Data from school administrators focused on issues relating to school social problems (e.g., gang activity, racial/ethnic conflict, and robbery). Students also completed the subscale and indicated if they had encountered problems with theft, threat to physical violence, and drugs at school. Teachers completed a nine question subscale to rate trust, positive teacher/student/administration interactions, and school expectations.

Analysis was conducted using a series of regression models. Model one included grade point average and student individual level variables. Model two included the structural and school-based variables. Grades were used as the dependent variable in the analyses with students reporting grades in math, English, history, and science. Results

from first model indicated that school attachment, school commitment, positive peers, and parent-child discussions were significant. Model two reflected that school cohesion was significant.

Stewart (2007) concluded that it is important to isolate the key variables that are influencing the student achievement for African American tenth grade students. It appears that students who feel supported by teachers and care about their own education are able to make connections with the school and fellow peers with similar educational goals. It also appears that students who talk with their parents about education do better in school.

Stewart (2007) recommends that educators acknowledge the power in a cohesive school. She suggests that emphasis be placed on cooperation between teachers and administrators as they consider their expectations for student success. She maintains the need for teacher training in the areas of motivation and parent interaction. She also recommends a multicultural approach to sensitivity training.

In a similar study, Chapin (2006) explored data collected in the Early Childhood Longitudinal Study to ascertain the social studies and science skills children had at the beginning of kindergarten and at the end of first grade. The goal was to examine the relationship of skills acquired in comparison to race and gender. The study used the scores of 13,820 students from the General Knowledge Test, an assessments created for the purpose of assessing the kindergarten sample of the Early Childhood Longitinual Study.

The analysis compared the mean scores of the students with demographic variables (e.g., race, socio-economic status, number of siblings, language spoken at home).

Additional analysis used a Spearman correlation coefficient to the compare scores of the General Knowledge Test from spring and fall to ascertain the gains for the children from kindergarten to the first grade.

Results indicated that scores from the General Knowledge Test were strongly correlated to the level of education of the mother, two-parent households, English as the home language, and the family not receiving welfare. All students achieved higher in first grade then they did in kindergarten. However, African American students scored the lowest, on average one full standard deviation below their white non-Hispanic peers. Hispanic students also were significantly behind their white-non-Hispanic peers. Differences based on gender were not significant.

Chapin (2006) concluded that policies must be improved and expanded to assist young children as they enter kindergarten to create a level knowledge base. Without these policies, this gap will continue to exist throughout the school career of a child. Her suggestions include all day kindergarten, providing only certified teachers in schools in poverty areas, and strong school resources.

Southworth and Mickelson (2007) explored the relationship between race and gender and the tracking of twelfth grade students in a school district that had been forced to desegregate, of eleven schools only five had been found to be racially balanced. Surveys were completed by 1,334 students in their senior English class. The demographics of the students were: 434 white non-Hispanic males, 436 white non-Hispanic females, 205 African American males, and 267 African American females across eleven high schools. Variables in the survey included the academic track of the student (e.g., advanced placement, advanced, academically gifted, international baccalaureate, and non-college

track), gender, race, socioeconomic status as measured by parents' education and occupation, student grade point average, prior achievement from sixth-grade test scores, percent of years spent in a segregated elementary school, and student affiliation with college-bound peers.

Analysis was conducted with a multivariate logistic regression hierarchical linear model. Results from model one indicated that white non-Hispanic males where more likely to be enrolled in college preparatory English than White non-Hispanic females, white females were more likely to be enrolled than African American females, and African American females more likely to be enrolled than African American males. The second model of analysis indicated that college-track English participation decreased as the African American population increased in a school. Overall, the likelihood to be enrolled in college track classes increased for all students the more their friends had similar goals, the higher their parental education, the higher the grade point average, and the higher their sixth grade test scores. The variable that had the most negative significance concerning student participation in college preparatory English was the student's attendance in a segregated elementary school. The model three analysis indicated that the higher the percentage of African American students in a school, the greater the likelihood of other ethnic groups being in college track courses. However, African American students in schools that were predominately African American were more likely to be in college track classes than were when they attended racially-balanced schools.

Southworth and Mickelson (2007) concluded that public education is imbalanced and that this impacts different groups of students in various ways. They maintain that tracking

is a within school segregation policy. This policy creates a segregated learning environment in respect to race and gender and this ultimately impacts post-secondary education. They also concluded that tracking is a systematic perpetuation of social inequity.

Students living in poverty. Poverty in the United States is defined by the United States Census as a family of four earning $21,200 a year (U.S. Census, 2007). This results in approximately 14% to 25% of children/youth living in poverty, with one out of three living in urban areas (U.S. Census). Unfortunately, the stereotype is that these children/youth are from diverse backgrounds. However, the Census indicates that 14% of children/youth living in poverty are White non-Hispanic (U.S. Census).

In an attempt to answer the question of poverty in relationship to special education, Skiba, Polani-Staudinger, Simmons, Feggins-Azziz,& Chung (2005) explored the impact of socio-demographic and poverty-related variables on ethnic disproportionality in special education. Using data from the State of Indiana, a logistic regression analysis was used to analyze the effects of race, poverty, district resources, and outcomes, on the identification rates for special education. Analysis was conducted only with school districts that had African American students enrolled. The data indicated that there was a moderately high correlation between poverty and race as well as between poverty and special education identification. Children with mild intellectual disabilities were identified at a higher rate as the poverty level of their families increased. However, the identification of children with speech and language problems and learning disabilities decreased as the poverty level of their families increased. Findings also indicated that children with mild intellectual disabilities, moderate intellectual disabilities, emotional

disturbance, and learning disabilities were suspended at a higher rate than their typical peers.

Odds ratios analyses were applied to explore the likelihood of students from various ethnic groups to be identified as having a disability based on race and/or poverty. African American students were three times more likely to be identified as having mild intellectual disabilities, two times more likely to be identified as having moderate intellectual disabilities, two times more likely to be identified as having emotional disturbance, .6 times more likely to be identified as having speech and language problems, and .87 times more likely to be identified as having a learning disability when compared to their White non-Hispanic peers. When poverty was added in the odd ratio equation, independent of race, children living in poverty were two times more likely than their peers in wealthy districts to be identified as having mild intellectual disabilities, moderate intellectual disabilities, and emotional disturbance. When race and poverty were analyzed together, African American students were 2.5 times more likely to be identified as having mild intellectual disabilities, 1.5 times more likely to have moderate intellectual disabilities as well as emotional disturbance.

Skiba, et al., (2005) concluded that more affluent school districts have disproportional rates of African American children having learning disabilities, intellectual disabilities, and emotional disturbance. The researchers caution school districts against correlating poverty and ethnicity. However, they stress that there appears to be a relationship among poverty, race, and the overrepresentation of African American children in special education.

Balfanz and Brynes (2006) explored school reform and its impact on high poverty schools as well as on the math achievement for students. Three high poverty middle schools that had implemented school-wide reform programs were compared to 23 other high poverty middle schools. Math achievement scores for 1,233 students were collected for six years. Data collected included pre- and post- test scores (e.g., *SAT-9* and *Stanford-9*), demographic information (e.g., age, gender, school, cohort number) as well as behavioral and attendance reports.

A Logistical Regression Analysis was conducted to separate factors that might have impacted student achievement. Results indicated that students who attended the three schools that implemented school reform were meeting or exceeding national standards on *SAT-9* and *Stanford 9*. However, the pretest indicated that students were not meeting national standards. These data indicated that 33% of students were able to gain ten or more percentile points on assessments and 42% of the students reached national standards.

Balfanz and Byrnes (2006) maintained that placement in homerooms, student attendance, effort in class, and behavior in school were significant factors in determining school achievement. They suggested that rigorous instructional programming, positive student/teacher relationships, a challenging and caring school atmosphere that is academically challenging and is caring, rewards for positive behavior, and programs that promote student effort are key in promoting achievement in math.

The impact of poverty on school attendance, behavioral referrals and student motivation was studied by Martin, Martin, Gibson, and Wilkens (2007). In a study designed to examine the effectiveness of a comprehensive after-school program as an

intervention for African American males who were considered high risk, 33 adolescents participated in the after-school program for two years. The program provided students with a comprehensive curriculum after the regular school day.

The program included counseling, tutoring, social skills training, recreation, and cultural activities in coordination with community agencies. *The Kaufman Test of Educational Achievement- Second Edition* (KTEA) (Kaufman & Kaufman, 2004) and the *Kaufman Brief Intelligence Test* (KBIT; Kaufman& Kaufman, 1990) were used as pre- and post- measures. Using a correlation analysis comparing achievement and the *KBIT* scores there was a .96 correlation found. Results also indicated that students were performing on grade level at the conclusion of the program. Conclusions drawn from study were that comprehensive after school programs were an effective way to increase motivation in students, increase school attendance, and increase academic performance.

Another issue that affects student educational attainment in regard to poverty is homelessness. Kennedy (2007) explored the relationship among homelessness, violence, and school participation. One hundred and twenty students, ages 16 to 20, from an alternative high school for adolescents who were pregnant and/or parenting completed surveys concerning observed/participation in familial/partner violence, school participation, homelessness, and use of social support. The *Revised Conflict Tactics Scale (CTS2)* (Straus, Hamby, Boney-McCoy & Sugarman, 1996) was used to assess student experience with the variables. The *Social Support Behavior Scale (SS-B)* (Vaux, Riedel, & Stewart, 1987) was used to assess student use of support systems in immediate family and friends. Additional questions were asked to ascertain student history of homelessness, level of school participation, and attitude toward school. Ethnic

composition of the participants was 54% Hispanic American, 33% African American, and 13% White non-Hispanic and other.

Data were analyzed using a MANOVA and regression analysis. Results indicated that the majority of the students had been exposed to each type of violence assessed. The data indicated that 85% of the students were exposed to parental violence, 72% to physical abuse by a parent, 59% to partner violence, 54% had witnessed a parent/adult family member being assaulted, 25% had witnessed a gun or knife used by an adult family member toward another in the household, 5% also reported a adult family member using a gun or knife towards them. Participants who also reported homelessness had increased percentages of violence. All reported physical abuse and witnessing of violence by adult family member. Of the students reporting homelessness at the time of survey, three fourths of them were homelessness at that moment. Thirty-two percent of African American students experienced homelessness, 47% of the White non-Hispanic students, and 8% of the Hispanic American students experienced homelessness.

Kennedy (2007) concluded that school is a lower priority for adolescents who are exposed to homelessness and who are parents. She suggests that future research be conducted to explore relationships between ethnicity, homelessness, and social support.

The relationship of poverty to academic achievement is multifaceted and appears to be a contributing variable to problems associated with student achievement. Students living in poverty have a different set of priorities and needs that must be addressed in order for them to succeed in academic settings. Students in poverty are being judged by a set of standards that deviate from their reality which places them at risk for being

identified as having a learning disability, intellectual disability, or emotional disability based on current deficit models.

Linguistically diverse students. Abella, Urrutia, and Shneyderman (2005) examined the validity of assessments for students who were English Language Learners. They maintained that students are being assessed in content areas without an understanding of English and the lack of understanding impacts their achievement scores. The focus of the study was to ascertain the impact of literacy in the primary language on achievement and whether or not former ELL student scores are valid measures of their language achievement.

The study was conducted in the Miami-Dade County Public Schools which has the largest population of English Language Learners in the United States. Students from 36 schools participated in the study for a total of 1,678 participants. The participants consisted of three groups: (a) students in the early stages of English acquisition, (b) students in the advanced stages of English acquisition, and (c) students who were no longer receiving ELL support services.

The students completed the *Stanford Achievement Test-9* (1996) and the *Aprenda- 2nd Edition* (Harcourt Publishing, 1997). In order to control for the language of the students, analysis was conducted on the math portion of the tests. The *Stanford* was administered in English and the *Aprenda* was administered in Spanish.

Utilizing one-way and two-way ANOVAs, the researchers compared the levels of English proficiency and scores from the two assessments. Overall, the students performed better on the Spanish assessments than they did on the English assessments. For the fourth grade students, the better the student's English proficiency, the better they did on

the English version of the assessment and the poorer the student's English, the better they did on the Spanish form of the assessment. The students who had already exited from the ELL program scored the best on the English assessment. Overall, the tenth grade students did better in the Spanish assessment. A two-way ANOVA was conducted to compare English proficiency and home language literacy. For fourth grade students, the advanced ELL students with literacy in their home language performed better on the Spanish version of the assessment. Tenth graders who had strong English skills and proficient literacy skills in their home language under performed on the English version of the assessment. The authors concluded that an English-language achievement test may not be a valid measure of former ELL students (Abella, Urrutia, & Shneyderman ,2005).

In a qualitative study designed to examine the effectiveness of a child study team (CST) within the prereferral and placement process for students who were English Language Learners, Klinger and Harry (2006) attended 21 CST meetings, 14 related meetings, five psychological evaluations, 15 home and community observations as well as made 627 classroom observations. They also conducted semi-structured interviews with students, parents, and school/district personnel. They reviewed test protocols, work samples, psychological reports, IEPs, school district guidelines, and district data concerning placement for students in special education. They collected these data for 19 students from kindergarten to fifth grade.

The students were from various ethnic/cultural groups, spoke different primary languages, and had different levels of English Proficiency (e.g., 11 spoke Spanish, 6 Haitian Creole, 1 Arabic). The schools provided different language support systems (e.g.,

dual immersion (Spanish), pull out ESOL, curriculum content in primary language, and an art class in primary language).

Klingner and Harry (2006) used a grounded-theory framework that allowed them to interpret information as it was collected. Data were analyzed and organized using a database. The data were coded and chunked into themes and quotes.

Results indicated several problematic and unethical themes. The first area identified was a lack of following referral and placement procedures. There also was a lack of clear expectations for the CST as well as little understanding of the roles of team members. These problems resulted in variability across CST teams concerning the identification of learning disabilities and evaluations of ELL students. The CST were not used to collect prereferral intervention strategies or report on the use of those strategies in classroom settings.

Another problematic area was the treatment of parents by school personnel. Teachers, interpreters, and psychologists were found to be disrespectful, unwilling to translate information appropriately, mimicking parents behind their backs, aggressive with parents, and inconsiderate of parent needs when scheduling meetings.

Klingner and Harry (2006) recommended that CST must be changed to a collaborative endeavor in order to create useful interventions. They also maintain that the roles and responsibilities of team members must be clarified as well as adding an additional tier of support to the pre-referral process. They concluded that professional development was essential to address unprofessional behaviors, attitudes, and treatment of parents.

