

Assessing the Intercultural Sensitivity of Elementary Teachers  
in Bilingual Schools in a Texas School District

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By

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## Dedication

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## Abstract

This study explored the intercultural sensitivity of 233 elementary teachers working in five bilingual schools in an urban Texas school district. The purpose of the study was to assess teachers' intercultural sensitivity and to determine whether there were differences in intercultural sensitivity in terms of certain demographic and background variables related to their intercultural experience.

A quantitative, non-experimental design was used for the study. The Intercultural Development Inventory (IDI), version 2, a psychometrically valid instrument based on the Development Model of Intercultural Sensitivity (DMIS), was used to measure intercultural sensitivity. A seven-item demographic and background information sheet was used to gather the information needed to determine whether the dependent variables (IDI developmental and scale scores) differed for teacher groups in terms of the independent variables: gender, age, level of education, years living in a bicultural setting, years teaching in schools, years teaching ethnically diverse students, and years teaching in a bilingual classroom.

The IDI results revealed a mean developmental score of 95.09 for the group of teachers. This score placed the teachers in Minimization, an ethnocentric stage on the DMIS. This suggests that while the group of teachers may have a familiarity with different cultures and be aware of differences in cultural patterns such as values, beliefs, and communication styles, they may minimize student cultural differences and apply universal values and principles in their educational practice.

The results also indicated a significant difference between the mean developmental score for teacher groups examined for two of the variables: years teaching in schools and years teaching ethnically diverse students. For both of these variables, the group of teachers with over 10 years experience had a higher mean developmental score than the group of teachers with fewer years experience. There were no significant differences in the scores between teacher groups for the other variables: living in a bicultural setting, years teaching in a bilingual classroom, age, gender, or level of education.

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## Chapter 1

### INTRODUCTION

“Cultural and social diversity is certainly not a new issue facing us as humans. It has always existed, and we remain challenged by it. However, the burgeoning complexity of our times calls upon us as educators to face this challenge more directly, to value diversity, honor it with integrity, and to preserve the cultural dignity of our students.”

(Lindsey, Roberts, & CampbellJones, 2005, p. xv)

#### Statement of the Problem

Many changes have occurred in the world since the onset of globalization.

Physical boundaries, for example, have become increasingly more pervious. And, less tangible borders such as cultural norms are rapidly changing as well (Earley, Ang, & Tan, 2006, p. 1). One effect of globalization in U.S. schools is increased diversity of the school-age population. The student population is rapidly growing more ethnically, linguistically, and culturally diverse. At the same time, however, the teacher population, made up of predominantly white, middle-class, English monolingual teachers remains primarily homogeneous (National Center for Education Statistics, 2007; National Collaborative on Diversity in the Teaching Force, 2004; Snyder & Hoffman, 2002). As advances in technology and telecommunications have rendered people from different cultures more interconnected and education continues to become more and more of a “cross-cultural encounter” (Robins, Lindsey, Lindsey, & Terrell, 2006, p. 6), questions arise about the preparedness of individuals and organizations to meet the social, relational, and communication needs created by globalization. In speaking of the inhabitants of this increasingly more global society, Barnlund (1989) asks, “will [they]



be neighbors capable of respecting and utilizing their differences or clusters of strangers living in ghettos and united only in their antipathies of others?" (p. 36).

Issues related to diversity have been frequent topics of discussion among educational policy makers. Current school reform such as the *No Child Left Behind Act of 2001 (NCLB)* has underscored the academic gap that exists between ethnically, culturally, linguistically, and socioeconomically diverse students and their mainstream counterparts and has set goals for higher academic standards and nationwide testing programs with increased accountability. The academic achievement of each individual student is an important goal of schools and one which poses great challenges to educators in the midst of drastic demographic changes. It is not the only goal, however. Productive discussions among educational policy makers also include the acknowledgement that schools are established to serve not only individuals but the larger society. As Bruner (1996) argues in *Culture of Education*:

...education is not just about conventional school matters like curriculum or standards or testing. What we resolve to do in school only makes sense when considered in the broader context of what society intends to accomplish through its educational investment in the young. (p. ix)

Sixty-five years ago, William Vickery and Stewart Cole wrote *Intercultural Education in American Schools* (1943), in which they proposed a greater purpose of public education. Vickery and Cole suggested that our educational system is a tool to move the nation toward a cultural democracy. Cultural democracy argues the existence of multiple cultures and viewpoints. It is focused on transforming behavior to value the

diversity and celebrate the richness that can be found in every culture. Similarly, Tye and Tye (1992) contend that education must be aimed toward global citizenship where all students are engaged in “the study of themselves as members of the human species, as inhabitants of planet earth, and as participants in the global social order” (xvii). This greater purpose of education means that all students must learn the knowledge and skills that will allow them to adapt constantly to others from diverse backgrounds and to take responsibility for making our society more congruent with democratic ideals. And, as Tye and Tye suggest, there must be a focus on the understanding of global issues and the development of intelligences suitable to address both one’s own well-being and the well-being of others. Educators today, then, are charged not only with the task of teaching literacy and basic skills but also with the task of helping students develop respect for diversity, the ability to interact effectively with people from various cultures, and global understanding. Determining if educators themselves possess these attributes and abilities to think and act in culturally appropriate ways is a first step in ensuring that this greater educational purpose is achieved.

Hammer et al. (2003) term this “ability to think and act in culturally appropriate ways” (p.2) as intercultural competence. In an educational context, it can be defined simply as the ability to effectively teach cross-culturally (Diller & Moule, 2005). An important forerunner to intercultural competence is intercultural sensitivity.

Intercultural sensitivity is “the ability to discriminate and experience relevant cultural differences” (Hammer et al., p. 2). Intercultural communication scholars have put forth many components of intercultural sensitivity. These include respect for cultural

differences, adaptability, perspective-taking, open-mindedness, and acknowledgement of others' needs (Bennett, 1993; Chen and Starosta, 2005). Bhawuk and Brislin (1992) point to the necessity of intercultural sensitivity of teachers in today's schools when they propose that intercultural sensitivity can foretell how effective a person will be when working with someone from a different culture.

This study uses the Developmental Model of Intercultural Sensitivity (DMIS) (Bennett, 1993) as the theoretical foundation for examining the intercultural development of teachers. The DMIS conceptualizes intercultural sensitivity as a continuum ranging from an ethnocentric worldview to a more ethnorelative worldview and offers an explanation of how people respond to cultural differences and how their responses develop over time. The Intercultural Development Inventory (IDI), version 2, developed by Milton Bennett and Mitchell Hammer (2001) to determine an individual's worldview orientation to difference, is used in this study as the instrument to measure intercultural sensitivity.

#### Rationale for the Study

Current and future educators working in a global society must acquire the competencies necessary to prepare them to relate in a variety of cross-cultural contexts. Their knowledge and skills must then be transferred, in meaningful and substantive ways, to student learners in order that they, too, be adequately prepared to demonstrate appreciation for differences and mutual respect among cultures. While all educators share in the responsibility of laying the groundwork for students to become interculturally competent, this study focuses on elementary teachers as central figures in

creating the educational environments and delivering the curriculum that will foster the development of acceptance, respect, and understanding among cultures.

Ramírez and Casteñeda (1974) pointed out in their classic volume, *Cultural Democracy, Bicultural Development and Education*, over thirty years ago that “many culturally different children have been made to feel that they must reject the culture of their homes in order to succeed in school” (p. xi). A visit to many public schools in the U.S. today would most certainly reveal a lack of understanding and acceptance of difference similar to that suggested by Ramírez and Casteñeda, along with a curriculum that is not representative of the students’ cultural backgrounds and experiences. The current demographics have raised the potential for significant cultural discontinuities among students, their families, their teachers, and their curriculum and instruction to an even higher level than was present when Ramírez and Casteñeda first wrote about the need for cultural democracy. Alongside the potential for cultural discontinuities, however, lie the opportunity and the responsibility for educators to facilitate intercultural development. If educators are to succeed in helping students develop understanding, acceptance, and respect for diversity, however, they must serve as the role models for students. Inherent is the need for teachers to examine their own beliefs and attitudes and develop their own intercultural sensitivity.

Research has been conducted in teacher education that addresses the importance of intercultural competence of pre-service teachers (Dominguez, 2003; Emmanuel, 2002; Lockhart, 2002; Park, 2006; Ross, 2002; Song, 2005). These studies have concluded that pre-service teachers are firmly anchored in prior cultural beliefs that in

turn strongly influence their decision-making and interactions with students. And, although teacher educators have attempted to respond to the large need for well-prepared teachers in diverse classrooms, teachers acknowledge that they feel insufficiently prepared to enter diverse classrooms (National Center for Education Statistics, 1999; Farr, Sexton, Puckett, Pereira-León, & Weissman, 2005).

Other research studies have attempted to identify predictors of an individual's intercultural sensitivity (Ayas, 2006; Conrad, 2006; Fretheim, 2007; Helmer, 2007; Kelso, 2006; Lai, 2006; Park, 2006; Pederson, 1998; Straffon, 2001; Westrick & Yuen, 2007). However, the efforts to isolate the factors which positively correlate with levels of intercultural sensitivity have yielded mixed results. Few studies have addressed the intercultural sensitivity of in-service teachers (DeJaeghere & Zhang, 2008; Fretheim, 2006; Helmer, 2007; Lai, 2006; Lundgren, 2007; Westrick & Yuen, 2007), and of these studies which have been conducted with the population of in-service teachers, only two have examined the intercultural sensitivity of teachers in the United States.

The need for teachers who have greater capacity to work with culturally diverse students seems apparent in today's global world and some studies have examined how an individual's experiences with cultural difference may be linked with that capacity. In their study of secondary teachers in Hong Kong schools, for example, Westrick and Yuen (2007) determined a strong correlation between intercultural sensitivity and experience living in other cultures. Similarly, Fretheim (2007) noted in her study of teachers in South Africa a trend that more experience living outside of one's own culture was associated with higher levels of intercultural sensitivity. Is it only those

experiences gained in a foreign country such as the international teaching experiences described by Fretheim or Westrick and Yuen, however, which can promote intercultural sensitivity? Or, can an individual's intercultural experiences in the U.S. have positive effects as well? Can one assume, for example, that educators who have had extensive experience living in a bicultural setting in the U.S. might have acquired sensitivity to other cultures in a similar way that someone living and working in another country has gained intercultural sensitivity? Or, is it possible that a teacher who has spent many years working with ethnically or linguistically diverse students in the U.S. may have acquired a more ethnocentric worldview than a teacher with more limited experience? Little research has been undertaken to explore or to give validity or accuracy to such assumptions. Results from a recent study by DeJaeghere and Cao (2009), however, suggest that the intercultural sensitivity of K-12 educators in the U.S. can be developed through intercultural initiatives and professional development programs.

#### Purpose of the Study and Research Questions

This dissertation builds on the existing research and attempts to fill the gap in the literature by examining the intercultural sensitivity of in-service teachers in the U.S. Specifically, the purpose of this study is to assess the levels of intercultural sensitivity of elementary teachers in bilingual schools in a Texas school district and to determine whether there are differences in the intercultural sensitivity of teachers in terms of certain demographic and background variables related to their intercultural experience. The study attempts to answer the following questions:

1. What is the level of intercultural sensitivity, as measured by the Intercultural

Development Inventory (IDI), of elementary teachers in bilingual schools in a Texas school district?

2. Do teachers' levels of intercultural sensitivity differ in terms of the following variables?
  - gender
  - age
  - level of education
  - years living in a bicultural setting
  - years teaching in schools
  - years teaching ethnically diverse students
  - years teaching in a bilingual classroom

#### Significance of the Study

Given the increasingly diverse nature of the world, intercultural sensitivity is a logical goal for schools, both in the U.S. and in other countries. Educators must be prepared to adequately understand the nature of their own cultural beliefs and to understand, appreciate, and respect cultural differences if they are to effectively teach diverse students and then help these students develop their intercultural sensitivity. Using the IDI to determine the intercultural sensitivity of a group of teachers could provide valuable insight into what makes some educators more prepared to do this than others. While educators and policymakers in the school district studied may find this data useful to build support and mobilize action, this research has implications that extend well beyond this one school district. This research may evidence the need to

examine the intercultural sensitivity of the stakeholders in any educational institution wishing to increase cultural awareness and foster understanding among individuals from different cultures.

Additionally, this study may provide data to support the need, as well as provide the impetus, for educational leaders to make policies that will promote greater intercultural sensitivity among educators, students, parents, and the community. If districts believe that an important goal of education is moving the nation toward a cultural democracy as Vickery and Cole (1943) suggest, policymakers need to proactively monitor the environment and incorporate intercultural sensitivity in all aspects of policymaking, administration, and practice. This will require the reassessment of policies and practices related to areas including hiring, professional development, and resource allocation. For educational leaders who envision a staff that fosters the practices of a cultural democracy, research data from this study may provide evidence to support the use of the IDI as a diagnostic tool in the hiring process. Assessing the intercultural sensitivity of potential school district employees could assist in the selection of educators with greater intercultural sensitivity as well as provide important information to persons responsible for designing programs to support the professional growth of educators after they are hired. The results of this study may also argue the need to reevaluate curriculum, instruction, and assessment in order to ensure that all aspects of educational practice capitalize on the cultural backgrounds of all students.



## Definition of Terms

The following terms are used frequently in this study. While it is intercultural sensitivity that is specifically being measured in the study, a definition of other frequently used terms is presented to enhance the reader's understanding.

**Bilingual School:** A bilingual school is one in which there are at least 18 students in the same grade level and from the same language group other than English, whose English language skills are such that they will have difficulty performing ordinary class work in English.

**Culture:** “The learned beliefs, values, rules, norms, symbols, and traditions that are common to a group of people. It is these *shared* qualities of a group that make them unique. Culture is dynamic and transmitted to others” (Northouse, 2007, p. 302).

**Ethnocentric:** A perspective “that one's own culture is experienced as central to reality in some way” (Hammer & Bennett, 2001, p. 12)

**Ethnorelative:** A perspective “that one's own culture is experienced in the context of other cultures” (Hammer & Bennett, 2001 p. 12)

**Intercultural Competence:** “The ability to think and act in interculturally appropriate ways” (Hammer et al., 2003, p. 2). A person who is interculturally competent has the “ability to communicate effectively in cross-cultural situations and to relate appropriately in a variety of cultural contexts” (Bennett & Bennett, 2004, p. 149). Intercultural competence in teaching refers to the “ability to successfully teach students who come from cultures other than your own” (Diller & Moulle, 2005, p. 2).

Intercultural Sensitivity: “The ability to discriminate and experience relevant cultural differences” (Hammer et al., 2003, p. 2). Intercultural sensitivity is considered a precursor to intercultural competence.

#### Limitations of the Study

This study includes 233 elementary teachers working in one Texas school district during the 2008-2009 school year. This sample of teachers was selected based on being employed at one of five of the district’s 19 bilingual campuses. While the results are informative of teachers in these types of schools, this sample of teachers may not be representative of the elementary teachers at other schools in the district or at schools outside of the district where the student populations served and the backgrounds of the educators may be different. It would be difficult, therefore, to generalize the results beyond the population studied.

Another limiting factor in this research was the use of the psychometric instrument. Of those persons who participated in the study, some may have been led to do so simply because their peers chose to do so and may have failed to respond to the questions with utmost sincerity. Others may have given responses that they deemed socially acceptable. The reason that a person decided whether or not to complete the inventory or how seriously they took the inventory will never be known to the researcher nor will the extent to which this may have skewed the sample population.

The variable “years living in a bicultural setting” was a broad variable that encompasses many types of experiences and is also a limitation of this study. Better

refinement of this variable might have allowed for improved identification of the types of experiences that may have a greater influence on intercultural sensitivity.

## Chapter 2

### REVIEW OF THE LITERATURE

#### Introduction

In recent years, there has been a barrage of literature concerning the increasing cultural diversity in the United States and the consequent need for individuals to develop intercultural competence. This literature review begins by examining the current perspectives on the need for intercultural competence. The second section discusses the concept of culture and the functions that it serves. In the third section, literature on the concept of intercultural competence is examined with particular attention to cultural competence in education. The fourth section focuses on theoretical frameworks for intercultural competence and presents the Developmental Model of Intercultural Sensitivity (DMIS) as the theoretical foundation of the study. A comparison of the Intercultural Development Inventory (IDI) and the DMIS is included to establish the IDI's validity as a tool for measuring the worldview orientations toward cultural competence described in the DMIS. Finally, related studies using the IDI are presented.

#### Current Perspectives on the Need for Intercultural Competence in Education

As the world continues to become more global, much attention is given to the need for individuals to develop a greater intercultural perspective. Chen and Starsosta (2005) claim that “the development of a global mind-set is pivotal for further human progress” (p. 4). Schools play a vital role in promoting cultural democracy and the intercultural dimension of learning is increasingly more important. Educators, charged

with helping students to develop greater global understanding and respect for diversity and different cultures, are an obvious link to the attainment of an intercultural perspective, yet many teachers live in vastly different worlds from the students they teach. This gives rise to the question of whether teachers are prepared to meet the tasks required of an educator in today's schools. Much has appeared in the literature in recent years that points to the need for educators to develop intercultural competence, yet as Diller and Moule (2005) suggest, many school districts profess commitment to support diversity and cultural competence but it is not always seen in practice. Diller and Moule claim that students from diverse cultures may regularly experience discrimination because their teachers lack the sensitivity, knowledge and skills needed to effectively teach students from backgrounds different from their own. George and Louise Spindler (1994) explain that teachers and students each bring a personal cultural background which is reflected in their perceptions and assumptions.

Together students and teachers construct, mostly without being conscious of doing it, an environment of meanings enacted in individual and group behaviors, of conflict and accommodation, rejection and acceptance, alienation and withdrawal. (p.xii)

The dominant group determines how everyone else should behave, talk, and interact. Teachers' beliefs, culture, and language are mirrored in their teaching practices including the curriculum being taught (Pajares, 1992; Villegas & Lucas, 2002). Villegas and Lucas contend that although this setting of "unacknowledged norms" may be unintentional, "schools place poor and minority children at a disadvantage in the

learning process and systematically obstruct their development” (p. xvii). Ladson-Billings (2001) claims that the prevailing dominance of whiteness in schools and the consequent norming makes it difficult for teachers to understand what it feels like to be a minority student. Paulo Freire’s (2000) seminal work, *Pedagogy of the Oppressed*, takes the view that dominance involves “cultural invasion.” Freire explains:

In this phenomenon, the invaders penetrate the cultural context of another group, in disrespect of the latter’s potentialities; they impose their own view of the world upon those they invade and inhibit the creativity of the invaded by curbing their expression. (p. 152)

This tendency for individuals to place their own ethnic, racial, or cultural group at the center of their observations of others and the world is known as ethnocentrism (Bennett, 1993; Gudykunst & Kim, 1997; Northouse, 2007; Porter & Samovar, 1997; Ting-Toomey, 1999). This perception that one’s own culture is superior to the cultures of others or the inability to recognize the unique perspectives of others can be a major obstacle to teachers because it prevents them from fully understanding or respecting the worlds of their students. Converse to ethnocentrism lies what Bennett refers to as ethnorelativism, the ability to understand one’s culture relative to another or one’s behavior within a cultural context. Howard (1999) claims that it can be very difficult for someone who is a member of any hegemonic group to see their own dominance. Researchers assert the importance for teachers to become self-reflective about their own worldviews (Banks, 1994; Bennett, 1993; Cochran-Smith, 1995; Garmon, 2004; Lawrence & Tatum, 1997). It is then, as Bennett suggests, that they will be able to

understand the worldviews of their students. At the heart of this understanding lies culture.

### The Concept of Culture

To comprehend the concept of intercultural competence, an understanding of culture is indispensable. A survey of the literature on culture reveals a concept that has been studied widely for many years and across many disciplines yet which lacks an agreed upon definition. In an extensive review of how social scientists use the term, Kroeber and Kluckhohn (1952) identified over 160 different definitions of the word and summarized a definition upon which most social scientists agreed. An update of Kroeber and Kluckhohn's seminal work would reveal an even greater number of definitions (Brody, 2003). Although the concept of culture is complex and difficult to describe, the literature identifies some prevalent aspects of culture and some classic definitions of culture that are fairly widely accepted. A comprehensive review of the vast literature on culture would extend beyond the purpose of this study. A brief overview of the definitions and characteristics of culture, however, is offered to provide clarity of the term.

One of the earliest influential definitions of culture is that of nineteenth century anthropologist, E.B. Tyler, (in Banks, 2006) who describes culture as "...that complex whole which includes knowledge, beliefs, art, morals, law, customs and any other capabilities and habits acquired by man as a member of society" (p. 70). Clifford Geertz (1973) characterizes culture as the means through which people "communicate, perpetuate, and develop their knowledge about attitudes toward life. Culture is the

fabric of meaning in terms of which human beings interpret their experience and guide their action” (p. 83). Definitions such as those of Tyler and Geertz have been criticized for their presumption that the actors are robots which are capable only of responding automatically to cultural commands (Banks & Banks, 2007) and for their perpetuation of the idea that simply knowing the language, customs, and beliefs of a social group assumes understanding of that culture (Straffon, 2001).

Although artifacts and material objects are still considered as part of culture, social scientists today identify the most important features of culture as those which are intangible, symbolic, and ideational (Banks, 2006). According to Banks, even when socialist scientists include artifacts and material objects in their definitions of culture, they usually consider culture as the way people interpret these objects and the rules governing their use. Kuper claims “It is the values, symbols, interpretations, and perspectives that distinguish one people from another in modernized societies; it is not artifacts, materials, objects, and other tangible aspects of human societies” (as cited in Banks & Banks, 2007, p. 8).

Trompenaars and Hampden-Turner (1998) view culture as a “shared system of meanings” and contend that “it dictates what we pay attention to, how we act and what we value” (p. 13). In a closely related definition, Hofstede and Hofstede (2005) compare culture to the way computers are programmed and refer to a person’s patterns of thinking, feeling, and acting as the “mental programs” or “software of the mind” (p. 3). Similarly, Erickson (as cited in Banks & Banks, 2007) likens culture to the software system for a computer:



Culture can be considered as the software - the coding system for doing meaning and executing sequences of work - by which our human physiological and cognitive hardware is able to operate so that we can make sense and take action with others in daily life. Culture structures the 'default' conditions of the everyday practices of being human. (p. 33)

Northouse (2007) synthesizes the salient aspects of culture into a definition that will be used for the purposes of this study to understand culture. Culture is "the learned beliefs, values, rules, norms, symbols, and traditions that are common to a group of people. It is these *shared* qualities of a group that make them unique. Culture is dynamic and transmitted to others" (p. 302).

#### Functions and Impact of Culture

Organizations, as well as individuals, have cultures. Deal and Peterson (1999) point out that "organizations usually have clearly distinguishable identities manifested in organizational members' patterns of behavior, thought, and norms. The concept of culture helps us understand these varied patterns..." (p. 3). Willard Waller wrote in 1932: "Schools have a culture that is definitely their own" (p. 96). A school's culture defines its unwritten rules and traditions, norms, and expectations that seem to penetrate all facets of everyday life in school including such things as the way people act, how they dress, and what they talk about or avoid talking about. Deal and Peterson point to the important role that culture plays in schools when they state:

This invisible, taken-for-granted flow of beliefs and assumptions gives meaning to what people say and do. It shapes how they interpret hundreds of daily

transactions. This deeper structure of life in organizations is reflected and transmitted through symbolic language and expressive action. Culture consists of the stable, underlying social meanings that shape beliefs and behavior over time. (p. 7)

Ting-Toomey (1999) identifies five important functions of culture which are useful for helping understand cross-cultural interactions between teachers and students: (1) identity meaning function, (2) group inclusion function, (3) intergroup boundary regulation function, (4) ecological adaptation function, and (5) cultural communication. First, as the definitions of culture suggest, culture serves the identity meaning function. Culture provides the frame of reference in the form of values, beliefs, and norms through which teacher and student identify themselves.

Second, culture serves the group inclusion function satisfying the need that people have to feel included or to belong. This function is of particular importance to an immigrant student who seeks safety and acceptance within a new school environment, yet who brings a different set of values, beliefs and norms to the classroom than that of the teacher. At the same time, the teacher, whose actions normally require no explanation, may need to use great effort to explain and defend actions when working with students from a different cultural group.

A third function of culture is the intergroup boundary regulation function. Ting-Toomey explains (1999), “Culture helps us to form evaluative attitudes [positive or negative] toward in-group and out-group interactions” (p. 13). Culture fosters our tendencies toward ethnocentrism. This tendency to hold unfavorable attitudes toward

individuals from different cultures can negatively impact the relationship between a teacher and a student from different cultural backgrounds.

A fourth function culture serves is the ecological adaptation function. Triandis (1994) observes that the “realities of the environment create conditions for the development of particular cultural, socialization, and behavioral patterns” (p. 23). Culture “facilitates the adaptation processes among the self, the cultural community, and the larger environment” (Ting-Toomey, 1999, p. 14). When people adapt their needs and their particular ways of doing things in response to these changing environmental factors, changes in the culture result as well. Culture, as Ting-Toomey points out, rewards the behaviors that are compatible with its ecology and punishes those that are not.

The final function which culture serves is the cultural communication function. Intercultural communication researchers identify culture as a coordinated body of knowledge that allows people to know how to communicate with others from a different culture and how to interpret their behaviors (Gudykunst, 2004; Hall, 1976). As such, culture and communication are inextricably intertwined, each influencing the other. In his seminal work, *The Silent Language*, noted anthropologist Hall sums it up by saying that “culture is communication and communication is culture” (p. 186). Culture is passed down through communication. At the same time, communication is needed to define cultural experiences. Cultural communication provides the set of standards of how interaction is to take place among a similar group of people. Students and teachers coming from different cultural groups may lack the system of knowledge that informs

them of the norms that govern interaction within each other's group. As a result, they may have very different expectations for the interaction.

As Ting-Toomey (1999) suggests, culture serves these various functions "as an essential component of the effort of human beings to survive and thrive in their particular environment" (p. 12). She summarizes:

Culture serves as the 'safety net' in which individuals seek to satisfy their needs for identity, inclusion, boundary regulation, adaptation and communication coordination. Culture facilitates and enhances individuals' adaptation processes in their natural cultural habitats. Communication, in essence, serves as the major means of linking these diverse needs together. (p.15)

The complex role that culture serves both to individuals and in organizations is clearly identified and one can see how confusion may result from clashes of cultural differences. As people from different cultures and ideologies are now increasingly interconnected due to globalization, a certain capability to adapt to new cultural environments is essential even if they never leave home.

### Intercultural Competence

Many concepts which capture the idea of operating effectively in different cultural contexts appear in the literature. The terms are noted in fields ranging from business, communications, healthcare, education, and psychology. The terms cultural sensitivity and cross-cultural sensitivity (Bhawuk & Brislin, 1992), intercultural sensitivity (Bennett & Bennett, 2004; Westrick & Yuen, 2007), global competency (Olson & Kroeger; 2001), global awareness (Hanvey, 1978), intercultural competence

(Davis & Cho, 2005; Bennett, 2003; DeJaeghere & Zhang, 2008; Yershova et al., 2000), cross-cultural competence (Greenholtz, 2000; Hains, Lynch, & Winton, 2000), cultural competence (Diller & Moule, 2005; Ladson-Billings, 2001), culturally proficient (Robins et al., 2006), and cultural intelligence (Earley & Ang, 2003) are often used interchangeably in the literature. Some scholars imbed intercultural competence or equivalent concepts within larger frameworks such as global education (Tye & Tye, 1992) and citizenship education (DeJaeghere, 2002). For the purposes of this research, the terms intercultural competence and intercultural sensitivity will be used. However, a distinction between these two terms will be provided.

Many of the definitions of intercultural competence focus on the skills and attributes needed in order to interact effectively with someone from another culture. In a seminal work, Cross (1988) defines this competence as a “set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable that system, agency, or those professionals to work effectively in cross-cultural situations” (p.1). Bennett, Bennett and Allen (2003) also include attitudes and behavior in their definition, “intercultural competence refers to the general ability to transcend ethnocentrism, appreciate other cultures, and generate the appropriate behavior in one or more different cultures” (p.237). Bennett and Bennett (2004) capture an important aspect, the inseparable relationship of culture and communication, when they define intercultural competence as “the ability to communicate effectively in cross-cultural situations and to relate appropriately in a variety of cultural contexts” (p. 149). They emphasize the need for both a *mindset* and a *skillset*. The mindset refers to one’s

cognizance of operating in a cultural context. According to Bennett and Bennett, it includes being self-aware of one's own culture and knowing how to use cultural generalizations without stereotyping. Additionally, it entails maintaining attitudes such as curiosity that promote a desire to seek out cultural differences. The skillset, on the other hand, refers to the ability to analyze a cultural setting and adapt one's behavior appropriately for that setting. Behavior, as Bennett and Bennett point out, cannot exist separately from thoughts and emotions. The definition of intercultural competence adopted for the purposes of this study is one that also suggests the importance of both mindset and skillset or attitudes and behavior. Intercultural competence will be defined simply as "the ability to think and act in interculturally appropriate ways" (Hammer et al., 2003, p. 2).

#### *Intercultural Competence in Education*

A growing body of literature focuses specifically on intercultural competence in education and a number of terms are used synonymously to refer to the idea of intercultural competence in teaching. The terms culturally responsive teaching (Gay, 2000; Klump & McNeir, 2005; Villegas & Lucas, 2002), culturally proficient instruction (Robins et al., 2006), and culturally relevant teaching (Ladson-Billings, 2001) are noted in the literature. Additionally, terms related to the transformation of schools to promote educational equality for diverse students appear in the literature. These include cultural diversity (Marshall, 2002) and multicultural education (Banks, 2006; Banks & Banks, 2007; Howard, 1999). Diller and Moule (2005) describe intercultural competence as it relates to teaching:

[Intercultural competence] is the ability to successfully teach students who come from cultures other than your own. It entails developing certain personal and interpersonal awareness and sensitivities, learning specific bodies of cultures, and mastering a set of skills, that taken together, underlie effective cross-cultural teaching. (p.2)

The importance of effective cross-cultural interactions in both international and domestic contexts is well recognized. Numerous studies have identified the importance of intercultural competence in increasing understanding and improving interactions across cultures (Bennett, 1993; Hammer, 1999). Many case studies and correlational studies exist which show that culturally responsive teaching affects student achievement (Jodry, 2001; Kelleher, 2006; Ladson-Billings, 1994; Lundgren 2007), but there is scant experimental research linking intercultural competence in teaching practice to student achievement. Klump and McNeir (2005) attribute this lack of explicit research to the difficulty of conducting random experiments in public schools rather than to the validity of culturally responsive practice.

#### *Skill Areas and Characteristics of Interculturally Competent Educators*

The seminal work of Cross, Bazron, Dennis, and Izaacs (1989) offers five important skill areas that are associated with the development of intercultural competence of teachers: (1) awareness and acceptance of others, (2) self-awareness, (3) dynamics of difference, (4) knowledge of the student's culture, and (5) adaptation of skills. The first of these skill areas involves developing an awareness of the ways in which cultures differ, an understanding of how these differences may affect one's

performance when working with students, and an acceptance of these differences.

Examples of these cultural differences include values, styles of communication, and perception of time. Moule and Diller (2005) point out:

Each individual begins life with a singular experience of culture, which is taken as reality. Only with exposure to additional and differing cultural realities does one begin to develop an appreciation for the diversity that is possible in human behavior. (p. 15)

The second skill area, self-awareness, involves understanding how deeply culture affects human behavior. Cross et al. (1989) contend that many people fail to acknowledge that their behaviors have been defined primarily by cultural norms and values and are continually reinforced by the culture (family, peers, social institutions) in which they function. “The skill of self-awareness requires sufficient self-knowledge to anticipate when one’s own cultural limits are likely to be pushed, foreseeing potential areas of tension and conflict with specific student groups, and accommodating them” (Diller & Moule, 2005, p. 16).