Artiles, Rueda, Salazar and Higereda (2005) examined 11 California school databases for the 1998-1999 school year. The goal of the study was to ascertain the ELL representation within disability groups and grade levels, trends of overrepresentation, and whether or not social class was a variable in the overrepresentation of ELL students in disability groups. Of the records examined, 69% were Hispanic American, 10.5% were white non-Hispanic, 13.6% were African American, 4.3% were Asian American, 1.9% were Filipino American, .4% were Pacific Islander, and .3% were American Indian/Native Alaskan. Overall, 85% were elementary students, 15% were secondary students, and 71% qualified for free and/or reduced lunch.

Analysis was conducted on the data for four variables (e.g., special education services, disability category, grade level, and social class). Only data for students receiving services for intellectual disabilities, learning disabilities, and speech and language were analyzed. Composition index, risk index, and odds ratio were calculated to explore relationships between the variables with the white non-Hispanic students as the comparison group.

Results indicated that on the secondary level English language learners were most often labeled as having a disability than White non-Hispanic students. These students at the secondary level also were overrepresented in special education. The lower the English proficiency of the student, the more likely they were labeled as having a learning disability or intellectual disability. Students who were considered English proficient were underrepresented in both elementary and secondary special education programs. Students who lived in poverty were more likely to be labeled as having a disability. Students with limited English skills were the most likely to be labeled as having a disability

Artiles, Rueda, Salazar and Higereda (2005) concluded that school districts must reevaluate their screening, referral, and identification processes. They maintained that teachers need a better understanding of English language learners. They recommend that appropriate educational environments and assessment procedures be explored in an effort to eliminate the overrepresentation of these students in special education. They also suggest that all educational programs should support language development in the student's native language.

High Rates of Children from Diverse Backgrounds in Special Education

Using data from *The Twenty-Second Annual Report to Congress on the Implementation of IDEA* (U.S. Department of Education, 2000), the National Center for Educational Statistics (NCES, 1998-1999), and the *Poverty in the United States Report* (U.S. Census Bureau 1998-1999), Zhang & Katsiyannis (2002) explored the relationship between high incidence disabilities and representation from diverse groups in special education. They also addressed the variable of poverty in relation to students from diverse communities.

Using the three reports, Zhang and Kitsiyannis (2002) aggregated the data on children/youth from the ages of 6 to 21 in all 50 states and the District of Columbia. They broke down the children/youth into ethnic groups as well as by disability groups within each ethnic group (e.g., learning disabilities, intellectual disabilities, and emotional disabilities). The goal was to identify trends in ethnic representation in terms of under- and over-representation in the disability categories. Correlation analyses were conducted among ethnicity groups and poverty and ANOVAs were conducted to explore the variability based on regions of the country.

Results indicated that African American and American Indian/Native Alaskan students were overrepresented in the categories of emotional disabilities, learning disabilities, and intellectual disabilities. However, Hispanic American and Asian American students were underrepresented in the same categories (Zhang & Katsiyannis, 2002). Differences were found in the various regions of the United States. In the Northeast region, Hispanic American students had a higher representation in the categories of learning disabilities and emotional disabilities than they did in the South or Western Regions. African American students in the West, North Central, and Eastern North Central regions were identified more often in all disability areas than they were in West and North Eastern regions. In the South, Native Americans were identified most often as having some sort of disability. Overall, African American students in the United States had the highest representation in special education across all disability groups.

Zhang and Katsiyannis (2002) concluded that states need to examine their special education identification and placement processes due to the variability and overrepresentation found in this study. Their recommendations include isolating factors that contribute to overrepresentation, exploring variability in instruction, developing a non-biased identification system, and training teachers in the pre-referral process. While overrepresentation of children/youth from diverse populations in special education is a problem, Skiba, Polani-Staudinger, Simmons, Gallani, & Feggini-Azziz, (2006) maintain that a greater problem maybe the disproportionality of African American students being placed in more restrictive environments than their peers from all ethnic groups. In a study designed to explore the disproportionate placement of African American students in restrictive special education environments (e.g., self contained

classrooms for students with emotional disabilities, intellectual disabilities, and learning disabilities), data were collected from student records as well as school district IDEA compliance reports from all school districts in the State of Indiana. Data from 295 school districts were included in the study.

The data were analyzed using risk ratio and chi squares analyses to compare the risk index of one ethnic group of students to the risk index of another ethnic group of students as well as to the whole student population. This resulted in a data break down of the disproportionality of student placement by ethnicity for all disabilities as well as by disability category and type of placement.

Results of the analyses indicated that African American students with disabilities are underrepresented in general education classrooms in that they receive the majority of their instruction outside of the general education environment. The data indicated that African American students received 60% of their instruction in self-contained special education settings.

Skiba, et al. (2006) also found that African American students represent 23% of the students being identified as having emotional disabilities in the State of Indiana. They were three times more likely to be identified as having mild intellectual disabilities, two times more likely to be identified as having moderate intellectual disabilities, and three times more likely to be identified as having learning disabilities than their White non-Hispanic peers. In all disability categories, these students were 30% to 50% more likely to receive special education services in a self-contained setting than their White non-Hispanic peers.

Skiba, et al. (2006) concluded that there appears to be many inequities in the decision-making process in special education placements. The authors argue that this disproportionality of placement appears to be the result of a subjective placement process that is influenced by the biases held by key decision makers as well as a lack of cultural competence in the institution of education. Skiba, et al. suggest that school districts explore their referral and placement processes as well as teacher training.

Inconsistencies in the identification process were explored by Coutinho and Oswald (2002). In a study designed to ascertain the effects of race and gender on the identification of students as having a learning disability as well as the relationship between socio-demographic factors and disproportionate representation, data from the *Elementary and Secondary School Survey 2000* (2002) from the Office of Civil Rights and the National Center of Education Statistics (1993) were used. Data from 4,151 school districts encompassing 24 million students were analyzed to identify trends and relationships. Variables explored were student/teacher ratio, per pupil expenditure, percentage of children considered at risk, percentage of enrolled non-White students, percentage of English language learners, median housing value, median income for families with children, and percentage of adults with high school diplomas.

Data analyses were conducted using logistic regression and chi square analyses. The data indicated that 5.5% of all students in the United States have learning disabilities. The occurrence of learning disabilities varied from a low of 1.2% of Asian/Pacific Islander female students being identified as having a learning disability to a high of 9.2% Native American Indian male students being identified.

Using an odds ratio analysis with white non-Hispanic females as a comparison group, the authors compared other ethnic groups and males to ascertain their likelihood of being identified as having a learning disability. The findings indicated that white males were 2.4 times more likely to be identified, African American females .9 times more likely to be identified, and Native American males 2.9 times more likely to be identified than White non-Hispanic females as having a learning disability. The socio-demographic data indicated that African American students and Hispanic American students with disabilities were more likely to live in poverty. Whereas, white non-Hispanic and Native American Indian students with learning disabilities were less likely to live in poverty.

Coutinho and Oswald (2002) concluded that teacher bias, culture, and cultural behaviors must be explored in greater depth to ascertain their impact on the identification process. They maintain that over identification may be a result of cultural discontinuity between teacher and student. They emphasize that over-identification also may be the result of practitioners not using the exclusionary provision clause during the referral process that recognizes the effects of environmental variables (e.g. poverty). Coutinho and Oswald recommend that research continue in the area of disproportionality, gender, ethnicity, teacher training, and administration training. They maintain that it is through culturally competent educational practices that appropriate identification of students as having a learning disability will occur.

In a study that explored the relationship between student ethnicity, language proficiency, disability, class placement, and participation in early intervention programs, deValenzuela, Copeland, Qi, & Park (2006) data mined the special education database of a large school district. The district was comprised of 87,000 students of which 37% were

white non-Hispanic, 3.8% African American, 50.5% Hispanic American, 4.7% Native American, 1.9% Asian/Pacific Islander, and 1.2% identified as *other*. Forty-five percent of the students received free or reduced lunch. In this school district, 17,824 students participated in special education. There was 22.3% of the student population who received services as English Language Learners and 35.9% whose primary language was not English.

The data were analyzed through a series of ANOVAs and frequency analyses to compare student enrollment in disability categories (e.g. emotional disabilities, intellectual disabilities, learning disabilities). The focus of the analyses was to identify the relationship between disproportionate representation in disability categories and ethnicity.

The results indicated that the largest exceptionality categories in the sample were learning disabilities (47%), gifted (24.2%), speech and language (11.4%), developmental delay (5.7%), emotional disabilities (5.5%), intellectual disabilities (2.9%), and other health-impaired (2.6%). White non-Hispanic students were over overrepresented in the exceptionality categories of emotional disturbance, gifted, speech and language and they were underrepresented in learning disabilities. African American students were overrepresented in the categories of emotional disturbance and learning disabilities and underrepresented in gifted education. Hispanic American students were over represented in the category of learning disabilities and under represented in category of emotional disturbance. Native American students were overrepresented in the category of learning disabilities, and underrepresented in categories of gifted and developmental delays. Children labeled as English Language Learners were overrepresented in the categories of

emotional disturbance, speech and language problems, intellectual disabilities, and underrepresented in the category of developmental delays. Asian/Pacific Islander students were underrepresented in the category of speech and language, and students identified as *other* were over represented in gifted education.

Identification of having multiple disabilities was found to be disproportionate for African Americans students, Hispanic Americans students, Native Americans students, and English Language Learners. Overall these students were placed in the most segregated classrooms. African Americans received multiple labels at a significantly higher rate that White non-Hispanic students.

deValenzuela, Copeland, Qi, & Park (2006) maintained that school districts need to evaluate their processes of identification and placement for special education services. They believed that ethnicity was a variable that determined educational access and educational opportunities in this study. They stated that children from diverse backgrounds were disproportionately represented in the majority of special education categories. They also asked that schools explore the disproportionate rate of placement of African Americans as well as ELL students.

In a similar study, Achilles, McLauglin, & Croninger (2007) explored the socio-cultural characteristics (e.g., ethnicity, gender, socioeconomic status, family structure, socio-ecological resources of school and community, and whether or not the student attended Head Start) of students with high expulsion and suspension rates. Using data collected in the *Special Education Elementary Longitudinal Study* (SEELS) (SRI, 2003), they phoned the parents of 1,824 students with emotional/ behavior disabilities, health impairments (e.g., ADHD), and learning disabilities. The goal was to determine if there

was a correlation between the characteristics and ethnic group. The demographic makeup of the students was 14.1% Hispanic American, 17.2% African American, and 68.2% white non-Hispanic. The ages of the students were 7 to 9 (19.8%), 10 to 12 (61.5%), and 13 to 14 (18.7%) years old.

Parent interviews were conducted by telephone using a questionnaire designed to gather information concerning their satisfaction with their child's schooling (e.g., expulsion rate, disability category, parent/teacher interaction). Two series of logistic regression analyses were conducted to examine the relationship between socio-cultural predictors (e.g., child characteristics, family characteristics, school/community characteristics, and early intervention) and school expulsion. A four-model regression analysis was conducted to explore the variables that had the most impact on the disproportionate rates of ethnic representation among disability groups, ethnicity, age, and gender. The second model added factors, the third added community, and the forth model added early intervention history.

Data indicated that students who were male, older, African American, and/or Hispanic American were most likely to be excluded from school. Once family structure was added during the second model, socio-economic group was a predictor for exclusion. Community and family resource variables revealed that students who attended multiple schools, whose parents expressed lower satisfaction with schools, and students who attended schools in urban settings were at a higher risk for exclusion.

The same series of analyses were conducted on each disability group. The first level indicated that being Hispanic American was highly correlated with a learning disability and age was positively correlated with ADHD and learning disabilities. The second series

indicated that living in poverty was a predictor in all disability categories. Results from the third series indicated that Hispanic American students with emotional/behavioral disabilities who participated in school extracurricular activities had a lower rate of exclusion. Parents of students with emotional disabilities and learning disabilities who had been excluded had higher rates of dissatisfaction with school. Students with ADHD who were involved in church or religious activities had lower rates of exclusion

Achilles, McLauglin, and Croninger (2007) concluded that future research explore the variables that impact expulsion and suspension from school. They maintained that ethnicity and disability appear to be major factors in the structure and systematic inequalities in the school setting. They concluded that research should identify a standard mode of assessment based on the variance of behaviors in students.

Mandell, Davis, Bevans and Guevara (2008) compared the mental health diagnoses of 4,852 children/youth with the special education database from the local public school district. They merged the files from the Medicaid health claims with the educational database. All students had been diagnosed with Attention Deficit Hyperactive Disorder (ADHD).

Analyses were conducted using a series of ANOVAs, chi-square tests, and binary logistic regression models. Results indicated that there were vast differences concerning the labeling of students from different ethnic groups. Hispanic American children/youth labeled as *other* were more likely to have been diagnosed as having a learning disability than African American and white non-Hispanic students. African American children were most likely to receive diagnoses of having an emotional disability.

Differences in how children were diagnosed were also evident from mental health related diagnoses. African American children/youth were most likely to be diagnosed as having adjustment and disruptive disorders. Hispanic American children/youth were diagnosed with affective disorders, however, African American children rarely received this diagnosis. White non-Hispanic children were most often diagnosed with pervasive development delay (PDD).

The type of treatment received by the children was markedly different as well. White non-Hispanic children were most likely to be given mood stabilizing medications, whereas African American children were less likely to be on any kind of medication. In terms of services provided, African American children received either case management or special education, while white non-Hispanic children received both services.

Mandell, Davis, Bevans and Guevara (2008) concluded that conflicting information exists between school district and the mental health agencies. They maintain that the parents of white non-Hispanic children advocate more strongly for their child and this advocacy impacts the label as well as the services received by the child. They recommend parent education, increased use of appropriate behavioral interventions, culturally sensitive assessments, and increased collaboration between education and mental health agencies be implemented.

Oswald, Coutinho, Best, and Nguyen (2001) analyzed data from the Office of Civil Rights survey collected during the 1994-1995 school year. They were interested in the relationship among gender, disability, and ethnicity. The data for 24 million students from 4,151 school districts were compared on nine socio-demographic variables (e.g., poverty, at risk, being a member of a diverse group, parent education). Data were

analyzed using linear and quadratic analyses (e.g., chi square, interaction effects, logistic regression, odds ratio).

Results indicated that 1.38% of the total school population had intellectual disabilities. When the data were analyzed by gender and ethnic group, disproportionate representation was found. Odds ratio analysis indicated that, when compared to white non-Hispanic females, white non-Hispanic males were 1.36 times more likely to be identified as having an intellectual disability; African American females were 2.02 times more likely; African American males were 3.26 times more likely; Native American males were 1.66 times more likely; Native American females were 1.21 times more likely; and Hispanic males were .95 times more likely to be identified as having an intellectual disability. Students who were living in poverty, those at risk, and who had parents without high school diplomas were most likely to be identified as having an intellectual disability. Oswald et al. (2001) (((recommended that additional research be conducted to isolate variables that are a result of educational environmental issues (e.g., poor instruction) and further work should be conducted to explore systemic educational biases.