The third skill area, dynamics of difference, involves being knowledgeable about things that can go wrong when communicating with those from a different culture and how to make corrections when miscommunication occurs. Cultural misunderstandings may stem from current political relations between groups, from past experiences of students or their families with members of the other’s group, or from differences in cultural style. For example, if a teacher from a culture that interprets direct eye contact as a sign of respect works with a student who has been taught to



avoid direct eye in order to be respectful, a cross-cultural misunderstanding is likely to occur. The teacher who is aware of these dynamics of difference is better prepared for effective student-teacher interaction.

A fourth skill area is knowledge of the student's culture. While the growing diversity in today's classrooms makes it all but impossible for a teacher to be expert in the cultures of all students, it is possible for one to learn to identify the kind and sources of information that are required to understand classroom behaviors in their own cultural context. Paige, Jorstad, Siaya, Klein, and Colby (2003) ascertain that "culture learning" is not just memorization of cultural facts.

Culture learning is the process of acquiring the culture-specific and culture-general knowledge, skills, and attitudes required for effective communication and interaction with individuals from other cultures. It is a dynamic, developmental, and ongoing process which engages the learner cognitively, behaviorally, and affectively. (p. 177)

Northouse (2007) suggests that it is important to understand the relationships between cultures and points out that one of the first steps toward achieving this understanding is to determine the basic dimensions or characteristics of different cultures. A number of important studies have focused on how to characterize the basic dimensions of culture. Kluckhohn and Strodtbeck (1961) propose that in all cultures people have orientations about the following five different values: human nature, man and nature, time, activity, and relational. Their scheme for conceptualizing cultural variation also assumes that there are variants of these orientations in each culture. Hall

(1976) claims that cultures can be classified by the degree to which they focus on the individual (individualistic cultures) or on the group (collectivist cultures). Trompenaars and Hampden-Turner (1998) propose yet another classification scheme. They identified four cultural orientations: egalitarian, hierarchical, person, and task. Egalitarian cultures exhibit shared power rather than hierarchical power. Cultures with a person orientation focus on human interaction as opposed to emphasizing tasks to accomplish. Probably the most frequently cited study on this topic is that of Hofstede (2001) who surveyed more than 100,000 people in over 50 countries and identified five major dimensions of culture: power distance, uncertainty avoidance, individualism-collectivism, masculinity-femininity, and long-term-short-term orientation. Most recently, the GLOBE research program, initiated by Robert House in 1991, expanded the previous research in this area by analyzing the attributes of 62 countries and identifying nine cultural dimensions (Northhouse, 2007). Paige (1993) concludes that culture learning includes learning about one's cultural self, learning about culture, culture-general and culture-specific learning, and learning how to learn. Researchers (Britzman, 1994; Cole & Knowles, 1995; Merryfield, 2003) identify reflection on one's lived experiences as a prerequisite for culture learning.

The final skill area which Cross et al. (1989) identifies is the adaptation of skills. This relates to one's ability to react responsively and adjust teaching practice to accommodate cultural differences. Adaptation of skills might range from altering one's style of interaction to modifying learning goals to better fit a student's cultural values. Cross et al. consider these basic skill areas essential for teachers to be effective when

working with students from diverse cultures. According to Diller and Moule (2005), “these skill areas must be taught, supported, and even more basically, introduced as underlying dimensions of everyday functioning within schools” (p.15). Diller and Moule highlight the importance of such skills when they claim that these skills must imbue not only the teacher’s individual work but must also infuse the general environment of the school and the educational system as a whole.

In their report, *Research-based Resources: Cultural Competency of Schools and Teachers in Relation to Student Success*, Klump and Nelson (2005) identify six important characteristics, derived from more than 50 articles and reports, of culturally competent educators and schools. The research identifies these characteristics as those which can contribute to the academic success of students from diverse cultural backgrounds. Klump and Nelson (p. 3) summarize the characteristics:

1. A climate of inclusion, respect, connection, and caring is fostered in the school and classroom. Interpersonal relationships are built and fostered, and a learning community culture is developed.
2. Bridges are built between academic learning and students’ prior understanding, knowledge, native language, and values. Culture and native language (and cultural dialect) are valued and used as assets in learning rather than deficits. ‘Empower students intellectually, socially, emotionally, and politically using cultural references to impart knowledge, skills and attitudes’ (Ladson-Billings as cited in Klump & Nelson, p. 4).

3. High expectations and high standards are set for all students. Remedial work for students is not acceptable. Activities are designed to foster higher order thinking.
4. The most effective classroom practices are hands-on, cooperative, and culturally aligned. There is less emphasis on lecture.
5. Teachers find out as much as possible about their students' culture, language, and learning styles so they can modify curriculum and instruction accordingly.
6. Teachers realize that students are at different stages of acculturation. 'Lesson plans need to blend information on how students can become more comfortable with American culture with ways that other students can become culturally responsive to members of diverse cultures' (Stickey as cited in Klump & Nelson, p. 4).

Much of the research on intercultural competence refers to the seminal work of Robert Hanvey (1978), "An Attainable Global Perspective." Hanvey outlines five dimensions of global awareness important to integrate across the school curriculum in order to give attention to the intercultural dimension of learning. They are: (a) perspective consciousness, an individual's awareness that everyone does not share the same worldview; (b) state of the planet awareness, an individual's understanding of global trends and issues; (c) cross-cultural understanding, a basic awareness of the diverse ideas and practices in different cultures and a willingness to respect differing viewpoints; (d) knowledge of global dynamics, an understanding of the world as a system and insight into the patterns of world change; and (e) awareness of human

choices, an understanding of the expanded ranges of choice as knowledge of the global system increases. Cushner (2008) argues the important role that educators play in facilitating the development of an intercultural perspective and promoting cultural democracy but acknowledges the difficulties of addressing the cross-cultural dimension in the United States where so many educators are cross-culturally inexperienced.

The skills areas and characteristics of interculturally competent educators and practice suggested by researchers such as Cross et al. (1989) and Klump and Nelson (2005), along with the dimensions of a global perspective proposed by Hanvey (1978), provide meaningful insight into what educators need in order to be interculturally competent and how that intercultural competence is exemplified in practice. Bennett (1993) maintains, however, that it is not the mastery of skills that insures one's intercultural competence. He claims that the changes in knowledge, skills, and attitudes are manifestations of changes in one's underlying worldview. From his observations, Bennett (2004) concludes that as this underlying worldview changes, people develop greater intercultural competence. Bennett categorizes intercultural competence as an ongoing developmental process. He asserts that the assumed underlying worldview develops along a continuum from ethnocentrism to ethnorelativism. As this happens, a greater "ability to discriminate and experience relative cultural differences" (Hammer et al., 2003, p. 2) is generated. This intercultural sensitivity, as it is commonly termed, increases the potential for greater intercultural competence.

As Bennett (2004) proposes, inherent in the process of intercultural competence is intercultural sensitivity. Bhawuk and Brislin (1992) have established the importance

of intercultural sensitivity in interactions with those from other cultures. Like Bennett, Bhawuk and Brislin identify intercultural sensitivity as a precursor to intercultural competence and claim that it can predict one's success when working in cross-cultural environments. They state:

To be effective in another culture people must be interested in other cultures, be sensitive enough to notice cultural differences, and then also be willing to modify their behavior as an indication of respect for the people of other cultures. A reasonable term that summarizes these qualities of people is intercultural sensitivity. (p. 416)

Bennett (1993) suggests the challenges involved in developing intercultural competence when he states,

Intercultural sensitivity is not natural. It is not a part of our primate past nor has it characterized most of human history. Cross-cultural contact usually has been accompanied by bloodshed, oppression, or genocide. The continuation of this pattern in today's world of unimagined interdependence is not just immoral or unprofitable – it is self-destructive. Yet in seeking a different way, we inherit no model from history to guide us. (p. 21)

Diller and Moule (2005) also articulate the challenges involved. Becoming culturally competent is “hard emotional work” (p. 22).

### Theoretical Frameworks for Intercultural Competence

As with the definitions of intercultural competence previously described, a number of constructs emerge in the literature which can be useful for understanding the

reactions of an individual to cultural difference (Banks; 1994; Bennett, 1993; Capinha-Bacote, 1994; Cross et al., 1989; Earley & Ang, 2003, Helms, 1990; Pierce, 1993). Such models can also be helpful for understanding how that individual's capacity to adapt to diverse circumstances develops.

### *Cultural Intelligence*

Earley and Ang (2003) claim that if we can better understand why people act the way they do, we might improve how people relate to one another. They suggest that the key to helping people get along with one another is a type of human problem-solving which relies on human thought or intelligence. Diverging from the earlier work on emotional or social intelligence (Salovey & Mayer, 1990) and multiple intelligences (Gardner, 1993), Earley and Ang argue that cultural intelligence, a separate category of intelligence, reflects a person's ability to adapt "to a new cultural setting and their capability to deal effectively with other people with whom the person does not share a common cultural background and understanding" (p. 12). While emotional intelligence presumes that a person is familiar with his own culture and uses a familiar situation as a way of acting and reacting with others, cultural intelligence presumes the interactions of individuals in unfamiliar surroundings. Earley and Ang note that when people from different cultural backgrounds interact, the outcome is often very different. Some people, for example, struggle to integrate themselves into social gatherings or a work setting, while others seem to possess a special ability to do so quickly and with great ease. According to Earley and Ang, the difference between the individual who is successful and the one who is less successful is often not a matter of motivation alone

but rather an ability to step into a culturally foreign context, quickly evaluate it, and decide upon an appropriate action. Earley and Ang's construct consists of cognitive, motivation, and behavioral elements. The first key aspect, the cognitive component, is a person's ability to comprehend a new culture from cultural cues. The motivational component is a person's desire to adapt and adjust to the cultural setting. Finally, the behavior component, or action, is a person's capability to engage in adaptive behaviors in accordance with the cognizance of what is appropriate and the desire to engage others. While Earley and Ang's model is helpful to understand how intelligence operates within an intercultural context and the differential successes that may be observed when people interact interculturally, Milton Bennett's (1993) Developmental Model of Intercultural Sensitivity (DMIS) provides a useful model for understanding how individuals develop intercultural competence.

#### *The Developmental Model of Intercultural Sensitivity*

A model frequently referred to in the literature which is relevant to teachers working with students from various cultures and the one that serves as the theoretical foundation for this study is The Developmental Model of Intercultural Sensitivity (DMIS; Bennett, 1993). The model's focus on cultural differences and increased understanding of cultural nuances suggests an approach which encourages educators to continually learn about their students' cultures and adapt their thinking and practice to meet the needs of their culturally diverse students. The DMIS observes a person's response to cultural difference and delineates a series of stages from which a person



may operate in intercultural situations. The DMIS suggests a cognitive developmental progression that is accompanied by changes in attitude and behavior.

The DMIS, based on personal construct theory (Kelly, 1963) and its extension, radical constructivism, uses “observed behavior (verbal statements) to indicate an underlying condition (world view state) that enables people to experience cultural difference in a certain way” (Bennett et al., 2003, p. 247). Constructivism is useful to understand how an individual’s ability to construe and experience cultural differences develops. Kelly propounds:

A person can be a witness to a tremendous parade of episodes and yet, if he fails to keep making something out of them...., he gains little in the way of experience from having been around when they happened. It is not what happens around him that makes a man experienced; it is the successive construing and reconstruing of what happens, as it happens, that enriches the experience of his life. (p. 73)

Hammer et al. (2003) claim that “the more perceptual and conceptual discriminations that can be brought to bear on the event [of cultural difference], the more complex will be the construction of the event, and thus the richer will become the experience” (p. 423). They point out that individuals who have been socialized in primarily one culture may be unable to construe and thus, experience the difference between their own perception and that of someone from another culture. Central to the development of intercultural sensitivity is gaining the ability to construe and thus to experience cultural

difference in more complex ways. In this sense, Bennett's model is phenomenological in nature. In the words of Bennett and Bennett (2004):

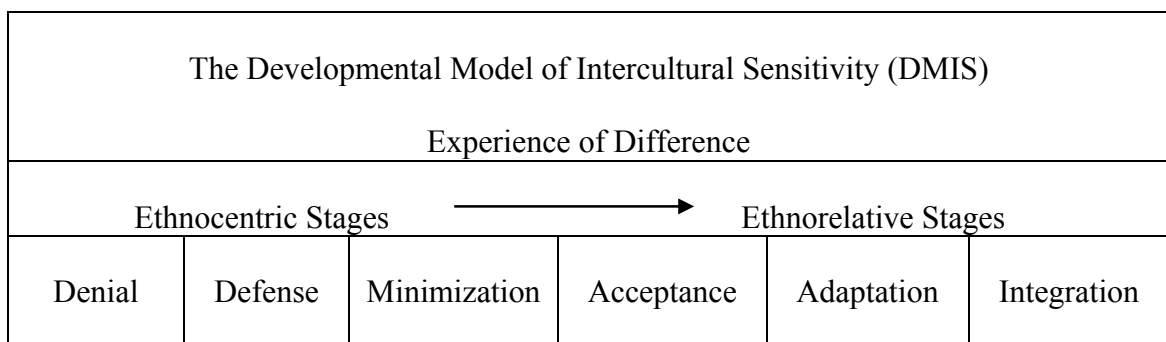
The underlying assumption of the model is that as one's experience of cultural differences becomes more sophisticated, one's competence in intercultural relations increases. Each stage is indicative of a particular worldview configuration, and certain kinds of attitudes and behavior are typically associated with each such configuration. The DMIS is not a model for changes in attitudes and behavior. Rather, it is a model of the development of cognitive structure (p. 152).

#### *The Six Stages of the DMIS*

The Development Model of Intercultural Sensitivity presents a continuum of six stages which describe the various ways in which people construe cultural differences (see Figure 2.1). Bennett (1993) explains that each stage is "meant to characterize a treatment of cultural difference that is fairly consistent for a particular individual at a particular point of development" (p. 27). He delineates the first three stages as ethnocentrism, an orientation that assumes "that the worldview of one's own culture is central to all reality" (p.30). In the last three stages, which Bennett identifies as ethnorelativism, "cultures can only be understood relative to one another and a particular behavior can only be understood within a cultural context" (p. 46). Although the DMIS includes different stages, it differs from strict stage theory which suggests a sequential progression in which individuals must complete one stage before moving to the next. In describing the developmental process assumed by the DMIS, Bennett

(2004) explains that as an individual’s worldview structure changes, new and more sophisticated issues to be resolved emerge. He points out that “the resolution of relevant issues activates the emergence of the next orientation. Since issues may not be totally resolved, movement [from one stage to another] may be incomplete and one’s experience of difference diffused across more than one worldview” (p. 74).

*Figure 2.1 Developmental Model of Intercultural Sensitivity*



(Bennett, 1993)

*Ethnocentric Stages*

The earliest and “purest” (Bennett, 1993, p. 30) form of ethnocentrism is that of *Denial*. Persons operating in this stage do not acknowledge the existence of differences among people from different cultures. Denial is often indicated as disinterest in cultural difference even when those differences are brought to an individual’s attention. Bennett (2004) points out that denial of cultural difference is the “default condition of typical, monocultural primary socialization” (p. 62).

Two circumstances which may foster denial have been identified as substages of Denial. These substages are isolation and separation. If a group of people has been isolated to the extent that they have never confronted cultural difference in any way, they will most probably never consider that cultural difference exists. In our world of

increasing globalization, however, physical isolation is more apt to be relative. For example, the denial of the existence of cultural difference might be promoted in a homogeneous small town where individuals grow up in physical isolation and consequently lack the experience and ability to discriminate cultural difference. Likewise, the intentional erection of physical or social barriers to create distance from cultural differences, as can be seen in the examples of racially or ethnically segregated neighborhoods, can also create a means for maintaining some semblance of denial. Isolation and separation are sometimes interactive. The social barriers of racial discrimination may result in the physical barriers of a ghetto, thereby creating a situation where those born into and outside of the ghetto never meet. The separation results in isolation, which breeds more separation. Consequently, people are easily ensnarled in denial.