Teacher Bias

Unfortunately, the relationship between teacher perception and achievement may not be based on actual behavior and/or academic skills of the students. Often these perceptions are tied to cultural norms and expectations. Neal, McCray, Webb-Johnson and Bridgest (2003) focused on teacher views concerning the walking styles of male students as related to aggression, behavior, achievement, and the need for special

education. Teachers from three ethnically and economically diverse middle schools participated in the study.

Teachers completed a questionnaire that included demographic information as well as an adjective checklist the teachers used to rate the walking style in terms of aggression, behavior, and academic standing while watching a video depicting a style of walking. Teachers also indicated whether they thought the student in the video needed special educations services. The videos featured examples of young men walking in various styles: (a) an African American youth demonstrating a stroll, (b) a White non-Hispanic youth demonstrating a stroll, (c) an African American demonstrating a standard walking style, and (d) a White Non-Hispanic youth doing a standard walk. Students in the video dressed similarly and were the same size and stature.

Data were analyzed using a factorial ANOVA to compare each teacher's ethnicity, with their ratings on aggressiveness, achievement, and special education placement with the two levels of the ethnicity of the students in the video. Results indicated no significance between ethnicity of students, but significant differences were found based on the walk of the students. Strolling students were perceived to be more aggressive, less academic, and more likely to need special education

The authors concluded that cultural norms (e.g., walking style) should not be stereotyped as aggressive behavior, poor academic behavior, or disability. Neal, McCray, Webb-Johnson, and Bridgest (2003) recommended that future research focus on the impact of teacher perceptions on student achievement, cultural norms as perceptions, and mistaking cultural differences with disability.

Espinosa and Laffy (2003) studied the perceptions of Pre-K teachers of children with challenging behaviors. They explored the teachers' perceptions about the students' academic and behavior abilities, the relationship between the teacher ratings, and the students' math abilities. They also observed behavior during a computer-based activity, and the relationship between the teacher ratings and the teacher interactions in class. The study was conducted in a school that ranked in the bottom five percent in the areas of math, social studies, language arts, and science. Ninety-nine percent of the students received free and/or reduced lunch and all students in the study were African American. The students were in Pre-K to first grade. Four of the teacher participants were White non-Hispanic and two teachers were African American.

The teachers completed the *Social Skills Rating System* (SSRS) (Gresham & Elliot, 1988) prior to the students working with a computer-based activity. The *SSRS* assesses social skills, academic competence, and problem behaviors. Of the 187 children rated with the assessment, 54% were found to be at high risk for behavior problems and 28% were at low risk for behavior problems, 18% were found to be average. In terms of academic achievement, 81% of the students scored lower than the 50^{th} percentile, while 7% of the students were at the 70^{th} percentile or higher.

Results from the observations, assessments, and ratings indicated that there was a negative correlation to the teacher ratings of behavior and academic potential from the pretest. To compare the difference between groups scoring as high risk and those not at risk for behavior, *t*-tests indicated no significant difference in the student math knowledge. Similar *t*-tests were run to compare behavior during the computer task between high risk students and those not at risk. The student behavior during the

computer intervention was observed as being identical with both groups being engaged, showing enthusiasm, and paying attention to the task at hand.

The students' behavior in their classrooms was very different than the behavior observed during the computer-based activity. Eight students who during the computer-based activity were highly attentive, inquisitive, and actively engaged received extremely high teacher scores for being at risk for behavioral problems in class, but not during the computer-based activity.

Espinosa and Laffy (2003) concluded that teachers must be trained concerning a variety of methods, including learning styles. They also believe that further research must be conducted to define the relationship between students and teachers as well as the impact of the relationship on behavior and academic achievement. It appears that a lack of positive interaction between teachers and students can impact teacher attention to students and have a dramatic effect on student behavior and academic experiences.

In a study that explored the relationship between ethnicity, attention problems, and achievement, Rabiner, Murray, Schimid, and Malone (2004) had 33 teachers' complete two assessments concerning behavior and academic performance. The teachers used the *Conners Teacher Rating Scale* (Conners, 1997) to rate the students in their first-grade classes on student oppositional behavior, anxiety, hyperactivity, and attention problems. The teachers also used the *Comprehensive Inventory of Basic Skills* (Brigance, 1999) to rate student performance in reading, math, and written language. They evaluated 578 first graders. The ethnicity of the students was 122 white non-Hispanics students, 310 African American students, 147 Hispanic American students, and 42 identified as *other*. The data were analyzed using a series of correlation statistics controlling for school membership.

Structured equation models were used to determine the relationship between ethnic differences and attention. During the first analysis, when school membership and gender were controlled for, African American ethnicity was a negative predictor for achievement. The second model tested the effect of inattention on achievement and the effect of ethnicity on achievement. Both were statistically significant with African American ethnicity being a positive indicator of inattention. Inattention was also a negative indicator of achievement. Further analysis indicated that the relationship between inattention and achievement was much stronger than between achievement and behavior. When looking at data on achievement, White non-Hispanic students were ranked highest with African American and Hispanic American students rated below grade level. African American students had the highest ratings in oppositional behavior, attention problems, and hyperactivity. Hispanic American and White non-Hispanic students were not statistically different in these areas. Hispanic American students were significantly lower in the category of anxious/shy than the African American students. Rabiner et al. (2004) concluded that inattention appears to be a major hindrance in the learning of African American and Hispanic American students. They suggested that schools should explore the implementation of effective teaching methods, behavior management plans, and contingency plans to increase attention and achievement for all students.

Goodman and Webb (2006) examined the data from a State administered third and forth grade-level, curriculum-based assessment. They analyzed the data for 66 students who had been referred to special education. The students came from culturally diverse groups and many of them lived in poverty. Most of the students had passed the State

grade-level achievement test in reading, so it was predicted that special education referral must be related to variables other than student achievement. The school the students attended had an intervention assistance team that provided pre-referral assistance for teachers to prevent referral to special education. The data indicated that all 66 of the students went through the formal referral process.

Analysis was conducted using Pearson's chi square cross tabulation to compare groups by gender, ethnicity, and language differences (e.g., English proficiency). Results indicated that native English speakers were the most overrepresented in special education classrooms. This was contrary to the predictions of the researchers based on the high level of ELL students in the school. Of the 66 students who were referred and went through the formal referral process, 21 were diagnosed as having a reading disability even though 40 of the 66 had passed the State's grade-level reading test. Eleven of the students qualified for special education as having a reading disability and, of those placed, had passed the State reading assessment.

These results of this study led the authors to question the purpose of the intervention-assistance team in that the team was not able to recognize that two-thirds of students referred for services did not have a reading disability and that they did not provide adequate assistance to stop the referral process. The authors also questioned the validity of the overall referrals since the students performed well on the State grade-level assessment.

Goodman and Webb (2006) concluded that general education teachers were not as resourceful in finding methods or strategies to intervene with students who were experiencing difficulties, whereas teachers working with ELL students were more

resourceful in meeting student needs through various methods of instruction that avoided the students being referred to special education. They suggest redefining the category of learning disabilities and creating intervention assistance models that are more systematic and data driven.

Mckown and Weinstein (2008) examined the relationship between being a member of an ethnic group that is negatively stereotyped concerning their intellectual ability (e.g., African Americans, Hispanic Americans) versus a group that is positively stereotyped concerning their intellectual ability (e.g., Asian Americans, White non-Hispanics) and teacher expectations. Using archived data, the authors explored three questions: (a) whether or not there was a positive correlation between students rating teachers as being partial to high achievers compared to teachers identifying student ethnicity as a factor in their expectations, (b) whether or not ethnicity carried a higher value when teachers express their expectations for achievement, and (c) whether or not teacher bias in identifying achievement would be most evident in classrooms that were very diverse in composition. Mckown and Weinstein also examined the relationship between student ethnicity, the context of the classroom, whether teacher expectations were different based on the grade level the teacher taught, and the impact teacher bias had on the achievement gap between students.

Study one utilized a data set of 640 children in 30 urban schools and study two analyzed data from 1,232 children in mixed age-level groupings in grades one, three, and five who were part of a mental health project from 53 urban schools. Demographic data, academic achievement (e.g., reading and mathematics), teacher rankings of predicted student achievement, information on classroom context, and student perceptions

concerning teacher interactions with high and low achieving students were collected (e.g., *Teacher Treatment Inventory)* (Weinstein & Middlestadt, 1979). The inventory consisted of two forms: (a) a hypothetical scenario about a high achieving student, and (b) a hypothetical scenario about a low achieving student. Students were randomly assigned to answer the inventory on one of the two forms.

Analyses were done conducting a series of hierarchal regression models that added variables to the model to test interaction. For the first study results indicated no significance between teacher expectations and student ethnicity, though teachers did predict that Asian American students and white non-Hispanic students would have higher achievement in reading and math. Teachers in classrooms that had higher diversity rated Asian American students and white non-Hispanic students higher than African American and Hispanic American students. In the second study, teachers rated Asian American and white non-Hispanic students higher than African American and Hispanic students with identical achievement scores. In classrooms that were more diverse, teachers also held higher academic expectations for white non-Hispanic and Asian American students. In classrooms that were more mono-cultured (e.g., a less diverse student population), teacher expectations were more equitable. There was less teacher bias found in mixed-age level classes.

The third study combined the data sets of study one and two in order to predict the relationship between teacher expectations and student achievement at the end of the academic school year. Classrooms were grouped by high and low teacher bias and data were analyzed using random effects models to find interclass correlations and hierarchical linear models from end of the year data compared to prior student

achievement and teacher expectations. Results indicated that teacher bias was a significant factor in student achievement in classrooms taught by teachers who held ethnic-based, stereotyped beliefs concerning the learning ability of students. That is to say, if the teacher believed the students would not succeed academically, they did not succeed. Conversely, if the teachers believed the students would achieve, they did achieve. In classrooms with low ethnic-based, stereotyped bias there was little effect on student achievement.

Mckown and Weinstein (2008) suggest that this study be replicated to test for the generalization of the findings. They concluded that schools must address teacher bias as classrooms become more and more diverse. They also suggest that interventions must be identified to address this bias.

Edl, Jones, and Estell (2008) explored the relationship between teacher perceptions of Hispanic American students' (in general education and bilingual programs) interpersonal competence and academic achievement compared to their white non-Hispanic peers. The teachers completed the *Interpersonal Competence Scale-Teachers* (ICS-T) (Cairns, Lueng, Gest, & Cairns, 1995) on 703 white non-Hispanic students and 99 Hispanic American students in forth and fifth grades. The *ICS-T* is an 18-item, 7-point Likert scale that allows teachers to rate students on interpersonal characteristics, popularity, aggression, academics, Olympian (sport ability), internalizing, and affiliative behaviors. Analysis was conducted using discriminate function analysis (DFA) for four of the assessment points (e.g., fall and spring) to isolate differences among the three groups (Hispanic American in general education, Hispanic American students in bilingual programming, white non-Hispanic students). Results indicated that three characteristics

were significant in the fall for fourth graders. (e.g., popularity, academic competence, and Olympian). Popularity and academic competence were rated the highest for white non-Hispanic students followed by Hispanic American students in general education classrooms, and by Hispanic American students in bilingual classrooms. In the spring semester of the fourth grade students, academic competence, affiative behavior, and Olympian were significant with bilingual students being rated the lowest among all students. For fifth graders, popularity was the characteristic that was significant, with white non-Hispanics students rated the highest, followed by Hispanics American students in general education, with Hispanic American students in bilingual classrooms rated the lowest. During the final data collection, fifth grade students rated the highest in academic competence and Olympian with students in general education being rated the same while Hispanic American students in bilingual program rated lowest.

Edl, Jones, and Estell (2008) concluded that Hispanic American students in the bilingual classrooms were consistently rated lower than all students for interpersonal skills. They recommended that teachers must be aware of the impact of cultural norms on interpersonal skills. They also maintain that education develop strategies to meet the needs of bilingual students so as to meet their interpersonal and social needs. They suggest that future research focus on teacher relationships with students as well as teacher education in terms of dealing with cultural norms.

Dissonance Between Teachers, Students and Families

The majority of the teaching force in the United States is White non-Hispanic, monolingual, women (NCES, 2006) and appears to have little or no experience working with diverse populations (Terrill & Mark, 2000). This lack of experience with diverse

communities may be detrimental as teachers attempt to instruct students from diverse backgrounds (Gayle & Michaels, 2006).

Terrill and Mark (2000) explored the expectations that preservice teachers held about students. Specifically, they explored the views of preservice educators on nine variables (e.g. curriculum, child abuse, discipline, parental support, students with emotional problems, feelings of comfort with students, feelings of safety in community home visits, gifted and talented students, and motivation).

Using an assessment developed by the authors, preservice teachers completed a 37-item scaled questionnaire focusing on the nine variables in relation to three high schools (one majority White non-Hispanic, one majority Native American, and the other attended by African American students and English Language Learners). The goal of the study was to ascertain if the expectations held by preservice teachers differed based on racial and linguistic characteristics of the students in these high schools. The questionnaire was a Likert scale with choices ranging between 1 and 4, with 1= positive and 4= negative. The second section of the assessment focused on the demographic information of the preservice teachers including age, gender, ethnicity, a description of the neighborhood where their high school was located, the ethnic demographic of their high school, and the number of hours spent with students from diverse backgrounds.

Terrill and Mark (2000) described the ethnicity of the preservice teachers as being 89% white non-Hispanic and 65% female. While in high school, 51% attended high school in suburban communities and 36% attended high school in rural areas. When asked where they wanted to teach, 64% selected schools in which the majority of the

students were white non-Hispanic, with 52% indicating that they had never spent any classroom time with children from diverse backgrounds.

Analysis to sort differences in expectations for each of the variables (e.g., curriculum, parental support) was done using the Friedman test of nonparametrics. Eight of the nine variables (not curriculum) were statistically significant. Marginal Homogeneity Tests were used to sort differences between the expectations of the preservice teachers on the nine variables and schools that were predominately Native American and rural as well as urban schools that had a majority of African American and English Language Learners. This comparison indicated that there was significance between four of the nine variables when compared to the preservice teachers' expectations for Native Americans in the rural school and the white non-Hispanic suburban school. The preservice teachers believed that they would receive less parental support, the students would be less motivated, there would be fewer gifted and talented students, and they would have more issues with child abuse in the Native American school. When the preservice teachers rated the variables between the African American urban school to the white non-Hispanic suburban school, seven of the nine items were significant, with the preservice students reporting their expectations for the school as being increased levels of child abuse, discipline problems, fewer gifted and talented students, lack of parental support, low student motivation, less comfort with students, and feeling less safe in the community when doing home visits.

The expectations of preservice teachers in terms of their potential students and school communities concerned Terrill and Mark (2000) so much that they recommended all teacher education programs do similar assessments with preservice teachers to gauge local expectations in order to design teacher education interventions that increased

exposure to diverse communities, as well as implement integration across the curriculum. They maintained that field placements should be diverse settings and provide opportunities for diversity reflection. They also suggested that professors be culturally component as they work to guide future educators in learning about their personal biases and attitudes toward other cultures (Terrill & Mark).

Mahon (2006) explored teacher views relating to intercultural sensitivity as well as how their personal demographics influence their the level of cultural sensitivity. The 155 participants in the study were elementary and secondary teachers from rural, urban, and suburban schools. The demographic composition was 70% female, 30% male, and 18% were from ethnically diverse groups.

A modified version of the *Intercultural Development Inventory* (IDI) (Hammer & Bennett, 1999) was used to measure the teachers' views of other cultures and cultural difference. The questionnaire was a 7-point Likert scale measuring the ethnocentric dimensions of denial, defense, minimalization, and ethnorelativity acceptance and adaptation.

The data were first analyzed by computing mean scores for individual items. The data indicated that the majority of teachers were at minimization level on the scale (e.g., we are all the same, culture does not matter), denial was the next largest group (did not recognize variation in cultural groups), defense (e.g., see culture, but see their own culture as superior), acceptance (e.g., recognizing beliefs and values that go along with culture). Main effects and interaction analyses were conducted using a one-way ANOVA. Results indicated that the demographic variables of age, ethnicity, and overseas

experience were significant. High school teachers were the most accepting, however white non-Hispanic or African Americans were the least accepting.

Mahon (2006) concluded that these differences indicate a need for professional development, graduate work focusing on culture influences on education, overseas experience, service learning, and a variety of cross-cultural experience. She recommends that future research focus on coursework that provides teachers with multiple experiences in the area of culture relevance.

In a qualitative study designed to explore the construct of *whiteness*, Pennington (2007) supervised four preservice teachers during their student teaching in a primarily Hispanic American school located in a high poverty area. She attempted to ascertain how preservice teachers felt their *whiteness* influenced their interactions with the students at their school and how the field supervisor could work to reshape the attitudes of the preservice teachers in terms of viewing themselves as being in a position of privilege.

The intervention involved the supervisor sharing stories, experiences, and engaging the student teachers in critical thinking and problem solving. The goal was to have the preservice teachers view themselves from a critical perspective and how their privilege impacted their interaction with the students. The conversations challenged the preservice teachers to explore their interactions with their students, share their feelings about the subject of race and privilege, discuss being comfortable with parents, tell stories of feelings of inadequacy, and debate the construct of *whiteness*.

Data analysis indicated that teachers recognized their thoughts and actions did not always match, often these preservice teachers believed they were being kind and generous while their physical action was defensive. Pennington (2007) recommends the

use of these discussions as a viable means for preservice teachers to examine race and their relationships in the classrooms. She is critical of multicultural education that does not discuss privilege and whiteness. She recommends that teacher education programs encourage critical discussion of race, racial identity, as well as understanding one's own race and its impact on students.

Summary

The success of students from diverse backgrounds, students living in poverty and linguistically diverse students in the school setting is a multi-dimensional construct. The variables impacting the school success of these students are complex and in some instances institutionalized. However, it appears that the relationship formed between teachers and students has a significant impact on a student's success in the school setting. This relationship, positive or negative, influences academic achievement, referral to Special Education, behavior, and student motivation (Artiles & Trent, 1994; Espinosa & Laffy, 2003; Jussiem & Kolb, 1994; Neal, McCray, Webb-Johnson, & Bridgest, 2003). Recent research indicates that teacher education should focus on the cultural biases and or prejudices held by teacher candidates while in training to prepare them for the realities of the classroom (Neal, McCray, Webb-Johnson, & Bridgest, 2003).

Teacher Education Programs

Accredited teacher education programs attempt to meet the multicultural and linguistic requirements of CEC, INTASC NCATE, and TEAC through a variety of methods. The three most common methods are stand-alone programs, field experiences,

and infused programming (Brown, 2004b; Jennings, 2007; Walker-Dalhouse & Dalhouse, 2006). The common threads of these programs focus on preparing pre-service teachers to teach diverse groups of students, exposing them to diverse thought, and working with them to recognize the impact of ethnicity, religion, educational experience, language, gender, sexuality, and other individual differences on the educational outcomes of their students (Jennings 2006; Sleeter, 2001).

Stand-Alone Programs

A common method colleges of education use to meet the NCATE and TEAC standards on diversity/multicultural education is to offer a course on diversity within teacher education programs. Within this course students are exposed to topics on diversity including ethnicity/culture/race, class, gender, poverty, sexual orientation, and socio-cultural influences on education. Courses generally have activities to encourage self-discovery (e.g., recognizing biases, embracing culture, and opportunities to experience communities that differ from one's own). The attempt is to dispel stereotypes that may impact interactions with students and families (Brown, 2004; Tran, Young, & Di Lilla, 2005).

Middleton (2002) explored preservice teachers' attitudes toward, beliefs in, and commitment to diversity. The goal was to identify where the attitudes of the preservice teachers fell on a diversity continuum, if attitudes of teachers could be changed trough participation in a diversity course, and the processes preservice teachers use to attain, maintain, adapt, or create ideologies for increased commitment towards diversity. The participants of the study were students in a university diversity course. The course was comprised of predominantly White non-Hispanic students (89%), and 11% from the

ethnic groups of African American, Hispanic American, Native American, and Biracial. The class was 61% female and 72% undergraduates. Students participated in a variety of activities throughout the course including lectures, seminars, guest speakers, videos, field trips, and contact with people from diverse backgrounds.

The *Beliefs Diversity Scale* (Pohan & Agulliar, 1995) was used as a pre- and post test. The scale is comprised of 39 items and based on a 5-point Likert scale (5 = Strongly Agree; 1= Strongly Disagree). The scale measures personal and professional beliefs concerning diversity issues (e.g., race, social class, language, gender, ability, sexual orientation, practices, procedures, and policies within the school environment/culture). Data from the scales were analyzed using a one-way ANOVA and paired *t*-tests. The qualitative data were collected throughout the study as students participated in classroom discussions and journaled about activities in the class.

Middleton (2002) found that preservice teachers were willing to teach from a multicultural perspective, but held conflicting attitudes and indicated a lack of skills to do so effectively. Results from the pre- and post *Beliefs Diversity Scale* indicated that the preservice teachers increased their personal and professional beliefs about diversity. And, the qualitative data indicated that students were willing to make a commitment to use more inclusive language, address harassment, and focus on sexual orientation.

Middleton (2002) concluded that stand-alone courses can make a difference in changing preservice teachers' attitudes and beliefs about diversity. She maintains that courses such as these allow the students to reflect on injustice, explore other viewpoints, explore their own beliefs, and decide on their role as teachers. Middleton suggests that teacher education programs must include stand-alone multicultural courses as well as

have qualified instructors teaching, create authentic cultural experiences, and assess the levels of comfort teacher candidates.

In a similar study that focused on the changing of stereotypical ideas concerning specific ethnic groups, Tran, Young, and Di Lilla (2005) had preservice students complete a cultural survey comprised of 26 items dealing with the stereotypical personal traits of African Americans, Mexican Americans, and white non-Hispanic Americans. Fifty-five students enrolled in three introductory multicultural courses completed the study in the first week of class and again after 14 weeks of instruction. The introductory class focused on decreasing stereotypes and racism, exploration of values and biases, examination of the dominant culture, and the role of the teacher as a change agent for social responsibility.

Responses from the survey were analyzed using two-tailed, *t*-tests. The data indicated a change in the stereotypical attitudes of all groups studied. The stereotypes held by the preservice teachers concerning African American, Mexican Americans, white non-Hispanic Americans had been changed in a positive direction over the course of the semester.

Tran, Young, and Di Lella (2005) concluded that stand-alone courses can be a vehicle for changing stereotypes held by preservice teachers. They maintained that the purpose of multicultural courses should be to positively impact the current attitudes of students concerning cultural and ethnic groups. They believe that these courses are successful when students exchange ideas and thoughts outside of their normal sphere of influence and have direct contact with diverse groups.

Brown (2004a) studied the relationship between pre-service students' self-concept and cultural diversity awareness. One hundred and nine students participated in the study. The ethnic composition of the group was white non-Hispanic (100), African American (7), Hispanic American (1), and Asian American (1). The mean age of the participants was 24.1 and 94% had attended homogeneous K-12 schools.

The students completed the *Tennessee Self- Concept Scale* (TCSC:2) (Fitt & Warren, 1996) and the *Cultural Diversity Awareness Inventory* (CDAI) (Henry, 1995) as pre- and post- assessments. The self-concept scale had 82 questions and the *CDAI* had 28 items. Both were a 5-point Likert Scale with 1 (strongly disagree) and 5 (strongly agree). Students also completed bi-weekly journals, field experience reports, and reflective response journals. Data from the *CDAI* and the *TCSC:2* were analyzed using a series of three analyses: a Shapiro Wilk Test, a factor analysis, and a Welch ANOVA.

The results of the study indicated that cultural diversity awareness increased more than self concept for all participants. However, the most significant change in diversity awareness occurred in students who were 27 years or older and female. This group of students showed a significant increase in diversity awareness with a specific tolerance for people with different communication styles and speech patterns.

Brown (2004a) concluded that even though preservice teachers were predominately White non-Hispanic and female they varied considerably in their diversity awareness and their self-concept. She found that in the course of a semester the students varied along a spectrum of ideals and beliefs with some completely accepting the tenets of cultural diversity and others completely rejecting the ideas. Brown suggests monitoring student change frequently over the course of a semester rather than relying on pre- and post

assessments. She suggests using reflective journaling, structured discussions, debriefing, and cross cultural field experiences.

In a study that explored the change in awareness, knowledge, and skill of preservice teachers to teach diverse populations after taking a multicultural education course, Keim, Warring, and Rau (2001) administered the *Multicultural Counseling Awareness Knowledge and Skills Survey (MCAKSS)* to 63 students. The participants attended three sections of an undergraduate multicultural class taught by the same instructor. The demographic composition of the class was 63.6% female, 87.3% white non-Hispanic, 4.8% Hispanic. 1.6% African American, 1.6% Asian American, and 6.3% *other*. The survey contained 60 items and measured three subscales (e.g., awareness, knowledge, and skills pertaining to multicultural awareness). Pre-, mid- and post surveys were completed by the students.

The class was taught using a variety of lectures, readings, discussions, presentations, videos, as well as the creation of lesson plans. The objectives of the course were: (a) the contributions and lifestyles of diverse cultural groups within the United States, (b) recognizing biases, prejudices, and discrimination, (c) creating a teaching environment that encourages positive self-image and interpersonal relationships, (d) respecting human rights and diversity, and (e) developing inclusive approaches with respect to gender, multiculturalism, and disability.

A repeated-measures ANOVA was used to ascertain significance among the three assessment times. All areas on the survey were statistically significant between two of the three assessment times: (a) awareness (pre- and mid survey and pre- and post survey), (b)

knowledge (pre- and mid survey and mid- and post survey) and (c) skills (mid- and post survey and pre- and post survey).

Kiem, Warring, and Rau (2001) concluded that their findings support that awareness is a key factor in the beginning of the semester and it levels off, while knowledge consistently changes throughout the semester. They concluded that in order for students to develop skills in working with diverse populations, they must have awareness and knowledge of those populations. They maintained that skills should be sequenced and opportunities for bonding with each other and discussion should be provided. Keim, Warring, and Rau support additional research on models to implement effective preservice multicultural training.

In a study designed to assess changes in attitude as well as the level of awareness preservice students have concerning working with diverse children and interacting with families from diverse backgrounds, Cho and DeCastro-Ambrosetti (2006) administered pre- and post assessments to 25 preservice teachers in a multicultural course. The assessment consisted of seventeen questions related to personal experience with diversity, demographic information, and twenty-five questions regarding attitudes towards diversity. The post assessment contained a section of open-ended questions designed to engage students in self-reflection.

Data were analyzed using *t*-tests and frequencies, while the qualitative self-reflection questions were coded and categorized by themes. Data from both the quantitative and qualitative assessments indicated that the multicultural education course had some positive effect on student attitudes and their preparedness to work with students and parents of culturally and linguistically diverse backgrounds. However, further analysis of

the data revealed that many students did not see the benefits of multicultural education and continued to believe that diverse parents were to blame for the low achievement of their children. Cho and DeCastro-Ambrosetti (2006) concluded that these conflicting findings suggest a need to reconfigure multicultural education for preservice teachers. They maintained that teacher education should provide multiple opportunities throughout preservice education to address the issues of racism through interaction with diverse groups prior to student teaching.

The research appears to indicate that positive change can occur in the stand-alone courses. A limitation of the one course approach is the inability to ascertain if this information generalizes into classroom-based practices. It is also difficult to measure whether or not the preservice teacher interacts in a positive non-biased manner with children and families from diverse groups. Participation in one course may not provide for growth past the class experience and may not result in best practice at the end of semester (Banks & Banks, 2004). By providing multicultural education in a compartmentalized manner, the result may be the continuation of stereotypes of ethnic/cultural groups and confusing the preservice teacher in terms of what they should do with the information provided (Sleeter, 2001).

Field-based Experiences

Creating opportunities for preservice teachers to interact with children/youth from culturally and linguistically diverse communities while in a structured or semi-structured field-based experience allows for the shaping and reshaping of attitudes and ideals about diverse groups. Often preservice teachers have limited contact with people who differ from them. This limits their opportunities to interact and learn in diverse settings. A field-

based experience immerses preservice teachers in situations that challenge stereotypes that may be held by the teachers.

Brown (2004b) compared two methods for incorporating a field-based component into a multicultural course. The first field component involved a traditional multicultural stand-alone course incorporating a six-hour structured, field-based component in which students observed in diverse classrooms. The second course involved preservice teachers participating in stimulations, dialogues, and interactions as well as participating in a six-hour community-based, field-work experience. The goals for the community-based field-work were: (a) being in an environment that the students had no control over (b) experiencing minority status or subculture, (c) exploring community resources, and (d) depending on group members for collaboration. Students were assessed using the *Cultural Diversity Awareness Inventory* (Henry, 1986) as a pre- and post measure of diversity awareness and qualitative data were collected through work samples, journals, research papers, and research projects. Four sections of the multicultural course participated in this study, two traditional field-based and two immersion, community-based fieldwork.