Bennett (1993) points out that people of oppressed groups tend not to experience the stage of Denial because they receive constant reminders that they are different. He states, "In the context of domestic multicultural relations, denial can be thought of as a luxury of the dominant group" (p.35). While, the stereotypes of those in the stage of Denial are most often based more on "naivete than negativity" (p. 33), the danger lies in the dehumanizing of others that may result when one views the differences as a deficiency. Bennett considers that separation requires an individual to acknowledge, even if only temporarily, that some kind of difference exists. Therefore, separation is considered to be a slight development in intercultural sensitivity beyond isolation.

The second ethnocentric stage is *Defense*. In this stage, individuals recognize the existence of cultural difference but their worldview structure is not sufficiently complex to allow them to view the other culture as equal to their own. While in the Denial stage the existence of differences is ignored altogether, in the Defense stage, cultural differences are viewed as a threat. In an effort to nullify the threat, the world tends to get organized into “us” and “them” where one’s own culture is considered as superior and the other cultures are considered inferior. There are three substages in Defense: denigration, superiority, and reversal. In denigration, individuals protect their own worldview by negatively evaluating persons and stereotyping people with different cultural behaviors and attributing undesirable characteristics to every member of that group. The superiority substage focuses on exaggerating the positive aspects of one’s existing worldview in comparison to all other cultures. A person will respond to threatening cultural difference at the superiority stage by relegating the group to a lower-status. The third substage in Defense is reversal. This tendency to see another cultural as superior, while disavowing one’s own culture, is not an inevitable stage of intercultural development but is common, nonetheless, among long-term sojourners and international workers.

Difference is openly acknowledged in the Defense stage. For this reason, it represents development in intercultural sensitivity beyond Denial. Within the Defense stage, superiority represents a developmental step in intercultural sensitivity beyond denigration. Although difference is still considered something to overcome, it is less

negatively evaluated in superiority than in denigration. Reversal also has implications for intercultural development. Bennett (1993) sums up the implications as follows:

The positive valuing of a culture not one's own is not necessarily ethnocentric. If such positive attitudes are accompanied by denigration of one's own culture, it is likely that more development through ethnocentric stages is necessary before work on ethnocentrism can be undertaken. (40)

The third and final stage of ethnocentrism, *Minimization*, is the stage in which a basic similarity among all human beings is assumed. Cultural difference is openly acknowledged and is not negatively evaluated, yet it is trivialized instead. While *Minimization* represents intercultural development, it is an ethnocentric state because there is a naive assertion that despite some differences, all people share some basic characteristics. In the *Defense* stage, an individual counters the threats associated with cultural differences by subsuming the differences into familiar categories, thus creating the experience of one's own worldview as central to the reality of everyone. Two substages of *Minimization* provide such categories. The first substage of *Minimization*, *physical universalism*, assumes that all people in all cultures are similar in biological nature and share the same biological needs such as to eat, procreate, and die. The importance of cultural difference is minimized, therefore, by viewing it as merely as result of fundamental biology. The second substage of *Minimization*, *transcendent universalism*, assumes the applicability of certain religious, economic or philosophical concepts to all human beings. Bennett (1993) explains:

The obvious example of this view is any religion which holds that all people are creations of a particular supernatural entity or force. The statement, 'We are all God's children,' is indicative of this religious form of universalism, particularly where the 'children' include people who don't subscribe to the same god. (p. 43)

Hammer et al. (2003) claim that these "universal absolutes" (p. 425) conceal deep cultural differences in such a way that other cultures may be trivialized. People in the stage of Minimization expect similarities, yet their lack of cultural awareness prevents them from seeing that their characterizations of similarity are usually based on their own culture.

#### *Ethnorelative Stages*

The shift away from ethnocentrism to ethnorelativism represents a major change in the way that difference is experienced. In ethnocentrism, difference is experienced as threatening and various actions are taken to counter the threat. In ethnorelativism, one's own culture is experienced in the context of other cultures and difference is no longer experienced as threatening. Rather, individuals may actually seek out and find enjoyment in cultural difference. "Acceptance does not mean agreement – some cultural difference may be judged negatively – but the judgment is not ethnocentric in the sense of withholding equal humanity" (Hammer et al., 2003, p. 425).

The first stage of ethnorelativism is *Acceptance*. In this stage, individuals are able to experience their own culture as just one of a number of equally complex worldviews. Two substages are present in the stage of Acceptance, respect for behavioral difference and respect for value difference. In the first substage, respect for

behavioral difference, individuals accept that verbal and nonverbal behavior is not the same in all cultures. The most obvious of these behavioral differences which is recognized and respected is language. People at this stage begin to view language not only as a set of codes for communicating similar ideas but rather as shapers of reality. Additionally, individuals in the stage of Acceptance recognize differences in communication styles and in nonverbal behavior. Bennett (1993) points out, “development into ethnorelativism is first established by stressing recognition and nonevaluative respect for variation in verbal behavior and communication style, since such behavior is most generally recognized as appropriately different” (p. 49).

In the second substage in Acceptance, respect for value difference, people accept that different worldview assumptions are at the basis of cultural differences in behavior. They consider that the beliefs, values, and general patterns of assigning goodness and badness to ways of being in the world, including their own, all exist in cultural context and are respected as viable. This does not mean that people in this stage accept all behavior as appropriate in all contexts, but they do recognize the cultural context of behavior.

The second ethnorelative stage is *Adaptation*, in which a person’s worldview is broadened “to include relevant constructs from other cultural worldviews” (Hammer et al., 2003). In this stage, a person develops better skills for communicating with people from other cultures. The first substage in Adaptation is empathy. Individuals in this substage are able to consciously shift their cultural frame of reference and change their behavior in order to communicate more effectively with someone from another culture.



It requires people to temporarily set aside their own worldview assumptions and look at the world from another culture's perspective. "The result of employing empathy in an intercultural event is to generate natural behavior that is appropriate to the target culture" (Bennett et al., 2003). The second substage of Adaptation is pluralism, a term which is used to describe two aspects of this stage of intercultural sensitivity. The first aspect, a philosophical one, suggests that "cultures are not only different, but that such differences must always be understood totally within the context of the relevant culture" (Bennett, 1993, p. 55). The second aspect implies that that person must internalize two or more complete worldviews and that their behavior shifts completely into different frames of reference with little conscious effort. Pluralism most often represents a developmental step beyond empathy since cultural difference, in the pluralism form, is respected as highly as one's self and can, therefore, be experienced more completely than in the empathy form. "It could be construed that pluralistic people have a kind of natural empathy for differences included in their multiple worldviews" (p.56). This natural empathy serves as a powerful tool for intercultural communication.

The final ethnorelative stage is *Integration*. This is the stage where a person has internalized more than one cultural worldview and has developed a sense of self which can shift in and out of different cultural worldviews. People in this stage construe their identities as marginal to any one culture. Two forms of marginality make up the substages in Integration. The first substage in Integration is encapsulated marginality, a condition in which "one's sense of self is stuck between cultures in a dysfunctional way" (Bennett & Bennett, 2004, p. 157). This separation from culture is experienced as

alienation from any one culture and is often combined with feelings of anomie and confusion. The second substage in Integration is constructive marginality. In constructive marginality, a person operates outside of all normal cultural boundaries and the shifting of cultural perspective is seen as positive part of one's identify. Bennett (1993) acknowledges, however, that without prior development of ethnorelativism, an individual operating in marginality may experience problems. People in this stage of intercultural sensitivity are constantly creating their own reality, yet, without the prior development in the other stages of ethnorelativism, they are unprepared to experience total responsibility for their reality. As a result, they will likely either reject the responsibility or experience debilitating alienation. Bennett defends, "With preparation, however, constructive marginality can be the most powerful position from which to exercise intercultural sensitivity" (p. 65). Cross-cultural interactions, such as those between teacher and student or parent, could be accomplished most effectively by those individuals who are able to operate in multiple cultural contexts and able to construct appropriate worldviews as needed. Getting to that point, as Bennett conveys, is an ongoing developmental journey.

#### Intercultural Assessment Instruments

A number of intercultural instruments or inventories have been identified for their usefulness in assessing cross-cultural effectiveness or promoting cultural self-awareness. Paige (2004) defines an intercultural instrument as "any measurement device that identifies, describes, assesses, categorizes, or evaluates the cultural characteristics of individuals, groups, and organizations" (p. 86). The cultural

characteristics, as Paige points out, “can be cognitive, attitudinal, or behavioral in nature, or they can be broader measures that combine two or more of these into a gestalt or worldview” (p. 86). Three intercultural instruments described in this section are measures frequently cited in the literature.

#### *The Cross-Cultural Adaptability Inventory*

The Cross-Cultural Adaptability Inventory (CCAI; Kelley & Meyers, 1999) was designed to be used as a training tool on cross-cultural adaptability. The 50-item instrument measures four personal characteristics: personal autonomy, perceptual acuity, flexibility and openness, and emotional resilience. Kelly and Meyers claim that the CCAI can help learners understand the factors that are associated with cultural effectiveness and development intercultural communication and interaction skills. In an examination of the instrument, Paige (2004) points out that the CCAI can serve to promote personal development and self-awareness.

#### *The Intercultural Sensitivity Inventory*

The Intercultural Sensitivity Inventory (ICSI; Bhawuk & Brislin, 1992), a 46-item self-report instrument, measures the cultural constructs of individualism, collectivism, and flexibility and open-mindedness. Paige (2004) identifies the ISCI as an instrument which can be useful for “exploring cultural identity through the examination of one’s cultural value orientations and flexibility in adapting to new cultures and persons” (p. 100). According to Bhawuk & Brislin, the instrument was developed to measure the ability of people to modify their behavior. A key assumption is that “those who can change behaviors so that they are appropriate in other cultures

are intercultural sensitive” (Bhawuk & Brislin, p. 416). An advantage of using the ISCI is that it can be self-scored, and no special training is required to use it. A drawback of this instrument, however, is its use of two specific cultures, each with a different orientation – individualist versus collectivist - as a framework for respondents’ answers and its assumption that people are familiar with a secondary culture that has the opposite orientation to their own.

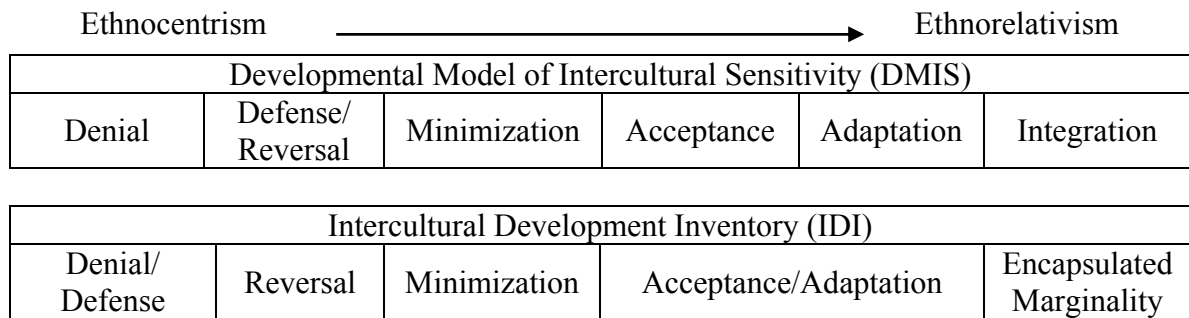
### *The Intercultural Development Inventory*

The Intercultural Development Inventory (IDI; Hammer and Bennett, 2001), is a psychometric instrument that empirically measures the worldview orientations toward cultural difference described in the DMIS. While a number of instruments, as seen above, can be useful for exploring thinking patterns and behavioral styles related to cultural self-awareness, the IDI’s specific design for the purpose of assessing or profiling respondents in terms of the worldview orientations toward cultural difference described in the DMIS, along with its rigorous testing for validity and reliability, make it the instrument of choice for this study on intercultural development.

The IDI version 2 uses five scales to assess intercultural development:

*Denial/Defense (DD), Reversal (R), Minimization (M), Acceptance/Adaptation (AA) and Encapsulated Marginality (EM)*. Although the IDI supports the DMIS’ distinctions between ethnocentric and ethnorelative worldview orientations, the IDI measures certain aspects differently from the way that they are conceptualized on the DMIS (see Figure 2.2).

Figure 2.2 Comparison of the DMIS and IDI



(Hammer & Bennett, 2001)

Several differences are noted between the DMIS and the IDI in the ethnocentric stages. For example, the DMIS identifies Denial and Defense as two separate stages. They are not measured separately on the IDI, however, but make up one scale that indicates a worldview ranging from a more denial emphasis to a more defense focus. Reversal, which is identified on the DMIS as a form of Defense is measured on the IDI as a separate scale. Minimization, identified as an ethnocentric stage in the DMIS, is considered on the IDI to function as a transition stage from ethnocentric to ethnorelative worldviews.

Differences also exist between the DMIS and the IDI in the ethnorelative stages. While the DMIS identifies Acceptance and Adaptation as two separate stages, the IDI places the two together as one scale that indicates a worldview ranging from more focus on Acceptance to more focus on Adaptation. Lastly, the IDI research identifies only one form of Integration, encapsulated marginality. It is measured as a distinct worldview orientation. The other form of Integration which is identified on the DMIS, constructive marginality, is not measured by the IDI.

In sum, the IDI uses five specific measures to present worldviews toward cultural differences. The DD scale indicates a worldview that simplifies and/or polarizes cultural difference. The DD scale is comprised of a Denial cluster, which indicates a tendency to avoid cultural differences, and a Defense cluster, which indicates a tendency to view the world in terms of “us” and “them”, where “us” is superior. The R scale indicates a worldview that reverses “us” and “them” polarization, where “them” is superior. The M scale indicates a worldview that highlights cultural commonality and universal issues. The AA scale indicates a worldview that can comprehend and accommodate to complex cultural differences. It includes an Acceptance cluster where the tendency is to recognize patterns of cultural difference in one’s own and other cultures and an Adaptation cluster where the tendency is to shift perspectives and behavior according to cultural context. The EM scale indicates a worldview that incorporates a multicultural identity with confused cultural perspectives.

The development of intercultural sensitivity is a process of developing awareness of one’s own cultural identity. It requires the self-examination of values, beliefs, and behaviors. The DMIS offers a framework for understanding the development of intercultural sensitivity and the IDI an empirical tool for measuring worldview orientations toward cultural difference identified by the DMIS. As teachers develop greater awareness about how their own culture influences their attitudes and behaviors, they are better able to understand and respond to the cultural differences of their students. Researchers have attempted to identify which factors may predict or

influence a person's level of intercultural sensitivity. The next section examines this research.

#### Related Studies Using the IDI

A number of studies have used the IDI to assess intercultural sensitivity and identify demographic or background factors related to intercultural sensitivity (Ayas, 2006; Conrad, 2006; Fretheim, 2007; Helmer, 2007; Kelso, 2006; Lai, 2006; Park, 2006; Pederson, 1998; Straffon, 2001; Westrick & Yuen, 2007). Researchers have also tried to establish a link between intercultural sensitivity and various types of interventions such as study abroad (Emert, 2008; Medina-López-Portillo, 2004), intercultural training (Altshuler, Sussman, & Kachur, 2003; participation in cultural events (Klak & Martin, 2003), and professional development (DeJaeghere & Zhang, 2008; Lundgren, 2007).

The research has been carried out using a variety of populations. Kelso (2006), for example, examined the intercultural sensitivity level of student affairs practitioners working at a mid-western university. Conrad (2006) investigated the intercultural sensitivity of 70 alumni from a North Florida community leadership training program. Much of the research has been carried out using students in both national and international settings. Many of these students have been pre-service teachers. A small number of studies identified in the literature have used the IDI with in-service teachers (DeJaeghere & Zhang, 2008; Emert, 2008; Fretheim, 2007; Helmer, 2007; Lai, 2006; Lundgren, 2007; Westrick & Yuen, 2007). A paucity of research, however, has examined the intercultural sensitivity of in-service teachers in the United States

(DeJaeghere & Zhang, 2008; Lundgren, 2007). Studies have examined factors such as ethnicity, age, linguistic competence, emotional intelligence, previous experience living abroad, and gender. Of the two studies identified which examined U.S. teachers, the primary focus was on the development of intercultural sensitivity through teacher participation in professional development rather than on the demographic and background factors which may be predictors of intercultural sensitivity. Results of the studies have been mixed. In many cases, no significant correlations have been identified between the variables and levels of intercultural sensitivity. In other cases, positive relationships with levels of intercultural sensitivity have been identified when examining variables such as age, experience with other cultures, and gender, but then other attempts to correlate these same variables in different studies have found no relationship. Examples of the studies and their findings are presented here.

#### *Studies Using the IDI with Students*

Three studies identified in the literature used the IDI to explore the intercultural sensitivity of junior high or high school students. Pederson (1998) used a modified IDI to explore factors associated with the intercultural sensitivity of 126 seventh grade students from rural, suburban, and urban areas of Minnesota. Results of the study found the mean scores of most students in the latter stage of Minimization or the early stage of Acceptance ( $M = 3.5-5.9$ ). Additionally, the results indicated a positive correlation between intercultural contact, gender orientation, and empathy. The IDI scores were generally higher for those students who reported having more intercultural friends and who reported engaging in conversation with people from cultures different from their



own as were the scores of those students who identified with both masculine and feminine traits. Pederson found that sex was not a significant variable in predicting an individual's intercultural sensitivity in general but she did note differences between the three subsamples examined. Girls, for example, in the rural and suburban subsamples, had higher IDI scores than boys, but the scores of the students in the urban subsample showed no statistically significant difference between boys and girls. Additionally, no significant correlations were identified between second language acquisition, minority status, travel, having relatives from different cultural groups or living in different neighborhoods and intercultural sensitivity. The study found authoritarianism to have a negative association with intercultural sensitivity. Pederson found that suburban students demonstrated higher intercultural sensitivity than rural or urban students. Her analysis of qualitative data revealed that the suburban students conceptualized cultural difference differently than the rural students.

Straffon (2001) used the IDI to study the intercultural sensitivity of 336 high school students, ages 13-19, in an international setting. Straffon found that 97% of the students scored in the Acceptance or Cognitive Adaptation stage. Results of the study showed a positive correlation between level of intercultural sensitivity and the length of time that the student had attended an international school and with the length of time that the student had lived outside of their home country. An examination of the ages of students in relation to the average stage score on the IDI indicated that younger students, aged 13 to 15, were less ethnocentric in their thinking than the older students, aged 17 to 19. The average score for the younger group in Denial was 2.07 while the

average of the older group was 3.14. Straffon found this trend to be consistent for the stages of Cognitive Adaptation, Behavior Adaptation and for the developmental score.

In her study, Westrick (2003) looked at the influence of service learning on the levels of intercultural sensitivity of 526 high school students at an international school in Hong Kong. Westrick found the mean overall profile score, or developmental score, of students in the sample to be 92.24, placing them in the stage of Minimization.

Westrick sought to determine the relationship of intercultural sensitivity and a number of variables including gender, number of years spent studying at international schools, number of years spent studying at Hong Kong International School, number of years spent living in another culture, previous participation in four models of service learning at Hong Kong International Schools, nationality, and grade level. Correlations were performed using both the overall profile score and the stage scores with the independent variables. Westrick found the highest mean overall profile score in the group of students with no previous participation in the four service models suggesting that prior participation in service-learning is not associated with higher levels of intercultural sensitivity. In examining the stage scores, however, factors related to prior participation in service programs showed a negative relationship with the absence of prior participation in service and a positive relationship with participation in SOS in the Acceptance/Adaptation stage supporting the study's assumption that prior participation in service-learning is associated with higher levels of intercultural sensitivity. Gender, Korean nationality, and Japanese nationality positively correlated with the IDI overall profile score. Gender also showed a statistically significant, positive relationship with

stage scores in Denial/Defense and Reversal with girls' stage scores indicating positive and statistically significant correlations. Westrick also performed a posttest IDI to determine the influence of participation in service models on the development of intercultural sensitivity. Statistically significant changes from the first to the second administration of the IDI occurred only in four stages. Of these four, three showed losses. The researcher did not explore the reasons behind the changes in IDI scores and pointed out the need for additional studies and the importance of viewing these results with caution.

Ayas (2006) assessed the intercultural sensitivity of 141 third-year medical students at the George Washington University. All 167 students in the class were invited to participate. Therefore, the sample was one of convenience. While the primary purpose of the study was to examine the effect of participation in one or more of the university's international programs on intercultural sensitivity, Ayas examined the relationships between developmental and perceived levels of intercultural sensitivity and a number of other variables (ethnic background, age, previous experience living abroad, and gender). Ayas found no statistically significant differences in the developmental and perceived levels of intercultural sensitivity among the students who had international experience and those who did not. Both groups had IDI developmental scores below 100 which placed them on the ethnocentric side of the IDI continuum. Additionally, Ayas found no significant correlations between ethnic background, age, and previous experience living abroad and developmental intercultural sensitivity. The mean IDI developmental score for the "not North American" group (94.4) and that of

the “North American” group (92.9) were not found to be significantly significant,  $F(1,119) = .21, p = 0.64$ . Two age categories, “under 31 years of age” ( $n = 110$ ) and “31 years of age or older” ( $n = 11$ ) were examined in order to determine whether there was a relationship between participant age and their intercultural sensitivity. No statistical correlations were found between age and developmental intercultural sensitivity ( $r = .06, p = .51$ ). Similarly, duration of previous experience living in another culture and developmental sensitivity failed to significantly correlate ( $r = .07, p = .42$ ). Ayas’ comparisons of these variables and perceived levels of intercultural sensitivity revealed no statistical significance. One positive statistical trend was noted, however, in that the greater previous experience living in another culture, the higher the perceived intercultural sensitivity. The only variable for which Ayas found statistical significance was gender, with females scoring higher than males in developmental intercultural sensitivity. The mean score for females was 97.0 while the mean score for males was 89.1. This difference was statistically significant,  $F(1,119) = 7.3, p < 0.01$ . Similarly, females scored higher than males in perceived level of intercultural sensitivity. One of the primary purposes of Ayas’ study was to evaluate the effectiveness of the intercultural experiential learning program within the university’s medical curriculum. Aya’s study had a number of limitations which hampered the interpretation of the results. The study was limited to third-year students. Since no other students were included, it is not known if aspects of the findings may be attributed to the stage of the participant’s medical training at the time of the study. Another limitation was the difficulty in controlling for factors related to the variable nature of the international

experiences in which students participated. Additionally, the lack of a control group and the lack of use of pretest data against which the levels of intercultural sensitivity following participation in the university's international programs could be compared proved to be limiting factors in this study.

Park (2006) used the IDI to measure intercultural sensitivity and the Michigan English Language Institute College English Test (MELICET) to measure linguistic competence in order to determine if a relationship exists between intercultural sensitivity and linguistic competence of English-as-a-Foreign-Language (EFL) pre-service teachers in Korea. Results of the Pearson product-moment correlation found no significant correlation between the IDI scores and the MELICET,  $r(102) = -.092$ ,  $p = .35$ . Additionally, Park looked at whether there was a difference in intercultural sensitivity levels between primary and secondary EFL pre-service teachers and found no significant mean difference,  $t(102) = -.011$ ,  $p = .31$ , in the levels of intercultural sensitivity between primary teachers' mean scores (89.89) and those of secondary teachers (92.15). Park's findings are congruent with those of Pederson (1998) who concluded no statistically significant relationships between second language acquisition and intercultural sensitivity. Park's study was limited to 104 Korean EFL pre-service teachers enrolled in two national universities in the province of Chonbuk, Korea, and cannot be generalized beyond this population. One class at each university was randomly selected and all students from each class participated.

### *Studies Using the IDI with In-service Teachers*

Lai (2006) investigated the sociocultural adaptation and intercultural sensitivity of 35 international instructors of Teaching English as a Foreign Language (TEFL) in Taiwan's colleges and universities. Using the IDI and the Sociocultural Adaptation Scale (SCAS), Lai examined a number of predictor variables (age, gender, nationality, the length of residence in Taiwan, the length of previous living experiences overseas, the length of studying Mandarin, and the frequency of interaction with Taiwanese) for their relationship to intercultural sensitivity. Few significant correlations were found. Analysis of the variable age and intercultural sensitivity scores showed that the relationship between the two was close to significant ( $r = -0.33, p > 0.05$ ), but the relationship between age and each stage score on the IDI was not significant (all  $p$  values  $> 0.05$ ). Lai found a significant correlation for the length of previous living experience overseas in the stage of Minimization ( $r = 0.35, p > 0.05$ ). There were no correlations, however, found between length of previous living experience overseas to any other stage (all  $p$  values  $> 0.05$ ) and developmental scores ( $r = -0.16, p > 0.05$ ). Similarly, the length of residence in Taiwan was found to be uncorrelated to the stage (all  $p$  values  $> 0.05$ ) and developmental scores ( $r = 0.16, p > 0.05$ ). In regard to gender, Lai identified males to have lower scores in Adaptation than females,  $t(33) = 2.48, p < 0.05$ , and concluded that males in the study were more ethnocentric than females. Gender was not, however, statistically correlated to other stage (all  $p$  values  $> 0.05$ ) and developmental scores,  $t(33) = 1.00, p < 0.05$ . This small sample size was a limitation in this study with only 37 of the 176 potential participants responding to the IDI and 45

responding to the SCAS. An additional limiting factor in this research is the use of only quantitative research methods. The use of qualitative methods such as interviews may have enhanced the understanding of sociocultural adaptation and intercultural sensitivity of the group studied.

Fretheim (2007) conducted a study to determine if there are variables that influence the level of intercultural sensitivity of educators. In this study, the researcher used the IDI to measure the intercultural sensitivity of 58 teachers and administrators working in an American international school in southern Africa. She then used statistical correlations to determine if any of a set of variables (years living abroad, years working in an international school, age, gender, region of origin, number of languages spoken, intercultural marriage, intercultural training, study abroad, Peace Corps, position in school, level of education) influenced participants' IDI scores. No statistically significant relationship was found between the variables and the IDI scores. Upon examination of the descriptive statistics, however, the researcher noted some trends. For example, no participants with less than 5 years' experience living overseas were in Acceptance/Adaptation while participants with over 10 years' experience living overseas had four of the six IDI scores in acceptance/adaptation. The participants with less than 5 years' experience had a lower mean IDI score (92.96) than the participants with over 10 years' experience living overseas who had a mean score of 101.52. This trend suggests that years experience outside one's own culture has a positive effect on level of intercultural sensitivity. Additionally, Fretheim identified a tendency for Peace Corps experience to have a positive correlation with IDI developmental scores. Sixty

percent of the participants whose IDI developmental scores were in Acceptance/Adaptation had a Peace Corps experience. Fretheim's research also suggests connections between higher levels of education and higher IDI developmental scores and between the more languages spoken and higher IDI developmental scores. This finding, however, is incongruent with that of Park (2006) who found no statistical significance between IDI scores and linguistic competence in her study of pre-service teachers. Another trend that Fretheim noted was in the variable of position/level of teaching of participants. High school level participants made up the greatest percentage (66.7%) of all IDI developmental scores in Acceptance/Adaptation. The administrator category, though comprised of only five participants, had a mean IDI score nearly 10 points higher than the teacher participants' scores and no one with a score in Denial/Defense. This suggests that there is a positive relationship between the level taught and the IDI developmental score and a positive relationship between being an administrator and higher IDI developmental scores. Park's study, on the other hand, found no significant difference in intercultural sensitivity levels between primary and secondary EFL pre-service teachers. Another trend was noted by Fretheim in the variable of age. Study participants in the age range of 31-50 represented 75.9% of the total population. One hundred percent of the IDI developmental scores found in the Denial/Defense range belonged to participants in this age group. In regard to the variable of gender, Fretheim found no statistical difference in mean IDI developmental scores between males and females nor did she note any particular trend. There were more females in Acceptance/Adaptation than males, however, the percentage of their



populations with developmental scores in Acceptance/Adaptation, 8.7 % for males and 8.8% for females, were almost exactly the same. As with the previously mentioned studies, the small sample size is a limiting factor.

Westrick and Yuen (2007) used the IDI to measure and compare the levels of intercultural sensitivity of 160 secondary school teachers in four different Hong Kong schools. They examined the variables of gender, educational level completed, age, and experience living in other cultures, to determine their relationship with intercultural sensitivity. Westrick and Yuen used correlation analysis and then stepwise regression to determine the predictors of intercultural sensitivity. The variable with the strongest correlation with overall developmental scores on the IDI was experience living in other cultures. The participants' overall developmental scores rose with increased experience with cultural difference ( $r=0.48$ ,  $p<0.01$ ). Westrick and Yuen concluded that teachers at the school with the highest overall developmental score (105.02) on the IDI as well as the smallest gap (21.66) between overall perceived score and overall developmental score were identified to be older, have completed higher levels of education, and have greater time spent living in other cultures than teachers in the other schools. Their findings in regards to age are similar to the trend noted by Fretheim (2007). Ayas (2006) and Lai (2006), on the other hand, found no relationship between age and intercultural sensitivity in the group of students studied. Additionally, Westrick and Yuen, like Fretheim, identified no correlation between gender with the overall developmental score or any stage of the IDI. Ayas, as previously mentioned, found a statistical significance when analyzing gender.

In another study, Helmer (2007) analyzed the relationship of the IDI scores of 40 elementary faculty members of Cairo American College in Egypt and factors leading to the referral of English language learners for special education services. The variables examined were gender, age, education, world region during one's formative years (0-18 years), number of years living abroad, and teaching position. Females in this study were noted to have slightly higher developmental scores. Helmer points out, however, that this could be due to the small number of males ( $n=5$ ) in the study compared to the number of females. Helmer's findings in regard to gender seem to support those of Ayas (2006) who found a correlation with gender. Helmer's findings, differed, however, from those of Fretheim (2007) and Westrick and Yuen (2007) who concluded no correlation. When Helmer examined the variable of age, she found that the group of people under 50 years of age had IDI scores associated with a higher level of intercultural sensitivity than those over 50 years of age. The use of different age groups in each of the studies makes comparisons of the findings for this variable difficult. Helmer examined only two groups, under 50 and over 50, each of which covers a large number of years. Westrick and Yuen, on the other hand, identified that over 50% of the faculty in the school whose teacher scored highest on the overall IDI (105.02) were between the ages of 40 and 60, part of which are over 50 and part of which are under 50. While all three of the studies found a positive correlation with age, both Fretheim's and Westrick and Yuen's findings seem to suggest that intercultural sensitivity is associated with people who are somewhat older than Helmer's study suggests. Ayas, as previously mentioned, however, found no correlation between age and intercultural

sensitivity. Helmer's examination of the variable, level of education, found that those who had finished graduate degrees such as a masters or doctorate degree ( $n=30$ ) had a slightly greater mean developmental score (102.24) when compared to the college degree group ( $n=10$ ) whose mean score was 98.23. The maximum score of those who had finished graduate degrees (129.27) compared to the maximum score of those in the college degree group (119.27) showed a wider range. While there was no statistically significant difference between the two groups, the scores suggest a trend similar to the one identified by Fretheim that higher levels of education were associated with higher developmental scores. Helmer also analyzed where the teachers had lived during their formative years (0-18 yrs.) The group from North America had a higher mean developmental score (102.28) compared to the "others" group with a mean score of 99.02. In addition, the scores from the North American group had a much greater range (72.97 to 119.27) than those in the "others" group (79.90 to 120.03). Helmer notes the small number of participants in the "others" group ( $n=7$ ). Another difference noted in the findings of this study is the relationship of IDI scores and length of time teachers have lived in other cultures. While other studies (Fretheim, 2007; Straffon, 2001; Westrick & Yuen, 2007) have identified a positive relationship between time spent outside one's own culture and intercultural sensitivity, Helmer found that those who had lived overseas for more than 10 years had the lowest mean score on the IDI. The small sample size of convenience in Helmer's study limits the generalizability of the study.