Data analyses were conducted using nonparametric tests as well as a one-way ANOVA to ascertain if there was difference between the courses taught by the instructors. A two-way ANOVA was conducted to compare the courses and the sections of the pre and post assessment results. A MANOVA was conducted with repeated measures (pre and post) to evaluate if there was awareness change over time.

Results from the study indicated that both fieldwork methods assisted students in increasing knowledge pertaining to diversity awareness. However, the group that

participated in the community-based fieldwork and interactive class activities had a greater change in diversity awareness over time.

Brown (2004b) concluded that immersion into a community as well as the opportunity to interact with peers results in a greater learning experience for preservice teachers concerning diversity. She recommends replicating the study in a variety of regions across the country as well as varying the gender of the instructor.

Service learning as a form of field experience is a relatively new phenomena. In order to allow preservice teachers to build relationships, Alvarez-Thomas, and Lehman (2006) incorporated a service learning component in a course on urban special education. The goal was to expose preservice teachers to the needs of a community as defined by the members of that community. Students worked with children/youth in the community to assist them in identifying and addressing a social issue in the community. The project lasted for two semesters and over the course of the semesters students worked in the field and participated in structured discussions during class time.

The field-based service learning project was conducted at a service agency housed in an apartment complex. Pre-service teachers were responsible for conducting discussions with children/youth ages 5 to 8 as well as adolescents. They discussed social justice issues (e.g. homelessness, inequity, and poverty).

The data collected for the study was qualitative in nature and involved data collected in class discussions and reflections. Analysis of the data was ongoing and fluid addressing the needs of students to assist with service project. Results from the weekly reflections indicated that students had benefited from the service learning project,

students were surprised at the level of activism displayed in the children and were pleased at the level of empowerment students felt after the conclusion of the project.

Alvarez-Thomas, and Lehman (2006) concluded that field-based service learning should be a core component of multicultural education in teacher preparation programs. They maintained that this type of experience allows deeper exploration and awareness of diverse groups as well as diverse communities. They recommend that all teacher preparation programs include multiple and varied interactions with diverse communities in order for teachers to develop competencies and awareness of social justice issues.

Walker-Dalhouse and Dalhouse (2006) studied the change in attitudes of preservice teachers when diverse experiences were incorporated into their field experiences. The students participated in a series of courses that focused on enculturation and education of Native Americans, African Americans, and Hispanic Americans and another that emphasized social and ethical issues pertaining to the historical and social aspects of multicultural education. The 92 white non-Hispanic preservice teachers who participated were from middle to upper level economic level families and participated in 30-hour, field-based experience and a 10-hour practicum.

During the seminar portion of the field-based course, the students participated in panel discussions as well as readings about multicultural education. They then went into the field were they were responsible for teaching two lessons and using the information from the seminar in the reading/language arts class.

The preservice teachers filled out the *Cultural Diversity Awareness Inventory (CDAI)* (Henry, 1995) during the first week of class and again at the end of the semester. The *CDAI* is based on a 5-point Likert scale that asks the teachers to rate their awareness of

awareness of cultural issues and beliefs. An ANOVA was done to compare pre- and post-inventories as well as the differences between male and female participants. The goal was to ascertain if the seminar coupled with the field experience changed the beliefs of white non-Hispanic preservice teachers in terms of awareness of culture, cultural communication, working with diverse families, assessment, and multicultural teaching methods.

Results indicated that the course and field-work had a significant impact on all students (Walker-Dalhouse & Dalhouse, 2006). The pre- and post-inventory data indicated that the preservice teachers' attitudes improved as well as their ability to assess their students. The preservice teachers were better able to recognize cultural or language differences over actual disabilities. They were also less accepting of ethnic jokes, were more equitable in their teaching, supported students' ethnic identity, and indicated they were interested in teaching students different from themselves.

Walker-Dalhouse and Dalhouse (2006) concluded that structured coursework coupled with field-based experiences provided a complex and dynamic milieu in which preservice teachers have an opportunity to reflect about their beliefs pertaining to culture and diversity issues. They believe this interaction creates a stronger and more pluralistic teacher.

Infused Programs

Theorists in the field of multicultural education support the use of an infused multicultural curriculum throughout preservice education coursework (Ambe, 2006; Clark, 2002; Jennings & Greene, 1999; Nieto, 2000). The goal of this infusion is to create a multicultural environment that addresses diversity consistently overtime and

within content coursework. The belief is that infusion of diversity education provides pre-service teachers multiple opportunities to connect theory with practice (Borden, 2007). Clark (2002) maintains that the infusion of diversity issues into all coursework creates a learning environment in which all cultures, ethnic groups, and other diverse groups are affirmed while non-infused coursework tends to affirm only mainstream culture. While theorists in multicultural education discuss the concept of infused multicultural education, there is a limited research on programs that use infusion models of multicultural education (Trent, Kea, & Oh, 2008). The research that has been conducted has not revolved around multicultural education specifically, but peripherally. Bleicher & Kirkland-Tucker, 2004; Borden, 2007; Gresham, 2007)

In a study that attempted to create a supportive mathematics learning environment for low achieving students, Gresham (2007) designed a classroom and curriculum that taught across learning styles and provided multiple perspectives of instruction. The goal was to teach to student strengths while improving weaknesses. This study explored the relationship between math anxiety and learning styles. Gresham maintained that the study was an infused multicultural study in that learning styles often are influenced by a student's cultural experiences.

The preservice teachers who participated in the study were enrolled in a mathematics method course. There were 264 students who participated in the study (247 female and 17 male). Students completed the *Mathematics Anxiety Ratings Scale* (MARS) (Richardson & Suinn, 1972), a 98-item, 5-point Likert scale used to assess the level of student math anxiety. The students also completed the *Style Analysis* (SAS) (Oxford, 1993), a 110-item, 4-point Likert scale that identifies preferred learning style.

Data analysis was done using Pearson correlations. Results indicated that global learners were positively correlated with anxiety. Of the 264 preservice teachers, 179 scored as global learners, 8 were considered analytical, and 77 were considered to be a combination of global and analytical.

Gresham (2007) discussed the characteristics of global learners (e.g., visual, intuitive, contextual, inductive) and how these learners typically are not supported in a traditional math class that is linear, sequential, deductive, and rule bound. She maintained that students with these learning styles typically are not *invited* into the classroom to learn. She maintained that multicultural education must be invitational in nature and that it should be positive, supportive, teach to student needs, recognize the role of learning styles, create learning communities, use non-traditional teaching methods, engage students in exploration, and provide challenging and relevant curriculum. Gresham (2007) concluded that preservice teachers must be taught to recognize the importance of teaching to the learning styles of their students as well methods to increase the effectiveness of instruction and minimize stress in mathematics classrooms.

Borden (2007) explored the use of service learning to decrease ethnocentrism in an intercultural communication course. This goal was to provide an infused curriculum that went beyond simple multicultural education. The students (27 females and 13 males) attended two sections (e.g., fall and spring) of an intercultural communications course taught by Borden. The fall section was comprised of all white non-Hispanic students and the spring section was comprised of 15 white non-Hispanic students and 3 African American students, ages 19 to 24. The students were required to complete 15 service hours at either an inner-city church or on campus at the International Club.

The students completed the *Generalized Ethnocentrism Scale* (GENE) (McCrosksey, 2001) as a pre-and post measurement. The *GENE* is a scale consisting of 22 items, 15 of which are related to ethnocentrism. A two-tailed paired comparison *t*-test was used to analyze the data. Results indicated that the post-measurement score decreased after the course and field work experience. This means that the students' level of ethnocentrism decreased after the course and the service learning experience. Borden (2007) concluded that it was necessary to couple the fieldwork experience with the course in order to provide sufficient opportunities for the students to reflect on their cultural communication as well as to involve the students with people from different cultures. She believes that the infused model facilitates the development of a culturally responsive educator.

Bleicher and Kirkland-Tucker (2004) studied the development of integrated lesson plans that infused global perspectives, social studies, and science content. The study focused on the planning and learning strategies used by preservice teachers as they developed integrated units and designed the evaluation of the unit. The goal was to ascertain changes in attitudes concerning global perspectives and content knowledge of the preservice teachers. Over a five-week time period, the preservice teachers attended either a science (19 students) or social studies (12 students) class and were grouped to prepare a unit on a topic (e.g., the Everglades, the Suex Canal, gold mining in Brazil). The authors maintained that the infusion of multicultural issues was done through a focus on global perspectives (e.g., awareness of the state of the planet, cross cultural awareness, awareness of human choices).

Data were collected using an ethnographic method in which Bleicher and Kirkland-Tucker served as both researchers and participants in that one taught the science course

and the other the social studies course. Student work samples, presentations, and reflection journals were collected. Additional data included the preservice teachers' demographic information and their written goals related to education.

Data analysis concentrated on the assessment of the units developed by the students. The assessment consisted of: (a) the core activity in the unit, (b) closure of the unit, and (c) the assessment of the unit. The analysis also considered the students' ability to integrate both the science and social studies content areas and the level of global perspectives contained in the unit (e.g. multiple perspectives, interconnectedness, civic action). The analysis used a matrix with the components of the unit compared to the lessons. The matrix was used to evaluate the same lessons on the global perspective components.

Results indicated that in three of the seven units the preservice teachers effectively integrated the required components (integration and global perspectives). Units with effective integration demonstrated instructional strategies within the introductory lessons that framed the unit. Specific strategies used in the units to encourage students to interact with the content material were case studies and debate. In the units, multiple perspectives were explored with activities that stressed the perspectives of parties involved in a situation (e.g., Agent Orange, American soldiers, Vietnamese military, and the indigenous people whom the chemical would affect). The interconnection of science and social studies was explored in the lessons. The achievement of global perspectives was demonstrated by the students making instructional decisions based on civic action.

Bliecher and Kirkland-Tucker (2004) concluded that this study indicated students were able to effectively integrate the content of science and social studies to provide a

connected unit of science and social studies. This unit and group project allowed information to be shared, discussed, and experienced. Bliecher and Kirkland-Tucker maintain that the preservice teachers benefited from the modeling of integration by the professors and the infusion of global perspective helped the preservice teachers see beyond the wants and needs of the United States and see how decisions made in one country impact another country and the world.

Teacher education programs that focus on infused multicultural education are attempting to model instruction that is multicultural in nature. The goal is for preservice students to learn to infuse diversity issues as they teach in their classrooms upon graduation. The focus is on experiences that model infusion of diversity content throughout curricula overtime. However, the research in this area is scant and the model warrants further exploration.

Summary

Multicultural education is a dynamic construct and one that has evolved over the course of time. Teacher education programs are attempting to address this construct in a variety of manners (e.g., stand alone coursework, field experience, infused programs) in order to meet professional standards as well as accreditation requirements. The goal is to prepare educators who are willing, ready, and prepared to work effectively with students and families from diverse communities. The development of the culturally competent educator has been discussed frequently in the literature (Clark, 2002; Ladson-Billings, 1995). However, as preservice education programs work to address the issue of cultural competence, preservice teachers continue to report a lack of preparedness to work with

children/youth who differ from them culturally and linguistically (George & Aronson, 2002).

Thus, a recursive cycle begins, teacher training programs attempt to meet the needs of their preservice teachers in this area, preservice teachers report a lack of skills in the area, and children/youth with and without disabilities from diverse groups are impacted negatively (Howard, 1999; Klingner, et al., 2005; Melnick, & Zeichner, 1995). Current research indicates that culturally and linguistically diverse students experience: (a) low academic achievement, (b) a high dropout rate, (c) a high arrest rate, and (d) a high placement rate in special education classrooms (Skiba et al., 2005; Stewart, 2007) This often results in a variety of inequalities, societal stereotypes, and ultimately a cultural mismatch among students, parents, the school environment, and teacher expectations (Delpit, 1995, Kea & Utley, 1998; Klingner et al., 2005)

In the end, educators rely on their training to prepare them to work in a diverse world. It is prudent for Colleges of Education to explore strategic methods to prepare their graduates to work in a world that is changing in terms of diversity, economics, language, and politics. It is only through the identification of effective multicultural preparation models that the professional development of educators will be well rounded in terms of cultural competence and relevance.

CHAPTER THREE

METHOD

Multicultural education is not a new concept in teacher education. Historically, educational organizations have recognized the importance of anti-bias, prejudice reduction, cultural pluralism, and relationship building in order to foster equity in the classroom (Derman-Sparks, 1989; NCATE, 1987, INTASC, 1992; TEAC, 2006).

Recently, Colleges of Education have begun to explore a variety of methods to teach multicultural principles, cultural competency, cultural consciousness, and acceptance of diverse values and needs. Emerging best practices include: (a) opportunities for critical self-reflection, (b) increased contact with diverse students, and (c) provisions of a safe environment to discuss issues of race, gender, economic relations, and history (Gay, 2004; Gay & Kirkland, 2003).

This study focused on pre-service teachers who were participating in special education, pre-student teaching fieldwork. The students received multicultural training that addressed classroom biases during their special education pre-student teaching seminar as well as a series of lessons/lectures that focused on multicultural principles (e.g. cultural competency, cultural consciousness, critical pedagogy, equity, learning styles) and the infusion of these principles into their daily lesson plans. During the study, quantitative data from a series of assessments and lesson plans were collected to: (a) measure the attitudes of the special education pre-service teachers towards cultural interactions, cultural pluralism, ethnocentrism, and cultural difference, (b) measure the pre-service teachers' ability to identify best practice as it related to multicultural

education, and (c) measure the ability of the pre-service teachers to plan lessons that incorporate multicultural information.

Research Questions

The study focused on the following questions:

Research Question One. Does participation in multicultural training during fieldwork impact special education pre-student teacher's multicultural teaching knowledge?

Research Question Two. Does participation in multicultural training during fieldwork have an effect on the inclusion of multicultural components into the lesson plans of special education pre-student teachers?

Research Question Three. Does participation in multicultural training during fieldwork impact special education pre-student teacher's attitudes toward diversity?

Research Question Four. Are there differences in the multicultural attitudes of special education pre-student teachers who are from culturally and linguistically diverse backgrounds and those who are not?

Research Question Five. Is age a factor in the multicultural attitudes of special education pre-student teachers?

Research Question Six. Is gender a factor in the multicultural attitudes of special education pre-student teachers?

Description of Participants

The participants in this study were pre-service special education teachers enrolled in ESP 481 *Pre-Student Teaching Seminar.* All students were completing Bachelor of

Science Degrees in Special Education with an endorsement to teach in a resource room with Teaching English as a Second Language (TESL) endorsement.

Pre-service Teachers

The participants in this study were 20 pre-student teachers in a special education department in a College of Education located in a large southwestern city. The students were enrolled in pre-student teaching fieldwork. Prior to the semester of the study, students completed all required core courses including multicultural education methods, passed the Pre-Professional Skills Test (Praxis I), were fingerprinted by the school district, and achieved and maintained a grade point average of at least 2.75 (See Table 1). During pre-student teaching in the special education program students are required to spend ten hours in the field, 12 weeks in a special education classroom, and three weeks in a general education classroom. They write a total of 42 lesson plans, complete a functional behavior assessment, write a behavior intervention plan, and develop an IEP. Four formal evaluations were completed by their university supervisor and the cooperating teacher, and the students completed two self-evaluations.

Instructor of Multicultural Modules

The instructor of the multicultural modules has taught various courses (undergraduate and graduate) at the university level for the last four years and has supervised student teachers. The instructor taught the diversity lessons/lectures for the first twenty minutes of the seminar, disseminated the pre- and post- tests, reviewed and scored weekly lesson plans, and observed the pre-student teachers in their classrooms to ascertain the implementation of the lessons.

Interrater Observers

Teacher fidelity. In order for this intervention to be duplicated it is important to document that the lectures and activities were implemented in the way they were designed. In order to do this, all the lectures and activities were observed by the instructor of the special education Pre-student Teaching Seminar. The instructor served as the teacher fidelity observer in which she checked off steps said by the instructor using the correlating teacher fidelity sheets for the lesson (see Appendix I). The lecture also was videotaped and reviewed by a graduate student using the correlated teacher fidelity sheet for the lesson to check off statements said by instructor in the delivery of the lesson. Teacher fidelity was needed to make sure that the instructor was covering the prescribed intervention. The observers provided immediate feedback to whether the intervention was being carried out effectively.

Interrater agreement between the observer and the graduate student was calculated using the formula [(agreements-disagreements)/agreements *100]. Agreement was 91% between the two fidelity scorers for the information that was covered by the instructor.

Inter-rater scorer. The inter-rater scorer was a graduate student in the Special Education Department with special education teaching experience. The purpose of this person was to ensure that all assessment data was correctly imputing into SPSS for statistical analysis. The scorer has taught at the secondary and post-secondary levels and was trained on the use of the Lesson Plan Assessment. This person was responsible for rescoring 25% of all pre- and post assessments (e.g. *Multicultural/Diversity Content Test* and *Multicultural/Diversity Scale, Revised*) and 25% percent of all the weekly lesson

plans using the *Lesson Plan Assessment*. Agreement for assessment rescoring will use the formula [(agreements - disagreements)/agreements] x 100% = percent of agreement.

Setting

The study occurred during the weekly special education pre-student teaching seminar. The classroom held 25 students and was equipped with an overhead projector, LCD, laptop computer, a white screen, and chalkboards on two walls. It was typical College of Education classroom.

Table 1

Demographics of Pre-Service Student Teachers

Demographics	Number
Gender	
Male	3
Female	17
Ethnicity	
African American	3
Asian American	0
Hispanic/Latino	4
Native American	0
White non-Hispanic American	13
Other	0
Age	
20-29	9
30-39	3
40-49	4
50-59	4
English Primary Language	Yes 18 No 2
Other Language(s) Spoken:	
Spanish, Cambodian, Sign Language	

Instrumentation

The assessments used in this study were created by Anthony Ambrosio. They were the *Multicultural/Diversity Content Test* (Ambrosio, 2000) (see Appendix A), the

Multicultural/Diversity Scale-Revised (Ambrosio, 1998) (see Appendix B), and the *Lesson Plan Assessment* (Ambrosio, Hogan, & Miller, 1999) (see Appendix C *The Multicultural/Diversity Content Test* and *the Multicultural/Diversity Scale-Revised* wereused to collect data assessing pre-service teacher content knowledge and attitudes concerning multicultural education. *The Lesson Plan Assessment* was used to assess weekly lesson plans.

Prior to beginning the intervention, students completed two pre assessments, the *Multicultural/Diversity Content Test* and the *Multicultural/Diversity Scale-Revised.* During the 13-week intervention, students' lesson plans were assessed using the *Lesson Plan Assessment* to measure the integration of multicultural practices discussed in the seminar.

The Multicultural/Diversity Content Test

The *Multicultural/Diversity Content Test* (Ambrosio, 2000) (see Appendix A) was designed to measure student philosophies and awareness of pedagogy considered to be best practice for working with learners from culturally and linguistically diverse backgrounds. This assessment contains 35 questions that present a scenario and four multiple-choice answers from which the student selects the best solution. The questions focused on a variety of multicultural issues/constructs (e.g. policy and procedures, bias, teacher expectations, key words, family involvement) The *Multicultural/Diversity Content Test* was used as a pre- and post- assessment to measure the student content knowledge concerning issues, policies, and information vital in multicultural education.

Multicultural/Diversity Scale-Revised

The *Multicultural/Diversity Scale-Revised* (Ambrosio, 1999) (see Appendix B) consists of 30 questions on which students provide their responses using a four-point Likert scale: (1) Strongly Disagree, (2) Disagree, (3) Agree, and (4) Strongly Agree. This assessment is designed to measure attitudes about cultural pluralism in personal and professional settings, eagerness to engage in activities with other cultures, and feelings concerning the role of diversity within a school environment. The *Multicultural/Diversity Scale-Revised* was used as a pre- and post- assessment to measure attitudes prior to the instructional intervention and at the end of the semester.

The Lesson Plan Assessment

The *Lesson Plan Assessment* was adapted from *The Lesson Plan Assessment* (Ambrosio, Sequin, Hogan, & Miller, 1998) (see Appendix C) for the purpose of making the rubric more concise. The assessment was used to assess the lesson plans written by the pre-student teachers over the course of the semester. The assessment was applied to the lesson plans written by the students to measure: (a) objectives that are free of stereotypes and/or bias, (b) multicultural content of the lesson, (c) engagement of the students in the lesson, (e) components of the lesson plan, and (e) the overall evaluation of the lesson plan. The assessment was used to score the lesson plans turned in by preservice teachers on a weekly basis. Students received the lesson plans back each week with scores, comments, and suggestions from the multicultural instructor.

Materials

The materials were a series of lessons/lectures conducted over 13-weeks of pre-student teaching that directly taught major principles of multicultural education. Within

the lessons, students had an opportunity to evaluate the usage of the multicultural lesson principles using case studies of teachers (video and written).

Lectures

The multicultural lessons/lectures used in the study included information, discussion, videos, case studies, and activities designed to the address the constructs of multicultural education and the infusion of the constructs in lesson planning (see Appendix D). All 13 constructs outlined in the *Multicultural/Diversity Content Test* (e.g. policy and philosophy, bias, teacher/student expectations, required knowledge of terms, history, attitude indicators, assessment, community/family, diversity awareness, creating learning environment, respect to variance in cultural point of view, pluralism, and instructional strategies) were the foci of the lectures (see Appendix E).

Each lecture dealt with one or more constructs from the content test and were 20-minutes in length. The basic structure of the lesson was: (a) two to three minutes for advanced organizer, (b) five minutes of direct instruction, (c) five to eight minutes of direct application examples for lesson plans and opportunity for pre-student teacher to contribute three examples, (d) two to five minutes for case study (e.g. written and video), and (e) two minutes for the assessment of the case study in terms of the use of multicultural principle, examples of bias, and how the teacher could have been more inclusive.

Teacher Fidelity Sheets

Teacher Fidelity Sheets were used by the teacher fidelity observer to check the instructor's accuracy delivering the intervention lectures (see Appendix I). Fidelity sheets were prepared for each lesson specifying details that must be included in each lesson. The

observer used these while observing the instructor deliver the lesson and checked off whether or not the covered the information. Lectures were also videotaped and reviewed by a second observer. The two sets of teacher fidelity data were compared weekly so the multicultural instructor could increase or maintain the quality of instruction.

Design and Procedures

This study was conducted over 13 weeks and consisted of four phases. The phases were: (a) preparation, (b) consent and pretest, (c) intervention, and (d) posttest.

Phase One

Preparation. Thirteen lessons were prepared to address the multicultural principles that were constructs in the *Multicultural/Diversity Content Test* (see Appendix D). Permission to use the *Multicultural/Diversity Content Test* (see Appendix F), *the Multicultural/Diversity Scale- Revised* (see Appendix G), and the *Lesson Plan Assessment* (see Appendix H) was obtained from Anthony Ambrosio. Permission to conduct research was obtained from the Behavioral Sciences Institutional Review Board at the University of Nevada Las Vegas.

Training multicultural fidelity observer. Training for the two multicultural fidelity observers occurred over one, two hour-long session. The observers were given the lectures, power points, and teacher fidelity sheets during this session. The training included a summary of the project and the instructor of the multicultural modules modeled three lessons as the observer completed the fidelity sheet (see Appendix I). In the training session, the instructor announced the completion of each lesson section for the first practice lecture. In the second practice lecture, the instructor did not announce

completion of each lesson section as teacher fidelity scorers checked off what they heard on the fidelity sheets. The instructor and the fidelity observers compared the results at the conclusion of exercise. Modeling of the lessons continued until agreement of 90% was reached between the fidelity observer and the multicultural instructor.

Training for interrater scorer. Training for the interrater scorer was conducted over two, hour-long sessions. In the training sessions the interrater scorer was given the scoring assessment for the lesson plans. Using several prepared lesson plans designed to establish standards, the interrater scorer and multicultural module instructor assessed the lesson plans until agreement is was 90%.

Phase Two

Consent. During the first class meeting, the pre-student teachers were introduced to the study. The multicultural instructor explained the study and answered questions. Even though all students in the pre-student teaching seminar completed all the lesson plans and participated in the lectures in conjunction with the multicultural components, data were collected only from the students who signed the informed consent form (see Appendix J).

Pretest. Students completed the *Multicultural/Diversity Scale-Revised* (Ambrosio, 1998) and the *Multicultural/Diversity Content Test,* (Ambrosio, 2000) as pre-assessments. These were completed only by students who signed the informed consent form. The pre-student teachers completed both assessments during the second pre-student teaching seminar.

Phase Three

During phase three, the 13 lessons/lectures were delivered and videotaped. Teacher fidelity was collected by the fidelity observer during the delivery of the lessons and

rescored using the video by the interrater scorer. Lesson plans were collected and evaluated each week. To assess the implementation of the lesson plans with the multicultural objective, 25% of the pre-student teachers were observed in their classrooms three times during the 13-week intervention (e.g., six students).

Multicultural lecture intervention. All students in the seminar received the multicultural instructional intervention, however, only data from pre-student teachers who agreed to participate and signed informed consent were used in analysis. The instruction was delivered over 13 lessons for 20 minutes of the seminar class. The fidelity observer evaluated the instructor's delivery of the intervention with the teacher fidelity sheets that correlated to the required sections of the lessons. Lessons was structured in five sections: (a) two to three minutes for advanced organizer, (b) five minutes of direct instruction, (c) five to eight minutes of direct application examples for lesson plans and opportunity for pre-student teacher to contribute three examples, (d) two to five minutes for case study (e.g. written and video), and (e) two minutes for the assessment of case study in terms of the use of multicultural principle, examples of bias, and how the teacher could have been more inclusive.

Lesson plans. All students were required to write lesson plans according to the Department of Special Education format with the added multicultural objective and content/materials (see Appendix K). Lessons plans were collected weekly during the seminar, assessed using the *Lesson Plan Assessment*, and returned to students the following week. Lesson plans were returned with the assessment, comments, and recommendations on the areas being assessed. The assessment evaluated the lesson plans in terms of the usage of the Multicultural Objective, engagement of students in the lesson,

interaction with a multicultural focus, and lesson plan mechanics (e.g. objectives, materials, presentation of content, method of presentation, use of alternative assessments, connection to previously taught materials, and generalization of content).

Observations. Twenty-five percent of the pre-student teachers were selected randomly to be observed while teaching in the fourth, eighth, and twelfth week of pre-student teaching fieldwork. Students were evaluated by the multicultural diversity instructor and were evaluated on the implementation of their lesson plan and the lesson plan mechanics. The primary goal of the observation was to provide confirmation on the implementation of the lesson plan containing the multicultural objective.

Phase Four

During this phase, the pre-student teachers completed the *Multicultural/Diversity Content Test* and the *Multicultural Scale Revised* as post assessments. Twenty-five percent of the assessments were rescored by the interrater scorer. The post assessment occurred during the 15th week of pre-student teaching.

Interrater scorer agreement was conducted on the *Multicultural/Diversity Scale Revised, Teacher Content Test,* and *Lesson Plan Assessment* and data entered into SPSS. Data were analyzed and a summary of the findings was written.

Data Collection

Inter-scorer reliability on the use of *Lesson Plan Assessment* for written lesson plans was determined by [(agreement - disagreement)/ agreement] x 100 = percent of agreement. Interrater reliability on scoring of the pre- and post- assessments was established with twenty-five percent of pre- and post- *Multicultural/Diversity Content*

Test (Ambrosio, 2000) and *The Multicultural Scale, Revised*, (Ambrosio, 1998) being rescored using the formula [(agreement - disagreement)/ agreement] x 100 = percent of agreement. Data collected from the assessments, lesson plans, and demographic information were entered into SPSS for statistical analysis.

Treatment of Data

Data from the *Multicultural/Diversity Content Assessment, Multicultural/Diveristy Scale- Revised, and Lesson Plan Assessment* were analyzed to answer the follow questions:

Research Question One: Does participation in multicultural training during fieldwork impact pre-student teachers' multicultural teaching knowledge?

Analysis: Dependent *t*-tests were used to compare pre- and post intervention assessments. Alpha was set at .05.

Research Question Two. Does participation in multicultural training during fieldwork have an effect on the inclusion of multicultural components into the lesson plans of pre-student teachers?

Analysis: A repeated measures ANOVA was used to compare the student's scores from the content section of the lesson plan rubric in the 4^{th}, 8^{th}, and 12^{th} week of multicultural instruction. Alpha was set at .05.

Research Question Three: Does participation in multicultural training during fieldwork impact pre-student teachers' attitudes toward diversity?

Analysis: Dependent *t*-tests were used to compare pre- and post intervention assessments. Alpha was set at .05.

Research Question Four: Are there differences in the multicultural attitudes of pre-student teachers who are from culturally and linguistically diverse backgrounds and those who are not?

Analysis: A 2 X 2 mixed-model ANOVA was used to analyze pre- and post assessment data from teachers from culturally and linguistically diverse backgrounds and those who are not. Alpha was set at .05.