DeJaeghere and Zhang (2008) examined the extent to which a professional development program using Bennett's Model of Intercultural Sensitivity as its

foundation was related to U.S. public school teachers' perceived intercultural competence in their classrooms. DeJaeghere and Zhang analyzed the responses of 284 participants who had taken the IDI and responded to their researcher-created scale of teachers' perceived intercultural competence to determine which factors in the professional development program are related to teachers' perceived intercultural competence. Additionally, using a regression model they assessed to what extent having a group profile or an individual profile of the IDI was related to change in perceived intercultural competence and they examined the variable of experience as it relates to perceived intercultural competence. The number of years of experience as a teacher and the number of years of experience in the school district were used as a proxy for experience in educational environments. Neither years of experience as a teacher nor the number of years of experience in the school district was found to have a significant correlation with perceived intercultural competence. DeJaeghere and Zhang concluded that teacher participation in individual and group profile interpretation of the IDI had had a positive effect on intercultural competence scores, ( $B = 2.38, p < .001$  and  $B = 2.32, p < .001$ , respectively). Additionally, they determined that although the professional development on the DMIS model seemed to have less effect on intercultural competence scores ( $B = 1.58$ ) than other professional opportunities such as simulation, culture-specific workshops about certain ethnic/religious groups, or Seeking Educational Equity and Diversity (SEED) courses, it had a significant effect on the perceived intercultural competence score ( $p < .005$ ). As with others, this study has limitations. Similar to the variable of international experience in Ayas' study, the

variable of professional development in DeJaeghere and Zhang's study is a broad variable. The considerable variation in the types of professional development in which teachers participated made it difficult to determine exactly which professional development may have influenced perceived intercultural competence. The researchers also identified the fact that teachers' years of experience was not measured as a continuous variable as a limitation. This response option made it impossible for the researchers to correlate the exact number of years of experience with teachers' perceived intercultural sensitivity.

In another analysis, DeJaeghere and Cao (2009) used repeated test measures to determine the extent of changes in the intercultural sensitivity of 89 K-12 educators who work in an urban district where an intercultural initiative based on Bennett's DMIS was implemented. The researcher analyzed pre- and post-data from the IDI to determine any changes in the perceived score and the developmental score. Results showed a significant, medium effect size, positive change in IDI overall development scores. The mean developmental score at the time of the first administration of the IDI was 104.25 compared to the mean developmental score, 111.02 at the time of the second administration of the IDI, with a change of 6.77. The mean perceived score changed from 124.86 to 128.67 from the first to the second administration of the IDI, with a change of 3.81. Changes in the developmental scores (Wilk's = 0.72,  $F(1,88) = 33.45$ ,  $p < 0.001$ ) and changes in the perceived scores (Wilk's = 0.82,  $F(1,88) = 18.93$ ,  $p < 0.001$ ) were both found to be significant. DeJaeghere and Cao noted that the change score is greater among this sample of teachers compared to previous samples tested.

Also noted are the medium effect sizes in change of mean scores from the first to the second administration of the IDI regardless of gender, previous intercultural experience, except for 3 – 4 years, education level, and the length of time between pre- and post-tests.

In another recent study using the IDI, Emert (2008) examined the effects of participation in the Fulbright Teacher Exchange Program (FTEP) on the intercultural sensitivity of 12 teachers. Six of the participants were U.S. American teachers and six were international teachers. The time spent teaching abroad ranged from six months to one year. The researcher used journals, interviews, and two open-ended questions related to teachers' expectations for the Fulbright Teacher Exchange experience along with an administration of the Strategies Inventory for Learning Culture (Paige, Cohen, Kappler, Chi, & Lassegard, 2002) and the IDI to teachers before and after teachers' participation in the FTEP. Results of the IDI showed an increase in developmental mean scores for the group as a whole from pretest (95.82) to posttest (96.20) placing the group in the stage of Minimization for both administrations of the IDI. The individual developmental scores showed an increase for eight participants and a decrease for four participants. Pretest and posttest stage scores showed the group to be resolved in the stages of Defense/Denial, Reversal, and Acceptance/Adaptation and in transition in the stage of Minimization. The quantitative results of this study concerning increased intercultural sensitivity were inconclusive but the researcher's analysis of the qualitative data suggested that the participants' intercultural competence increased as a result of their participation in the program.

## Summary

Today's student population is clearly growing more diverse and it is becoming evident that educators need to have an understanding of cultural difference if they are to effectively teach students from various cultural backgrounds. Current and projected demographic data on race, ethnicity and academic achievement do not provide conclusive evidence that teachers need to have intercultural competence. Nor do available studies provide hard evidence that there is a direct correlation between intercultural sensitivity and closing the gap in student achievement. The literature does, however, strongly identify the important role that culture plays in cross-cultural interactions and supports the need for educators to be able to think and act in culturally appropriate ways in order to effectively engage students from diverse cultural backgrounds and to foster the culturally appropriate knowledge and skills demanded by today's global society.

Bennett's Developmental Model of Intercultural Sensitivity (DMIS), the theoretical model that underpins this study, provides a construct for measuring and understanding an individual's worldviews toward cultural difference. The DMIS presents a continuum of six stages of intercultural sensitivity. The first three stages, Denial, Defense, and Minimization, indicate a worldview that is ethnocentric while the three later stages, Acceptance, Adaptation, and Integration, indicate a worldview that is ethnorelative. The IDI, a self-awareness inventory used to measure individuals' constructions of cultural differences along this continuum, has been increasingly used in studies of this type. Research evidences that the IDI, created for the specific purpose of

measuring the DMIS orientations, has been rigorously validated by factor analyses, reliability analyses, and construct validity tests.

A thorough search of the literature identified many studies which have used the IDI to assess the intercultural sensitivity of individuals in different settings. This research has attempted to understand the relationship between various demographic and background variables and intercultural sensitivity and competence. The studies using the IDI to examine intercultural sensitivity and its predictors, however, provide few conclusive findings in terms of what promotes intercultural sensitivity. The studies have been subject to numerous limitations. The sample size of many of the studies has been small, for example, and most often, one of convenience. Comparing studies is difficult largely due to the great variability of the groupings in the factors being compared. For each study which identifies a positive correlation with some factor, it seems that another study exists to refute the finding. Additionally, seldom have the quantitative and the qualitative findings coincided.

One factor that has been examined in different ways in a number of the studies and has been positively linked with intercultural competence is the experience that individuals have had interacting with people from other cultures. The intercultural experiences examined in the studies have taken place mostly outside of the U.S. The research has looked at the intercultural sensitivity of populations such as pre-service teachers participating in study abroad programs and in-service educators working in international schools. With the growing diversity in the U.S., however, many educators have had intercultural experiences without ever leaving home. Some educators, for



example, have lived in bicultural homes as children, as adults, or as both. Others have worked as bilingual teachers with students from different ethnic, linguistic, and cultural backgrounds. No research addresses how the intercultural experiences of those educators, living and working in bicultural settings in the U.S., are related to intercultural sensitivity. A gap exists in the literature. Additional research on the intercultural sensitivity of educators is imperative to inform educational policy and practice in today's global world. Using a school district in the U.S. as the basis for this research will provide an important dimension to the exploration of intercultural experience and intercultural sensitivity.

## Chapter 3

### METHODOLOGY

The purpose of this study was to assess the intercultural sensitivity of teachers and to determine whether there were differences in the intercultural sensitivity of teachers in terms of the following demographic and background variables: gender, age, level of education, years living in a bicultural setting, years teaching in schools, years teaching ethnically diverse students, and years teaching in a bilingual classroom. The study aims to contribute to the understanding of the intercultural development of educators. This chapter will focus on the research design, the selection and description of the study participants, the description of the instrument, the hypotheses, and the data collection and analysis procedures.

#### The Research Design

This study can be seen as exploratory in nature, investigating teachers' levels of intercultural sensitivity in terms of certain background and demographic factors. This research was conducted using a quantitative, non-experimental design. According to Creswell (2003), a quantitative approach is one in which the researcher uses "postpositivist claims for developing knowledge, employs strategies of inquiry such as experiments and surveys, and collects data on predetermined instruments that yield statistical data" (p. 18). The study is an inferential study in which the researcher uses a sample of data to draw conclusions or make inferences about the differences between groups of teachers. Utts and Heckard (2006) claim that inference methods can be applied "when it is reasonable to assume that the data in hand are representative for the

question being considered about a larger group” (p.59). In this study, version 2 of the Intercultural Development Inventory, (IDI), a psychometrically validated instrument was used as the quantitative instrument to assess the intercultural sensitivity of participants and to create a profile of their worldview orientation based on Milton Bennett’s (1993) Developmental Model of Intercultural Sensitivity (DMIS). Using the data gathered by the IDI, a mean developmental score and a score for each of the IDI’s five scales, Denial/Defense, Reversal, Minimization, Acceptance/ Adaptation, and Encapsulated Marginality, was determined for the group of participants. An attempt was then made to determine whether there were significant differences in the intercultural sensitivity (the IDI developmental score and the five scale scores) of various teacher groups in terms of the seven demographic and background variables. Terenzini and Upcraft (1996) point out that “quantitative studies give us a very firm foundation for describing and analyzing what ‘is’ and offer some insights into ‘why’ it is the way it is” (p. 85). Creswell (2003) claims that a quantitative approach may be the best approach for this type of research where the problem is one of identifying factors that influence an outcome or one of understanding the best predictors of outcomes.

The Intercultural Development Inventory (IDI) was chosen as the most efficient means of gathering data to answer the research questions. The IDI is not a survey but an inventory specifically designed to measure the DMIS concepts. It is similar to a survey, however, in that it provides an efficient way to collect data and it yields responses that are easy to tabulate, score, and analyze. These features, as Patton (2001) points out, make it a desirable method of data collection for this type of study. The response rate,

however, can often be low with survey research. With this in mind, the researcher determined that the use of the paper and pencil version of the IDI administered at each campus would probably yield a greater response rate than use of the online version. Another disadvantage of using a survey is that some respondents may be swayed by social desirability and may not provide accurate responses but tend to give answers that they think are socially acceptable. One of the reasons that the researcher chose the IDI over other possible instruments was because it was constructed following careful guidelines to ensure validity and reliability (Hammer et al., 2003; Paige, Jacobs-Cassuto, et al., 2003).

#### Context for the Study

The school district chosen for this study is an urban school district in the state of Texas. One of the ten largest school districts in the state, the district serves approximately 63,000 students and is comprised of seventy-four schools. Six are senior high schools (grades 9-12), 12 are junior high schools (grade 7-8), and 51 are elementary schools (grades PK-6). Additionally, there is a junior/senior high school for immigrant students, an alternative senior high school for at-risk and non-traditional students, and 3 alternative campuses for discipline management. The district's staff of approximately 8,377 makes it the largest employer in the city and the third largest employer in the county. The staff is comprised of 4,195 classroom teachers (51% of total staff), 907 educational aides, 675 professional support staff, 396 campus administration, 92 central administration and 2,108 auxiliary staff.

The student population in the school district has changed dramatically over the last twenty years. While the overall current student population remains steady, the population of English Language Learners continues to grow. Twenty percent of the district's students are English Language Learners compared to twenty years ago when that number was only 2%. Data from the Public Education Information Management System (PEIMS) for the state of Texas reveals a disparity between the ethnic distribution of the school district's students and teachers. Sixty-nine percent of the student population is made up of non-white students. Of this number, Hispanic students comprise 37% and African-American students comprise 24%. The teacher population, on the other hand, is 66% white. Thirteen percent of the teacher population is African-American and 18% is Hispanic. The average number of years teachers have working in the district is 8.4 while the average years of overall teaching experience is 11.3 years.

#### Selection and Description of the Study Participants

The data for this study were collected at five bilingual schools in a large urban school district in Texas. Participants in this study were 233 teachers employed during the 2008-2009 school year at one of the five schools chosen for the study. The group was comprised of pre-kindergarten through 6<sup>th</sup> grade classroom teachers, English as a Second Language teachers, special education teachers, and special subject area teachers such as music, art, and physical education. Cluster sampling was used to randomly select the five schools from the district's 19 bilingual schools. Bilingual schools in the district are those where there are at least 18 students in the same grade level and from the same language group other than English, whose English language skills are such

that they will have difficulty performing ordinary class work in English. The 19 bilingual schools from which this sample of five schools were randomly selected employ 859 (28.5%) of the school district's 4,195 teachers. Of this 859 teachers in the 19 schools, 245 (28.5%) work at one of the five bilingual schools included in the study. Once the schools had been selected for the study, the researcher attended a faculty meeting at each of the schools where all teachers present at school on that day were given a consent form (see Appendix A) to read and invited to participate. As such, the teachers were not randomly selected. The schools, however, were purposefully selected making the sample not entirely one of convenience. Of the 245 teachers, 11 were absent on the day the IDI was given. One teacher at one of the five schools who was present chose not to participate.

Table 3.1 presents a profile of the study participants along with a profile of the teachers at the 19 bilingual schools from which the schools for the study were randomly selected. There were 202 (86.7%) female teachers and 31 (13.3%) male teachers participating in the study. The make-up of the study participants in regards to gender is similar to that of the district's 19 bilingual schools which are comprised of 750 (87.3%) female teachers and 109 (12.7%) male teachers. No data was collected for the group of 233 teachers studied regarding ethnicity. The 2007-08 Academic Excellence Indicator System (AEIS) Campus Reports indicate, however, that 142 (58%) of the total number of teachers ( $n = 245$ ) at the 5 campuses studied are White and 103 (42%) are Non-White. This compares to the 19 bilingual schools' 556 (64.7%) White teachers and 303 (36.3%) Non-White teachers.

Table 3.1 Profile of Participants from the 5 Bilingual Schools Studied (N = 233) and Teachers from the School District's 19 Bilingual Schools (N = 859)

	5 Bilingual Schools				19 Bilingual Schools			
	<i>n</i>	%	Mean	<i>SD</i>	<i>n</i>	%	Mean	<i>SD</i>
Gender								
Female	202	86.7			750	87.3		
Male	31	13.3			109	12.7		
Ethnicity								
White	142	58			556	64.7		
Non-White	103	42			303	36.3		
Age			40.7	10.7			*	*
0 – 40 Years	123	52.8			*	*		
Over 40 Years	110	47.2			*	*		
Level of Ed.								
Undergraduate	156	67.0			*	*		
Graduate	77	33.0			*	*		
Yrs Living in a Bicultural Setting			10.8	15.0			*	*
0 Years	114	48.9			*	*		
1 - 10 Years	40	17.2			*	*		
Over 10 Years	79	33.9			*	*		
Yrs Teaching			10.7	8.6			*	*
5 Years or Less	73	31.3			365	42.5		
6 - 10 Years	76	32.6			227	26.4		
Over 10 years	84	36.1			267	31.1		
Yrs Teaching Ethnically Diverse Students			9.9	8.0			*	*
5 Years or Less	78	33.5			*	*		
6 - 10 Years	79	33.9			*	*		
Over 10 Years	76	32.6			*	*		
Yrs Teaching in a Bilingual Class.			3.4	5.8			*	*
0 Years	133	57.1			*	*		
1 - 10 Years	77	33.0			*	*		
Over 10 Years	23	9.9			*	*		

*Note.* Data for teachers working in the 5 bilingual schools studied was self-reported by study participants with the exception of ethnicity. Data for ethnicity was obtained from the Texas Education Agency (TEA) 2007-08 Academic Excellence Indicator System (AEIS) Campus Reports and includes all teachers (N = 245) working at the 5 bilingual schools sampled rather than only those who participated (N = 233) in the study. Data for teachers working in the district's 19 bilingual schools was obtained from the 2007-08 AEIS Campus Reports (TEA).

\*Indicates areas in which data for the 19 bilingual schools was not available on AEIS.

The ages of participants ranged from 22 years to 69 years with a mean age of 40.7 years. There were 123 (52.8%) individuals in the “0 - 40 years” group and 110 (47.2%) in the “over 40 years” group. Over two-thirds ( $n = 156$ , 67%) of the participants reported that their highest level of education was an undergraduate degree while slightly over a third ( $n = 77$ , 33%) held a graduate degree. Of the 233 participants, 73 (31.3%) reported teaching in schools for 5 years or less, 76 (32.5%) reported teaching in schools for 6 - 10 years, and 84 (36.1%) reported teaching in schools for over 10 years compared to the teachers at the 19 bilingual schools where 365 (42.5%) have been teaching for five years or less, 227 (26.4%) have been teaching for 6 – 10 years, and 267 (31.1%) have been teaching for over 10 years.