Research Question Five: Is age a factor in the multicultural attitudes of pre-student teachers?

Analysis: A 2 X 4 (time by age groups) mixed model ANOVA was used to study teacher attitudes (pre and post-intervention) and the potential effect of age. Alpha was set at .05.

Research Question Six: Is gender a factor in the multicultural attitudes of pre-student teachers?

Analysis: A 2 X 2 (gender by time) mixed-model ANOVA was used to compare pre- and post- intervention data and the potential interaction with gender. Alpha was set at .05.

CHAPTER FOUR

RESULTS

The goal of teacher education is to train potential educators to work with the diversity of learners that exists within today's classrooms (Banks, 2004; Gay, 2004; Ladson-Billings, 1995; Sleeter, 2001). This diversity can be cultural, ethnic, linguistic, sexual orientation, disability, and/or economic. The ultimate outcome is that all learners are respected, included, and taught using methods and strategies focused on the individual. The educational accreditation programs for Colleges of Education (e.g., NCATE and TEAC) require multicultural education/diversity training as part of the accreditation process (NCATE, 2002; TEAC, 2006).

Culturally competent teachers have been found to be an important factor in increasing the academic expectations and achievement for students from diverse backgrounds (Delpit, 1995). Preparing these teachers is a complex process that includes diversity awareness, interaction with diverse cultures, and the application of theory to the real world (e.g., the classroom) (Diller & Moule, 2005; Richards, Brown, & Forde, 2007). Current research in teacher education focuses on three methods to provide culturally relevant education, stand-alone courses, infused courses, and fieldwork (Jennings, 2007).

The purpose of this study was to provide infused multicultural instruction in the pre-student teaching experience of special education students. Pre-student teaching involved a one-hour seminar and 10 hours of weekly fieldwork. The students attended the one-hour seminar in which 20 minutes focused on 13 multicultural constructs, diversity awareness, specific diversity examples/case studies, and the creation of lesson plans that

included a diversity component. The weekly fieldwork involved the students teaching the lesson plans that included a diversity component. The goal was to assess the attitudes and content knowledge concerning multicultural education and diversity constructs in the preservice teachers as well as their ability to infuse a diversity component into their daily lesson plans.

The preservice teachers were given the *Multicultural/Diversity Content Assessment* (Ambrosio, 2000) and the *Multicultural/Diversity Attitude Scale-Revised (*Ambrosio, 1998) as pre-and post-assessments. Their lesson plans were evaluated on the incorporation of a diversity component. Six of the of the preservice teachers (25% of those participating in the study) also were observed three times over the course of the semester in their prestudent teaching classrooms.

Demographic Data

Twenty-five students participated in the prestudent teaching seminar and fieldwork, however only 20 students completed the *Multicultural Diversity Content Assessment* in its entirety, 19 completed the *Multicultural Diversity Attitude Scale-Revised* in its entirety, and 15 students turned in lesson plans throughout the semester. Demogrpahic and other background information was collected in the first section of the *Multicultural Diversity Content Assessment.* Students ranged in age from 22 to 54, had a variety of previous experiences working with children with disabilities (e.g., substitute teaching, educational assistant), and the majority were females (see Table 1).

Inter-rater Scorer Reliability

In order to check whether scores from the two assessments were scored and recorded into SPSS correctly, the inter-rater scorer randomly selected 25% of the pre-and post-*Multicultural/Diversity Content Assessment* and the *Multicultural/Diversity Attitude Scale-Revised* to recheck the scoring and recording of results. Using the formula [(agreements – disagreements)/agreements *100]. The resulting agreement was 97.91% (see Table 2).

Table 2

Inter-Scorer Agreement

Source	Observers	Percentage of Agreement
Inter-scorer agreement	(379-11)/379*100	97.91 %

Overall Inter-rater Agreement 97.91%

Teacher Fidelity

During the actual teaching of the multicultural components, the fidelity of instruction was recorded by the instructor of the prestudent teaching seminar. As a follow-up measure, the fidelity of instruction was recorded by a third-year doctoral student who watched videotapes of the pre-student teaching seminar. A total of 256 statements were

apart of the thirteen lessons. The teacher fidelity score for all lessons was 91% for the two fidelity scorers. The agreements were calculated by using the formula [(agreements-disagreements)/agreements *100] (see Table 3).

Table 3

Inter-rater Agreement for Teacher Fidelity

Source	Rater Scores	Percentage of Agreement
Class Instruction and	Rater #1= 245	(234-22)/234*100= 91%
Videotapes	Rater #2= 230	
Overall Teacher Fidelity Agreement 91%		

Multicultural Assessments

Multicultural Diversity Content Assessment

The *Multicultural Diversity Content Assessment* (Ambrosio, 2000) is comprised of 30 questions. These were broken down into 12 mini-scenarios with four or five possible answers, 12 questions that focus on defining a word or phrase specific to multicultural education, and 11 questions dealing with federal laws relating to multicultural education. The content assessment is representative of the 13 constructs that were taught in the multicultural lectures during in the seminar. They are: (a) policy and philosophy, (b) bias, (c) teacher/student expectations, (d) required knowledge of terms, (e) history, (f) attitude indicators, (g) assessment, (h) community/family, (i) diversity awareness, (j)

creating a learning environment, (k) respect to variance in cultural point of view, (l) pluralism, and (m) instructional strategies

The Multicultural/Diversity Attitude Scale-Revised

The *Multicultural/Diversity Attitude Scale-Revised* (Ambrosio, 1998) measures teacher attitudes relating to diversity awareness and acceptance of people from diverse backgrounds. The assessment is comprised of 30 questions based on a four point Likert scale ranging from 1-Strongly Disagree to 4-Strongly Agree. Issues covered include the use of native language, cultural pluralism, adapting of customs, and views of assimilation.

Analysis of the Data

Descriptive and inferential statistics were used to compare scores on the *Multicultural Diversity Content Assessment,* the *Multicultural Diversity Attitude Scale- Revised, and* the *Lesson Plan Assessment.* The goal was to ascertain if the 13 lectures impacted the knowledge, attitude, and/or application of multicultural principles in the lesson plans of the pre-student teachers.

Research Question One. Does the participation in multicultural training during fieldwork impact pre-student teachers' multicultural teaching knowledge?

The data were analyzed using dependent *t*-tests to compare the results from the pre- and post- *Multicultural/Diversity Content Assessment* (Ambrosio, 2000) to ascertain if there was a difference in the pre- and post- scores of the students. The results of the dependent *t*-tests indicate that there was not a significant difference between pre- and post scores of the students (t=1.208, p= .121) (see Table 4). The data indicate that

lectures did not impact the preservice teachers' knowledge of multicultural principles and content knowledge.

Table 4

Means, Standard Deviations, Standard Errors from Multicultural/Diversity Content Assessment

Multicultural/Diversity Content Assessment	Mean	N	Standard Deviation	Standard Error Mean
Pre Assessment	23.1	20	3.7	0.835
Post Assessment	22.0	20	4.4	0.989

Research Question Two. Does participation in multicultural training during fieldwork have an effect on the inclusion of multicultural components into the lesson plans of pre-student teachers?

The data were analyzed using a repeated measures ANOVA to ascertain differences among the scores from lesson plans written at the beginning of the semester, those written at the mid-point of the semester, and those written at the end of the semester. The results indicated no significant differences among the objectives on the lesson plans ($F = .577$, $p = .568$) (see Table 5). This means that preservice teachers did not write objectives specific to multicultural principles and at beginning of the semester and at the end most of them did not write objectives specific to multicultural principles. There was no significance among the overall lesson plan components in the samples collected three

times over the course of the semester ($F = 1.599, p = .219$) (see Table 6) . These data indicate that preservice teachers did not improve or decrease in their ability to write coherent lesson plans containing matching objectives, activities, and assessment, or assessment that includes alternative methods of assessment. However, there was a significant difference among the multicultural content of the lesson plans ($F = 4.305, p = .023$) (see Table 7). Pairwise comparisons revealed that the pre-service teachers scored significantly higher at the end of the semester than at the beginning of the semester ($p = .030$). Students scored higher on the content components because the lesson plans at the end of the semester included more information as well as content specific to multicultural and diversity issues. The lesson plans also included more activities that had a multicultural focus, these included role-playing, decision making, cooperative learning, and/or cooperative games.

Table 5

Lesson Plan Objectives Component On The Lesson Plan Assessment

	Source	*F*	*p*
Lesson Plan Assessment	Objectives	0.577	0.568

Table 6

Overall Lesson Plan Component On Lesson Plan Assessment

	Source	*F*	*P*
Lesson Plan Assessment	Overall Lesson Plan	1.599	0.219

Table 7

Lesson Plan Content Component On Lesson Plan Assessment

	Source	*F*	*P*
Lesson Plan Assessment	Content	4.305*	0.023*

**Note.* $p < .05$

Research Question Three. Does participation in multicultural training during fieldwork impact pre-student teachers attitudes toward diversity?

The data were analyzed using dependent *t*-tests to compare student scores on the pre- and post- *Multicultural/Diversity Attitude Scale-Revised* (Ambrosio, 1998). The data indicated that there was a significant change from pre-to post-assessment (t= -1.776, p=.046) (see Table 8). The mean score from pre-assessment was 85.8 and the post-assessment mean score was 90.85. This means that there was a significant positive change in the attitudes of the preservice teachers relating to diversity and multicultural education from the beginning of the semester to the end of the semester.

Table 8

Means, Standard Deviations, Standard Errors for Multicultural/Diversity Scale-Revised

Multicultural/ Diversity Scale-Revised	Mean	N	Standard Deviation	Standard Error Mean
Pre	85.8	20	5.3	1.193
Assessment	90.9*	20	12.6	2.827
Post Assessment				

Research Question Four. Are there differences in the multicultural attitudes of pre-student teachers who are from culturally and linguistically diverse backgrounds and those who are not?

The data from the pre-and post *Multicultural/ Diversity Attitude Scale- Revised* (Ambrosio, 1998) were analyzed using a 2 x 2 mixed-model ANOVA comparing preservice teachers from culturally and linguistically diverse groups and those who indicated otherwise. Results indicated no significant group by time interaction ($F = 3.27$, $p = .087$) (see Table 9). Data indicate that there was no difference in scores over time from students from culturally and linguistically diverse group and those who were not ($F= 1.47, p=.240$) (see Table 9).There were no attitude change differences between the students from culturally and linguistically diverse backgrounds and those not from

culturally and linguistically diverse backgrounds. Student attitudes concerning diversity issues changed regardless of group membership.

Table 9

ANOVA Results for Attitudes for Diverse Groups and Time

Multicultural/Diversity Attitude Scale-Revised	Source	*F*	*P*
	Time	1.564	0.227
	Diverse Group	1.478	0.240
	Time x Diverse Group Interaction	3.27	0.87

Research Question Five. Is age as factor in the multicultural attitudes of pre-student teachers?

The data from the pre-and post- *Multicultural/Diversity Attitude Scale-Revised* (Ambrosio, 1998) were analyzed using 2 x 4 mixed model ANOVA (time by age groups) to ascertain if there were differences based on the age of pre-student teachers. Results indicated no significant group by time interaction ($F = .192, p = .900$) There was no significance between age groups ($F=.186, p=.904$) nor, was there a significant change between the pre-and posttest ($F= 1.846, p=.193$). These results indicate that preservice teachers in the youngest group (20 to 25 years of age) changed at the same rate as preservice teachers at the 30 to 39 year-old category and those in the 40 years and above group. See Table 10.

Table 10

ANOVA Results for Attitudes by Time and Age

Multicultural/Diversity Attitudes Scale-Revised	Source	*F*	*P*
	Time	1.846	0.193
	Age Group	0.186	0.904
	Time x Age Group Interaction	0.192	0.900

Research Questions Six. Is gender a factor in the multicultural attitudes of pre-student teachers?

The data from the pre-and post *Multicultural/Diversity Attitude Scale-Revised* (Ambrosio, 1998) were analyzed using a 2 x 2 mixed model ANOVA to compare gender by times the assessments were completed by the preservice teachers. The data indicated no significant group by time interaction ($F = 1.679, p = .211$). Also, no significant difference was found between the gender groups (male, female) ($F = .299, p = .591$). This indicates that gender is not a factor for this group of students in terms of attitude change in relation multicultural and diversity issues (see Table 11).

Table 11

ANOVA Results for Attitudes by Gender and Time

Multicultural/Diversity Attitude Scale-Revised	Source	*F*	*P*
	Time	4.832	0.041*
	Gender	0.299	0.591
	Time x Gender Interaction	1.679	0.211

**Note.* $p < .05$

Summary

The data from this study indicate that the prestudent teacher knowledge base concerning diversity and multicultural issues did not significantly increase over the course of the semester. However, the data do indicate that the attitudes of the prestudent teachers concerning diversity issues did change significantly in the positive direction. This indicates that the participants improved their attitudes about multicultural education and diversity issues after participating in the infused seminar and fieldwork. There were no attitude differences found among students from diverse groups and those not from diverse groups, among students from different age groups, or between male and female students.

Data from the analysis of the prestudent teachers' lesson plans indicated no significant difference in the diversity objectives or the overall quality of the lesson plans over the course of the semester. However, the data analysis did indicate a significant

improvement in the lesson plans concerning the multicultural content of the lesson plans over the course of the semester.

CHAPTER FIVE

DISCUSSION

The educational conundrum in American public education is that the demographics of the classroom are changing while the teaching force remains the same as it has been for the last fifty years, white non-Hispanic, middle-class, and, for the most part, female (NCES, 2006). Researchers and theorists in the field of education maintain that this overwhelmingly homogenous group of educators is unfamiliar with the needs of diverse students and this unfamiliarity impacts student achievement, drop-out rate, parent involvement, over-representation in special education, and over-representation in restrictive educational settings (e.g., self-contained classrooms) (Abella, Urutia, & Shneyderman, 2005; Chatterji, 2006; deValenzulea, Copeland, Qi, & Park, 2006; Kea & Utley, 1998; Klingner et al., 2005; Skiba, Polani-Staudinger, Simmons, Gallani, & Feggins-Azzizz, 2006). However, the literature also indicates that teachers, regardless of ethnicity, who are culturally competent, are more successful when teaching students from diverse backgrounds (Ladson-Billings, 1995).

In recent years, teacher education programs have been mandated to address diversity issues in preservice training and, thus, prepare educators to effectively use multicultural principles upon graduation (CEC, 2003; INTASC, 1992; NCATE, 2002; TEAC, 2006). Currently, the majority of programs use one of three models to meet these mandates (e.g. stand alone courses, fieldwork, and infused curricula) (Cho & DeCastro-Ambrosetti, 2005; Gerstein, 2000). However, graduates of teacher education programs continue to

report that they feel unprepared to address the needs of culturally and linguistically diverse students/families once they begin teaching (George & Arsonson, 2002).

The purpose of this study was to: (a) assess the effectiveness of the direct instruction of 13 multicultural education principles and their impact on preservice special educators' knowledge, attitudes, and inclusion in lesson planning, and (b) explore the overall impact of the infused fieldwork model of multicultural education on the knowledge, attitudes, and inclusion in lesson planning. The study was conducted in a special education, pre-student teaching seminar that met weekly over the course of the semester.

Constructs of Multicultural Education

This study was designed to provide preservice special educators with an opportunity, outside of their required stand-alone multicultural course, to develop a bridge between the information in the multicultural course (e.g., self-awareness, diversity awareness, intercultural relationships, and history of diversity in the United States) to actual classroom practices while in a fieldwork setting (e.g., creating a culture of inclusion, developing lesson plans that represent all students, developing an awareness of themselves in relation to the students in their classroom). The 13 lectures were developed to reiterate specific content principles outlined in the *Multicultural/Diversity Content Assessment* (Ambrosio, 2000) and the *Multicultural/Diversity Attitude Scale-Revised* (Ambrosio, 1998) as well as to provide examples that would support the use of the principles in a classroom. The weekly lectures focused on policy and philosophy, bias, teacher/student expectations, required knowledge of terms, history, attitude indicators, assessment, community/family, diversity awareness, creating learning

environment, respect to variance in cultural point of view, pluralism, instructional strategies, key words, and federal laws.

Content Knowledge

The first area of interest in this study focused on whether preservice teachers increased their knowledge concerning multicultural education after participating in the infused fieldwork multicultural training for 13 weeks. This was measured by pre- and post scores from the *Multicultural/Diversity Content Assessment* (Ambrosio, 2000). The data indicated that there were no significant differences between the pre- and post assessment scores of the preservice teachers. In fact, the preservice teachers, as a whole, lost one point in the mean score on the post assessment.

While this decrease in scores on a knowledge-based test indicated the students did not increase their content knowledge over the course of the semester, it is important to consider that the students were not required to take notes during the lectures, though this was encouraged, and the students were not being graded on the knowledge assessment. Thus, the lack of knowledge increase could be due to the fact that the students did not take notes, did not study for the post-assessment as they would a final, or experienced a lack of motivation since the assessment was not part of their seminar score.

The time limit on the 13 lessons also could have impacted the knowledge of the students. The lessons were limited to 20-minutes in length. Often during the lessons, students became very involved in a topic and wanted to discuss it further, but this was not possible because of the structure of the seminar. It maybe that 20- minutes in a seminar was not enough time to adequately allow students to explore the information that was

presented. The short period of time may have covertly indicated to the preservice teachers that this information was not that important. The lack of opportunity for discussion may have thwarted their ability to retain the information presented. It also is possible, that the content presented mirrored too closely what they already knew about multicultural education and their knowledge simply had plateaued.

This lack of increase in content knowledge also leads to the question as to the importance of multicultural content knowledge (e.g., the dates of specific federal laws) when developing culturally relevant lesson plans or a classroom environment in which all students are reflected. The impact of multicultural content knowledge on classroom practices is an area that should be explored further.

Lesson Plans and Multicultural Trainings

The second area of interest in this study was the impact of the 13 lectures on the development of the lesson plans by the preservice teachers. *The Lesson Plan Assessment* (Ambrosio, Hogan, & Seguin,2001) was used to evaluate the three components in the lesson plans (e.g. objectives, content, the overall lesson plan). Over the course of the semester, 15 out of the 20 preservice teacher participants turned in their lesson plans for evaluation. Once again, the students were not receiving a grade on the evaluation of the lesson plans and this might have impacted the low return rate of the lesson plans. It is important to note that the students who were observed in their classrooms during this study all turned in their lesson plans for evaluation. This indicates that accountability is an important factor in a study of this nature.

The three lesson plans that were collected in the beginning, middle, and end of the semester were analyzed using a repeated- measures ANOVA. The data indicated that there was not a significant change in the preservice teachers' use of multicultural objectives or overall lesson plan organization concerning multicultural issues over the course of the semester, however, there was significant change in the multicultural content component of the lesson plans. These data indicate that the preservice teachers did not include multicultural objectives at a greater rate over the course of the semester, even though this was a required component of the lesson plan format used in the seminar, nor did the lesson plans include a significantly better match between objectives, activities, and assessment in terms of multicultural components. This indicates that the overall multicultural composition of the lesson plans remained stable over the course of the semester, the composition did not necessarily get better, but it did not get worse. This may be due to the fact that lesson planning was not a specific component of the 13 lectures provided to the preservice teachers. The person responsible for teaching the 13 lectures was not the person responsible for covering the topic of lesson plan construction in the seminar. This indicates that one person should be responsible for all components of instruction in a seminar of this nature. If an infused fieldwork is the multicultural model being used, then one instructor should be responsible for all components of the course.

However, data analysis on the multicultural content component of the lesson plans indicated that the preservice teachers significantly improved the content in their lesson plans over the course of the semester. The content of the lesson plans included significantly more multiculturalism and diversity activities (e.g., role playing, cooperative

games, decision making). These were all activities that were modeled during the 13 lectures and discussed in the lectures as being appropriate activities to use with students from diverse groups. This indicates that given more time in the lectures it might have been possible to provide more information for inclusion in the lesson plans.

Attitudes On Diversity and Multiculturalism

Overall Attitudes

The third area explored in this study dealt with the attitudes of the preservice teachers concerning multicultural education and diversity awareness. Student attitudes were measured through pre-and post assessments using the *Multicultural/Diversity Attitudes Scale-Revised* (Ambrosio, 1998). Results indicated that the attitudes of the preservice teachers significantly improved concerning diversity and multiculturalism issues over the course of the semester. This is an interesting finding in light of the lack of improvement found concerning their knowledge of multicultural education and diversity issues.

While knowledge certainly needs more exploration in the infused multicultural fieldwork model implemented in this study, it is an important finding that attitudes of the preservice teachers changed in a positive direction over the course of the study. This indicates that, although the 20-minute instructional time was short, it was long enough to focus on attitude change. It might also be that the inclusion in the lesson plans provided another opportunity to consider attitude as the preservice teachers constructed their lesson plans. Thus, attitude and the development of lesson plans might be more closely related than knowledge and the development of lesson plans. It is possible that the change of attitude is the most significant factor in the change of action/behavior as reflected in the

inclusion of multicultural content-based information in the lesson plans. This area certainly needs further investigation in that teacher attitude has been found to be a major indicator of student outcomes (Lovelace & Wheeler, 2006).

Group Membership as a Factor in Attitude

A sub-area of attitude explored in this study was the impact of group membership on multicultural and diversity attitudes. The study explored the relationship of attitude change based on preservice teachers' membership in a culturally and/or linguistically diverse group. Data analysis compared the pre-and post assessment scores of teachers who indicated membership in a diverse group on the *Multicultural/Diversity Attitudes Scale-Revised* (Ambrosio, 1998). The data indicated that there was no significant difference in attitude change based on membership in a culturally and linguistically diverse group. This indicates that regardless of whether students came from a culturally or linguistically diverse group their attitudes toward diversity and multicultural issues were not significantly different from preservice teachers who were not from diverse backgrounds. This is helpful as teacher education programs plan and design curricula for traditional students as well as groups of students that contain more diversity (e.g., alternative programs). It appears that membership in a diverse group is not a prerequisite to attitude change and that all students, regardless of diverse group membership or not, can benefit from multicultural and diversity education.

Age as a Factor in Attitude

The second sub-area explored concerning attitude change involved the construct of age. This area explored the relationship between attitudes over time and between the age groups of the preservice teachers. The data analysis indicated that age was not a

significant factor in the change of attitudes among the preservice teachers. This area was explored because of the large variation in age found within the sample group, the ages ranged from 20 years of age to over 40 years of age. This age range reflects the current age range found in teacher education programs (NCES, 2005). This area is important in that the research concerning age and attitude has shown that the most resistant to change is found in younger students (Brown, 2004a; Drudy & Clark, 2006). This study found that there was no difference in the change in attitudes among the age groups, indicating that all students changed their attitudes over the course of the semester regardless of age. This is an important finding in that as teacher education programs move to include diversity issues more and more into all coursework, age should not be considered a factor.

Gender as a Factor in Attitude

The third sub-area explored concerning attitude changed involved gender. This area explored the relationship between gender and attitude change over the course of the semester as measured by the *Multicultural/Diversity Attitude Scale-Revised* (Ambrosio, 1998). The analysis compared the two gender groups over time and found no significant difference between male and female preservice teachers in their change of attitudes. This indicates that both male and female students changed their attitudes over the course of the semester. Again, this is an important finding as teacher education programs begin to infuse multicultural education into their preservice training. It appears that the techniques dealing with attitude that have been developed to work with the majority female participants in teacher education work equally as well with the male participants. However, this is an area that does need further exploration as more males enter the

teaching field through alternative programs. It should be noted that the majority of the sample was female (17 of the 20), with a larger sample size and greater representation of men within that sample results may be different.

Summary

The six questions explored in this study were framed by the need for teacher education programs to devise additional methods to teach issues concerning multicultural pluralism and diversity. With the ultimate goal of teacher education to provide appropriate content knowledge as well as create positive attitudes concerning diversity and multicultural education, it is important that programs explore and validate models that create a culturally responsive educator. Current research indicates that teacher education programs still have a long way to go to create the ideal program that leads to positive outcomes for all students (Cho & DeCastro-Ambrosetti, 2005; Bennett, 2001; Brown, 2004b; Gay, 1997; Gerstein, 2000; Wasonga & Piversal, 2004).

This study attempted to explore knowledge variables, attitude variables, and the transfer of course knowledge into classroom application through an infused-fieldwork model of multicultural education (e.g., lesson plans). Thirteen factors based on current research and historic trends were explored in the seminar. Significance was found in two areas that appear to have a strong relationship, attitude and action, action being defined as the preservice teachers including and improving the level of multicultural content included in their lesson plans. Over the course of the semester the lesson plans included more and more engaging activities that allowed the special education students to interact with one another as well as materials representative of multicultural and global issues.

The lesson plans also included work that highlighted ethnic/cultural differences and similarities, ability, and regional variations (e.g., clothing, social customs).

The preservice teachers who were observed teaching indicated that they were seeing interesting results in the students with whom they worked. For example, one preservice teacher wrote into the lesson plan to solicit ideas from students about the topic of hazing. This topic had been discussed in a book the students had read and discussed in class. The pre-student teacher wondered if hazing was something students had experienced. He included in the lesson plan information related to Cambodian gangs. During the lesson, the students shared information concerning local gangs and then compared and contrasted the effects of gang lifestyles. After the lesson, the pre-student teacher expressed the need he felt to follow-up with additional lessons in which community resources would be used to address the life/social skills of his students in relation to gangs that exist in the neighborhood in which the school is located.

Another pre-student teacher used a storybook in which the narrator explained items found in a house. While the pre-student teacher read, the students identified specific rooms and discussed the purpose of the room based on the furniture and style of the room. The pre-student teacher then used pictures of homes from different regions in Africa and asked the students questions about Africa (e.g., where Africa was located, who lived in Africa). The students then looked at the African homes and identified the purpose of each room based on the furniture and other items in the home. These scenarios exemplify situations in which the pre-student teachers expanded lessons to include diversity and multicultural education.

This study indicated that a multicultural infused-fieldwork seminar could change the attitudes of the preservice participants as well as impact the overall multicultural content of the lessons plans written by them. Thus, two areas of great importance in multicultural education were supported, change in attitude and classroom action through the infused-fieldwork model (Brown, 2004b). Further research needs to investigate the relationship between attitude and content knowledge. In the end, all multicultural research must consider the classroom and the students who reside within the classroom. It is only through the exploration of a variety of preservice education models can training programs ascertain the most efficient and effective methods by which to train teachers for the diverse future in which they will teach.

Conclusions

Five conclusions can be drawn from the results of this study.

1. The change of attitude of the preservice teachers concerning multiculturalism and diversity was reflected in the increased emphasis of multicultural content in their lesson plans. Thus, there was an attitude into action focus of the preservice teachers.

2. A lack of knowledge concerning multiculturalism and diversity did not impact the attitudes of the preservice teachers.

3. All students in this study, regardless of gender, appear to have benefited from improved attitudes about multicultural education and diversity from the multicultural training, though male representation was discrepant when compared to female representation in the study. .

4. Being a member of a cultural or linguistic group did not result in a greater change in attitude over the course of the study, though 65% of sample was white non-Hispanic. All students, regardless of group membership, appear to have benefited from the multicultural trainings as indicated by their improved attitudes on the attitude assessment.

5. All students, regardless of age, appear to have benefited through improved attitudes about multicultural education and diversity from the multicultural training.

6. Multicultural and diversity content increasingly was included in the lesson plans of the pre-student teachers over the course of the semester. This may be a reflection of the attitude change that was occurring over the course of the semester.

7. There was a small percentage of male participates in the sample. This low number could have impacted the data comparing gender groups with changes in knowledge and attitude over time. A more equitable representation of males and females may yield different results.

Recommendations for Further Study

The following recommendations are for further study.

1. Further research needs to explore the best way to increase knowledge in an infused multicultural fieldwork class setting. This may take the form of making students more responsible for the acquisition of knowledge presented (e.g.,

assigning grades, post-assessments as a course requirement) or more actively engaging the students in their learning, rather than simply sitting through lectures.

2. Further research should explore the influence of two instructors versus a singular instructor in a course of this nature. That is to say, whether or not the consistency of instruction impacts knowledge acquisition, attitude change, or lesson planning.

3. Research is needed that explores the evolution of preservice teachers' lesson plans when direct instruction of multicultural lesson planning occurs concomitantly with the multicultural training. The goal would be to assess the impact of direct instruction on the resulting lesson plans.

4. Research is needed to explore the generalization of a course similar to this one beginning with the first field experience and culminating with student teaching. The focus would be on the change in knowledge, attitudes, and lesson planning over the course of three semesters.

5. Research into the impact of working for a course grade needs to be conducted. For example, would students participating in an infused multicultural fieldwork such as the one in this student have acquired more knowledge had a grade been attached to the post-knowledge assessment? The goal would be to ascertain the motivation to learn new things when a grade is and is not attached to the learning.

6. Further research is needed to explore the change in attitudes of the students on specific diversity areas (e.g., ethnicity, language, sexual orientation) to ascertain instructional methods that may fit best with the diversity area being discussed.

For example, do case studies work best with a diversity area or does role-playing classroom scenarios?

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