Additionally, this profile shows that teachers in the study have a range of experience living or working in a setting of difference. Of the 233 participants, almost half ( $n = 114$ , 48.9%) reported having no experience living in a bicultural setting. Seventy-eight (33.5%) participants reported 5 years or less teaching ethnically diverse students, 79 (33.9%) reported 6 to 10 years and 76 (32.6%) reported over 10 years. The majority of the participants ( $n = 133$ , 57.1%) reported 0 years teaching in a bilingual classroom while 77 (33%) reported 1 to 10 years, and 23 (9.9%) reported over 10 years teaching in a bilingual classroom.

#### Description of Instrument

Bennett and Hammer’s Intercultural Development Inventory (IDI), a psychometric instrument that empirically measures the worldview orientations toward cultural difference as conceptualized in the DMIS (Hammer & Bennett, 2001), was the



research instrument used to generate data that would help answer the research questions addressed by this study:

1. What is the level of intercultural sensitivity, as measured by the Intercultural Development Inventory (IDI), of elementary teachers in bilingual schools in a Texas school district?
2. Do teachers' levels of intercultural sensitivity differ in terms of the following variables?
  - gender
  - age
  - level of education
  - years living in a bicultural setting
  - years teaching in schools
  - years teaching ethnically diverse students
  - years teaching in a bilingual classroom

The IDI is a 50-item paper and pencil or online questionnaire. It is comprised of two parts and can generally be completed in about 20-25 minutes. In *Part One*, participants respond to fifty statements using a five point response set ranging from “agree” to “disagree.” In *Part Two* of the IDI, participants respond to questions to provide information about their background. For this research, the items in *Part Two* were replaced with seven demographic and background questions designed by the researcher (see Appendix B). The data gathered in *Part One* was used to answer research question one about the intercultural sensitivity of the participants. The responses taken from the

researcher-designed *Part Two* provided the data needed to answer the second research question regarding whether teachers' levels of intercultural sensitivity differed in terms of the demographic and background variables.

### *IDI Scales*

The IDI software (version 2.3) produces an IDI overall developmental profile or developmental score. The developmental score represents a standardized or z-score where 100 indicates the mean score of the original IDI normed sample with a standard deviation of 15 (Hammer & Bennett, 2001). The overall score range is 55-145 with a scale breakdown of 55.00-84.99 for Denial/Defense and Reversal, 85.00-114.99 for Minimization, and 115-145 for Acceptance/Adaptation.

The IDI also produces a score for each of the five IDI scales: Denial/Defense (DD), Reversal (R), Minimization (M), Acceptance/Adaptation (AA), and Encapsulated Marginality (EM). The DD scale measures an ethnocentric "worldview that simplifies cultural differences by dividing groups of "us" and "them" where "us" is superior to "them". The R Scale measures a worldview that reverses the "us" and "them" polarization that is noted in the DD stage. As such, a person functioning in the stage of Reversal might view the "them" as more important than the "us." The M scale measures a worldview which highlights cultural commonality and universal issues. The AA scale measures a worldview in which an individual can understand and adapt their behavior to a particular cultural context. The EM Scale measures a worldview categorized by cultural identity issues and confused cultural perspectives. The IDI scale scores fall between 1.00 and 5.00 on each of the five scales. The scores are further broken down

into a three-part scale indicating “unresolved” (1.00-2.33), “in transition” (2.34-3.66), or “resolved” (3.67-5.00). A score of 5.00, for example, on any of the five scales, means that an individual is “resolved” in that scale or that a person has successfully dealt with issues that might otherwise have been impeding intercultural development at that stage. A score of 3 on a scale suggests that a person is “in transition” or in the process of dealing with issues that might interfere with increased intercultural sensitivity. A score below 2.34 on a scale suggests that there are issues impeding intercultural development that need to be resolved in order for further development to occur. It is not necessary that one scale be completely resolved for the individual or the group to score in transition or resolved in more advanced scales.

#### *IDI Reliability and Validity*

The IDI went through an extensive instrument development process that took place in two phases over several years and extensive psychometric testing which indicates it to be a reliable and valid assessment of an individual’s and group’s core orientations toward cultural differences (Hammer et al., 2003; Paige, Jacobs-Cassuto, et al., 2003). The first version of the IDI was derived from a sample of 312 culturally diverse respondents and included 60-items. The following six scales were identified: Denial, Defense, Minimization, Acceptance, Cognitive Adaptation, and Behavioral Adaptation. Researchers (Hammer & Bennett, 2001; Hammer et al., 2003) reported alpha coefficients from .80 to .91 for the six IDI scales for this version to evidence the instrument’s internal consistency reliability. Subsequent to the development of the 60-item version, independent researchers, Paige, Jacobs-Cassuto, et al. (2003) conducted

factor analysis on the IDI v.1 and reported that the reliability for the six-stage DMIS ranged from .74 to .91, with four of the six scales above .80 (Cronbach alpha). They concluded that the IDI is a “reliable measure that has little or no social desirability bias and reasonably, although not exactly, approximates the developmental model of intercultural sensitivity...” (p. 467). Results from the research conducted by Paige et al. suggested that while the test data from the IDI generally follows the six stages of the DMIS, it fit a five stage-model better.

Hammer and Bennett (2001) incorporated results from the factor analysis conducted by Paige, Jacobs-Cassuto, et al. (2003) on the first version of the IDI into the second version, IDI v.2, the version used in this research. Confirmatory factor analysis of the responses to 122 items by 591 individuals resulted in a five-factor model that consisted of 50 items divided into five scales: DD scale (13 items, Denial/Defense); R scale (9 items, Reversal); M scale (9 items, Minimization); AA scale (14 items, Acceptance/Adaptation); and an EM scale (5 items, Encapsulated Marginality) (Hammer et al., 2003). The IDI v.2 had alpha coefficients of .80 to .84 for the five scales (Hammer & Bennett, 2001; Hammer et al., 2003) indicating that it, too, had strong evidence of internal consistency reliability.

Additionally, Hammer et al. (2003) examined construct validity by correlating the five IDI scales with modified versions of the Worldmindedness Scale (Sampson & Smith, 1957) and the Social Anxiety Scale (Stephen & Stephen, 1985). Hammer, Bennett, and Wiseman identified a positive and statistically significant relationship with worldmindedness and a negative relationship with intercultural anxiety. Thus, as would

be expected from DMIS theory, a higher level of worldmindedness had a positive correlation with a higher level of intercultural sensitivity as measured by the IDI while a lower level of worldmindedness correlated with a low level of intercultural sensitivity. Conversely, a higher level of intercultural anxiety correlated with a lower level of intercultural sensitivity as measured by the IDI and a lower level of intercultural anxiety correlated with a higher level of intercultural sensitivity. As in the case of the internal consistency reliability, the reports provided strong evidence of the IDI's construct validity.

### *Research Variables*

The study examined seven demographic and background factors that may influence intercultural sensitivity. This sensitivity toward difference, as Bennett (1993) suggests, is the result of an individual's traits and experiences. Factors which impact one's orientation to difference may include gender, age, or education. Likewise, the kind of environment that an individual lives in, the kind of experiences an individual has, and the people that an individual interacts with may also impact one's worldview toward difference. This study investigated the factors of gender, age, and educational level which have been examined in previous studies (Fretheim, 2007; Helmer, 2007; Westrick & Yuen, 2007). Additionally, this study expanded the research by including several variables related to intercultural experience not examined in previous studies. The following definitions were provided to study participants in order to clarify the terms used in Part Two (see Appendix B) of the IDI:

Years living in a bicultural setting: the combined number of years that the study participant has lived with someone from a different ethnic group than his or her own ethnic group and has lived in a country different than his or her country of birth.

Years teaching in schools: the total number of years the study participant has worked as a teacher in a public or private school.

Years teaching ethnically diverse students: the total number of years that the study participant has worked as a teacher in a classroom where one or more students were from an ethnic background different from that of the study participant.

Years teaching in a bilingual classroom: the total number of years that the study participant has worked as a teacher in a bilingual program. A bilingual program in this school district is one in which English and the students' home language, Spanish, are used as mediums of instruction. The program provides for learning basic skills in the primary language of the students in the program and for the carefully structured and sequenced mastery of English language skills.

The researcher collected continuous data for each of the variables except for the variables, level of education and gender. Data collected for all variables except gender were regrouped prior to statistical analysis in order to most effectively determine whether there were differences within and between groups of teachers based on the variables (See Table 4.5).

## Hypotheses

Based on a review of the literature, the data are expected to show that:

1. There is no statistically significant difference in the mean IDI scores of female teachers and male teachers.
2. There is no statistically significant difference in the mean IDI scores of teachers over the age of 40 and teachers who are 40 years of age and younger.
3. The mean IDI scores of teachers with a graduate level of education are statistically significantly higher than those of teachers with only an undergraduate level of education.
4. There is a statistically significant difference between the mean IDI scores of teachers based upon years of experience living in a bicultural setting.
5. There is a statistically significant difference between the mean IDI scores of teachers based upon years of experience teaching in schools.
6. There is a statistically significant difference between the mean IDI scores of teachers based upon years experience teaching ethnically diverse students.
7. There is a statistically significant difference between the mean IDI scores of teachers based upon years of experience teaching in a bilingual classroom.

## Data Collection

Prior to beginning the study, the researcher was given written permission from the school district to conduct the study. The researcher then sought Category 2 Exemption approval from the University of Minnesota's IRB committee prior to the

collection of data. Approval was granted July 14, 2008 (Human Subjects Code Number: 0807E39261).

The researcher personally contacted the principal of each of the five schools selected for the study and requested their participation in the study. The researcher, a qualified administrator of the IDI, was allowed time during a regular faculty meeting between August 18, 2008 and September 2, 2008 at each school to administer a paper/pencil version of the IDI to study participants. The researcher gave a brief description of the research to the perspective participants and then allowed participants to read a consent form and ask any questions prior to their agreement to participate in the study. Only one teacher at one of the five schools chose not to participate. All study participants signed a consent form and then completed the IDI. Completion time took approximately 25 minutes at each school. Participant's names were not requested but *Part One* and *Part Two* (demographic and background information) of the IDI were coded in such a way to ensure that they were correctly matched for analysis.

#### Data Analysis

The data gathered in *Part One* of the IDI was entered into the IDI software (version 2.3) designed by Hammer and Bennett (2001) to produce the group's IDI developmental and scale scores that would be needed to answer the research questions. The data was then entered into the Statistical Package for the Social Sciences (SPSS) along with the demographic and background data gathered in *Part Two* of the IDI. For the purposes of this study, the researcher set the statistical significance level for the statistical analyses to be less than 0.05. Mean, standard deviation, frequency, and range



were produced to help describe the demographic profile of the population and the group's level of intercultural sensitivity. A correlation matrix was created to examine the relationships between the seven independent variables. A series of one-way analyses of variance (ANOVA) and T-tests were used to determine whether the dependent variables (IDI scores) differed for teacher groups in terms of the independent variables: gender, age, level of education, years living in a bicultural setting, years teaching in schools, years teaching ethnically diverse students, and years teaching in a bilingual classroom. For each situation where the ANOVA results were significant, the Bonferroni post hoc test was used to further explore the differences among means.

## Chapter 4

### RESULTS

This chapter presents the results of the research undertaken to explore the intercultural sensitivity of elementary school teachers in bilingual schools in a large urban Texas school district. These results are the summary of data gathered through the administration of the Intercultural Development Inventory (IDI) to elementary teachers ( $n = 233$ ) working at one of the five bilingual schools randomly chosen for the study. All teachers present on the day that the IDI was administered at each school were invited to participate. Statistical analyses were performed in order to answer the two research questions posed in this study:

1. What is the level of intercultural sensitivity, as measured by the Intercultural Development Inventory (IDI), of elementary teachers in bilingual schools in a Texas school district?
2. Do teachers' levels of intercultural sensitivity differ in terms of the following variables?
  - gender
  - age
  - level of education
  - years living in a bicultural setting
  - years teaching in schools
  - years teaching ethnically diverse students
  - years teaching in a bilingual classroom

The chapter is organized into two sections according to the research questions. The first section presents the teachers' level of intercultural sensitivity as measured by the IDI. This is followed by the results of the statistical analyses used to determine whether there is a difference in teachers' levels of intercultural sensitivity based on the various independent variables.

### Teachers' Intercultural Sensitivity

The purpose of the first research question of this study was to determine the overall intercultural sensitivity of a group of elementary teachers working in bilingual schools in a Texas school district. Both the IDI developmental score and the scores for each of the five scales on the IDI were used to explore the intercultural sensitivity of the group of teachers who participated in the study.

#### *Levels of Intercultural Sensitivity – IDI Developmental Score*

The IDI consists of an overall developmental intercultural sensitivity which is a developmental score on a continuum from ethnocentrism to ethnorelativism. This continuum is divided into four groups or scales: Denial/Defense or Reversal, Minimization, Acceptance/Adaptation, and Encapsulated Marginality. In the IDI, V.2, the score range is 55 - 145 with a score of 100, which lies at the center of Minimization, representing the middle of the scoring scale. A score of 55 - 84.99 indicates Denial/Defense and Reversal, 85 - 114.99 indicates Minimization, and 115 - 145 indicates Acceptance/Adaptation (see Table 4.1).

Table 4.1 *IDI Continuum*

Phase	Ethnorelativism		Ethnocentrism
IDI Stage	Denial/Defense (DD) or Reversal (R)	Minimization (M)	Acceptance/Adaptation (AA)
IDI Score Range for Stage	55 - 84.99	85 - 114.99	115 - 145

According to the IDI results, the mean developmental score for the sample of 233 teachers was 95.09 ( $SD = 15$ ). This score, which is below the normative average score of 100, places the group in the lower end of Minimization according to Bennett’s DMIS. The range of worldviews related to the IDI developmental score revealed a gap of 76.61 between the lowest and highest scores. The lowest score was 56.45, which placed the respondent in Denial/Defense on the IDI scales and the highest score was 133.06 which placed the respondent in Acceptance/Adaptation (see Table 4.2).

Table 4.2 *Mean Score, SD, and Range of Teachers’ IDI Developmental Scores*

Mean	95.09
<i>SD</i>	15
Range	56.45 - 133.06
$N = 233$	

Sixty-four (27.5%) of the 233 participants’ scores were in Denial/Defense, which “indicates a worldview that simplifies and/or polarizes cultural difference” (Hammer & Bennett, 2002, p.1). The greatest number of participants (148, 63.5%) had overall scores in Minimization, indicating “a worldview that highlights cultural commonality and universal values” (Hammer & Bennett, p.1). Twenty-one participants (9%) had an overall developmental score in Acceptance/Adaptation, indicating “a worldview that can comprehend and accommodate to complex cultural difference” (Hammer &

Bennett, p.1). Table 4.3 shows the number and percent of teachers whose developmental scores place them in one of the three worldviews along the continuum. It can be concluded from these results that the worldviews of 212 (91%) of the teachers would be considered ethnocentric rather than ethnorelative.

Table 4.3 *Number and Percent of Teachers at Each Stage*

IDI Stage	Denial/Defense (DD) or Reversal (R)	Minimization (M)	Acceptance/Adaptation (AA)
Number of Teachers	64	148	21
Percent of Teachers	27.5	63.5	9

*N* = 233

*Levels of Intercultural Sensitivity – IDI Scale Scores*

In addition to the developmental score, the IDI provides a score for each of the following five separate scales: Denial/Defense, Reversal, Minimization, Acceptance/Adaptation, and Encapsulated Marginality. An analysis of these scores provides more detailed information about the degree to which the participants in this study have resolved the issues related to the worldview of the DMIS. The best score that an individual can obtain within any scale is a 5, meaning that the respondent had “worked through the issues” associated with that stage. For example, a score of 5 in the Denial/Defense stage on the IDI means that a person has successfully worked through the issues related to simplifying and/or polarizing cultural difference. Each of the five scales is divided into the following three clusters: “unresolved”, “in transition” and “resolved.” Scale scores of 1.00 - 2.33 indicate that developmental issues in this stage are unresolved. These issues need to be resolved for further intercultural development to occur. Scores of 2.34 - 3.65 indicate that developmental issues in this stage are in

transition and that an individual is making progress towards resolving issues associated with that developmental stage. Scores of 3.66 - 5.00 indicate that an individual has resolved any developmental issues in this stage. Assuming that Acceptance/Adaptation is the goal for all individuals, a 5 in all stages would represent the ideal score on the IDI. A high score indicates that a person has worked through issues impeding development in that stage and made positive development of intercultural sensitivity.

Table 4.4 *Teachers' Scale Scores*

	Denial/Defense	Reversal	Minimization	Acceptance Adaptation	Encapsulated Marginality
Mean	4.23	3.95	2.47	3.36	4.33
SD	.56	.75	.74	.65	.80
Mode	4.54	5.00	2.11	3.50	5.00
Range	2.23 - 5.00	2.00 - 5.00	1.00 - 5.00	1.57 - 4.86	1.00 - 5.00

Table 4.4 presents the mean scale scores for this sample. Considerable variance between the 5 scale scores is noted. The mean scores indicate that the teachers in this group have resolved issues within Denial/Defense ( $M = 4.23$ ,  $SD = .56$ ), Reversal ( $M = 3.95$ ,  $SD = .75$ ) and Encapsulated Marginality ( $M = 4.33$ ,  $SD = .80$ ). The mean scores for Acceptance/Adaptation ( $M = 3.36$ ,  $SD = .65$ ) indicate that issues associated with this stage are in transition. The stage with the lowest mean score for all five stages of the IDI is Minimization ( $M = 2.47$ ,  $SD = .74$ ) indicating that issues of this stage are also in transition. This score suggests that the teacher participants are grounded in worldviews related to minimization of difference.

### *Summary of IDI Scores*

The mean IDI overall developmental score of teacher participants in this study indicates the stage of Minimization. The mean scale scores for Denial/Defense, Reversal, and Encapsulated Marginality indicate that on average the teachers have successfully dealt with issues in these areas that might otherwise have been impeding with their intercultural development. The Denial/Defense and Reversal scores indicate a group that is generally interested in cultural differences. The group does not tend to polarize cultures into “us” and “them” where “us” is superior nor into an “us” and “them” polarization where “them” is superior. In the stage of Acceptance/Adaptation, the group is working on issues or “in transition.” An analysis of the Acceptance cluster ( $M = 3.68$ ) and Adaptation cluster ( $M = 3.18$ ) within the scale indicates that while teachers may recognize patterns of cultural difference in their own culture and other cultures, they have difficulty in altering their perspective and behavior according to the cultural context.

The skills, knowledge, and attitudes that the teachers studied have reflect those of Minimization. The mean score indicates that teachers assume that people from other cultures are basically just like them and share the same cultural values. They may stress the cultural commonality to such an extent that they may not be able to identify important cultural differences that influence intercultural relations. As was previously stated, teachers have begun to work on the stage of Minimization. They will need to resolve issues such as the tendency to emphasize similarity of people and commonality of basic values in order for further intercultural development to occur.

### Differences in Teachers' Levels of Intercultural Sensitivity

The second research question in this study seeks to determine whether teachers' levels of intercultural sensitivity (IDI developmental scores and scale scores) differed in terms of certain demographic and background variables related to their intercultural experience (the independent variables).

#### *Correlation Matrix*

A correlation matrix was produced to determine any relationships between the independent variables. While a number of variables were found to be inter-related, only two of the variables, years teaching in schools and years teaching ethnically diverse students, were found to be nearly perfectly related ( $r = .94, p < .05$ ). Table 4.5 shows the correlations between the independent variables.

Table 4.5 *Correlation Matrix of Independent Variables*

	Gender	Age	Ed.	Yrs LIBCS	Yrs TIS	Yrs TEDS	Yrs TIBC
Gender	1.000						
Age	.035	1.000					
ED	-.007	.246*	1.000				
Yrs LIBCS	.117	.155*	-.052	1.000			
Yrs TIS	-.070	.677*	.259*	.043	1.000		
Yrs TEDS	-.045	.630*	.256*	.077	.936*	1.000	
Yrs TIBC	.021	.277*	.013	.212*	.373*	.414*	1.000

Note. Ed. = Level of Education. Yrs LIBCS = Years Living in a Bicultural Setting. Yrs TIS = Years Teaching in Schools. Yrs TEDS = Years Teaching Ethnically Diverse Students. Yrs TIBC = Years Teaching in a Bilingual Classroom

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



### *T-Test and ANOVA Results*

Independent T-Tests or one-way analyses of variance (ANOVA) were used to analyze the following variables: gender, age, level of education, years living in a bicultural setting, years teaching in schools, years teaching ethnically diverse students, and years teaching in a bilingual classroom. For those variables identified with ANOVA tests to have a statistically significant difference, Bonferonni post hoc multiple comparisons technique was used to determine the statistical difference between each group.

For the purpose of ANOVA and T-Tests, the data gathered as continuous variables and for the categorical variable, level of education, were divided into different groups, as indicated in Table 4.6. Previous research (Ayas, 2006; Fretheim, 2007; Helmer, 2007; Kelso, 2006; Westrick & Yuen, 2007) offered a guide for regrouping the data for the variables of age and level of education. The variable, level of education, was coded into only two groups, “undergraduate degrees” and “graduate degrees,” due to the small number of participants ( $n = 4$ ) with a graduate degree other than a master’s degree. Previous research has not included all of the variables examined in this study, however, and therefore, was not helpful in determining parameters for the groups of teachers examined.

Table 4.6 *Teacher Groups Examined for Each Variable*

Variable	Number of Teachers
<b>Gender</b>	
Female	202
Male	31
<b>Age</b>	
0 - 40 Years	123
Over 40 Years	110
<b>Level of Education</b>	
Undergraduate	156
Graduate	77
<b>Yrs Living in a Bicultural Setting</b>	
0 Years	114
1 - 10 Years	40
Over 10 Years	79
<b>Yrs Teaching in Schools</b>	
5 Years or Less	73
6 - 10 Years	76
Over 10 Years	84
<b>Yrs Teaching Ethnically Diverse Students</b>	
5 Years or Less	78
6 - 10 Years	79
Over 10 Years	76
<b>Yrs Teaching in a Bilingual Classroom</b>	
0 Years	133
1 - 10 Years	77
Over 10 Years	23

The researcher hypothesized that there would be a difference between groups of teachers based upon their living and teaching experience. In order to test the hypotheses, the researcher attempted to create groups that would allow for the comparison of those teachers with greater years of experience and those with fewer years of experience. One might speculate that teachers with greater years' experience teaching have had longer working with diverse students and as a result, a greater opportunity to work through some of their issues relating to cultural difference. On the

other hand, one might assume that teachers who are recent college graduates may have had more intercultural training than teachers with many years of experience due to a greater emphasis at the university level on the need for intercultural competence than was present when many of the “veteran” teachers attended college. The inclusion of a group for “5 years or less” and “over 10 years” allowed for the comparison of both new teachers and veteran teachers. An examination of the preliminary data for two of the variables, years living in a bicultural setting and years teaching in a bilingual classroom, indicated that over half of the participants had 0 years experience. Due to the large number of teachers in this group for each of these two variables, the researcher decided that it would be worthwhile to look at 0 years as a separate category for the two variables.

### *Gender*

Independent t-tests were used to determine whether there are any differences in the mean IDI developmental score and the mean scale scores between teacher groups with regard to gender. Results of the t-tests presented in Table 4.7 showed no statistically significant difference at the  $p < .05$  level of significance for the mean developmental score. This finding supports the first hypothesis, namely that there is no statistically significant difference between the mean IDI scores of female teachers and those of male teachers. Cohen’s  $d$ , or the magnitude of effect size, was also computed for the variable of gender since there is a “visible” difference in both the sample sizes for the group of males ( $n = 31$ ) and the group of females ( $n = 202$ ) and the developmental scores for the two groups ( $M = 91.47$ ,  $SD = 14.94$ ;  $M = 95.65$ ,

$SD = 15.15$ , respectively). Cohen (1988) defined effect size as small (0 to 0.2), medium (0.21 to 0.5), and large (.51 to 0.8). The effect size for gender was 0.278 which indicates a medium effect.

Table 4.7 *Descriptive Statistics and T-Tests: IDI Scores and Gender*

Group		Mean	SD	Mean Dif.	Sig. (2-tailed)	t	95% Confidence Interval	
							Lower	Up
Developmental Score	Female	95.65	15.15	4.18	.153	1.43	-1.57	9.93
	Male	91.47	14.94					
Denial/Defense	Female	4.25	.551	.130	.226	1.22	-.0808	.341
	Male	4.12	.577					
Reversal	Female	3.98	.767	.181	.211	1.26	-.103	.464
	Male	3.80	.593					
Minimization	Female	2.50	.744	.172	.229	1.21	-.109	.454
	Male	2.32	.727					
Acceptance/Adaptation	Female	3.32	.649	-.301	.016*	-2.42	-.547	-.056
	Male	3.62	.619					
Encapsulated Marginality	Female	4.40	.744	.479	.002*	3.18	.182	.776
	Male	3.92	.997					

\* $p < .05$

$df = 231$

$n = 31$  Male

$n = 202$  Female

A statistically significance difference was found between the scale scores in Acceptance/Adaptation,  $t(231) = -2.42, p < .05$ , and in Encapsulated Marginality,  $t(231) = 3.18, p < .05$ . The mean Acceptance/Adaptation score of males ( $M = 3.62, SD = .62$ ) was higher than that of females ( $M = 3.32, SD = .65$ ). Both groups were in transition for the stage. The Encapsulated Marginality scale score of females ( $M = 4.40, SD = .74$ ) was higher than that of males ( $M = 3.92, SD = 1.00$ ). Both groups were resolved for the stage.

## Age

An independent T-Test was used to determine if there are any differences in the mean developmental score and the five scale scores between two teacher groups for the variable of age. Results of the T-Test showed that the two groups did not differ significantly at the  $p < .05$  level of significance for the mean developmental score (see Table 4.8) or the scale scores. This finding supports the second hypothesis, namely that there is no statistically significant difference in the mean IDI scores of teachers over the age of 40 and teachers who are 40 years of age and younger.

Table 4.8 *Descriptive Statistics and T-Tests: IDI Scores and Age*

	Group	Mean	SD	Mean Dif.	Sig. (2-tailed)	<i>t</i>	95% Confidence Interval	
							L	U
Developmental Score	0 - 40	95.01	15.2	-.167	.933	-.084	-4.09	3.76
	Over 40	95.18	15.1					
Denial/Defense	0 - 40	4.26	.571	.058	.431	.789	-.0861	.201
	Over 40	4.20	.538					
Reversal	0 - 40	3.92	.746	-.077	.434	-.784	-.270	.116
	Over 40	3.99	.750					
Minimization	0 - 40	2.47	.723	.00264	.978	.027	-.190	.195
	Over 40	2.47	.767					
Acceptance/Adaptation	0 - 40	3.37	.667	.01397	.871	.163	-.155	.183
	Over 40	3.35	.639					
Encapsulated Marginality	0 - 40	4.29	.864	-.0888	.397	-.848	-.295	.117
	Over 40	4.38	.716					

$p < .05$

$df = 231$

$n = 123$  Age 0 – 40

$n = 110$  Over 40

*Level of Education*

An Independent T-Test was used to determine whether there are any differences in the mean IDI developmental score and scale scores between teacher groups based upon level of education.

Table 4.9 *Descriptive Statistics and T-Tests: IDI Scores and Level of Education*

Group	Mean	SD	Mean Dif.	Sig. (one-tailed)	t	95% Confidence Interval	
						L	U
Developmental Score	Graduate 94.66 Under-graduate 95.98	15.27 14.97	-.133	.265	-.627	-5.49	2.84
Denial/Defense	Graduate 4.22 Under-graduate 4.26	.577 .510	-.045	.282	-.578	-.197	.108
Reversal	Graduate 3.97 Under-graduate 3.91	.755 .734	.060	.282	.578	-.145	.266
Minimization	Graduate 2.44 Under-graduate 2.53	.692 .837	-.092	.186	-.892	-.296	.112
Acceptance/Adaptation	Graduate 3.30 Under-graduate 3.47	.636 .674	-.170	.03*	-1.89	-.349	.00709
Encapsulated Marginality	Graduate 4.30 Under-graduate 4.40	.857 .659	-.106	.169	-.959	-.325	.112

\* $p < .05$

$df = 231$

$n = 156$  Undergraduate

$n = 77$  Graduate

The results of the T-Test showed no statistically significant differences between the scores of teachers with graduate degrees and those with only undergraduate degrees (see Table 4.9). This finding does not support the third hypothesis, namely that the mean IDI

scores of teachers with a graduate level of education are statistically significantly higher than those of teachers with only an undergraduate level of education. A statistically significance negative difference was found between the Acceptance/Adaptation scale scores,  $t(231) = -1.89, p < .05$ . The mean Acceptance/Adaptation score of those teachers with only an undergraduate level of education was 3.47 ( $SD = .67$ ) compared to the mean score of those with a graduate degree ( $M = 3.30, SD = .64$ ).

*Years Living in a Bicultural Setting*

A one-way analysis of variance (ANOVA) was carried out to determine whether the mean IDI scores differed for teacher groups with regard to years living in a bicultural setting.

Table 4.10 *Mean Scores and Standard Deviations for Living in a Bicultural Setting*

	Years Living in a Bicultural Setting	<i>n</i>	Mean	<i>SD</i>
Developmental Score	0 Years	114	94.36	14.78
	1 - 10 Years	40	95.14	13.98
	Over 10 Years	79	96.13	16.34
Denial/Defense	0 Years	114	4.20	.568
	1 - 10 Years	40	4.23	.599
	Over 10 Years	79	4.28	.515
Reversal	0 Years	114	3.98	.712
	1 - 10 Years	40	3.91	.699
	Over 10 Years	79	3.94	.824
Minimization	0 Years	114	2.46	.744
	1 - 10 Years	40	2.52	.714
	Over 10 Years	79	2.46	.762
Acceptance/Adaptation	0 Years	114	3.23	.579
	1 - 10 Years	40	3.42	.794
	Over 10 Years	79	3.51	.644
Encapsulated Marginality	0 Years	114	4.37	.690
	1 - 10 Years	40	4.38	.884
	Over 10 Years	79	4.25	.894

Table 4.10 shows the mean scores for the different groups studied for the variable, years living in a bicultural setting.

Results of the ANOVA showed no statistically significant difference between the mean developmental scores of teacher groups based upon their years living in a bicultural setting (see Table 4.11). This finding does not support the fourth hypothesis, namely that there is a significant difference between the mean IDI scores of teacher groups with different years of experience living in bicultural settings.

Table 4.11 ANOVA: *Developmental Scores by Years Living in a Bicultural Setting*

		Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Developmental Scores	Between Groups	145.327	2	72.664	.315	.730
	Within Groups	53126.452	230	230.985		
	Total	53271.779				

$p < .05$

A statistically significant difference,  $F(2, 230) = 4.64, p < .05$ , was found between the mean Acceptance/Adaptation scale scores of teacher groups with different years of experience living in a bicultural setting. The Bonferroni post hoc test was used to determine the statistical difference between the groups. The results indicate that teachers with over 10 years living in a bicultural setting had a significantly higher mean Acceptance/Adaptation score for ( $M = 3.51, SD = .64$ ) than for those with 0 years living in a bicultural setting ( $M = 3.23, SD = .58$ ). The results are set out in Tables 4.12 and 4.13, respectively.



Table 4.12 ANOVA: Acceptance/Adaptation Scale Scores by Years Living in a Bicultural Setting

		Sum of Squares	df	Mean Square	F	Sig.
Acceptance/ Adaptation	Between Groups	3.826	2	1.913	4.64	.011*
	Within Groups	94.863	230	.412		
	Total	98.688	232			

\* $p < .05$

Table 4.13 Post Hoc: Comparisons of Acceptance/Adaptation Scale Scores in Relation to Years Living in a Bicultural Setting

(I) Years Living in a Bicultural Setting	(J) Years Living in a Bicultural Setting	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Zero Years	1 - 10 Years	-.186	.118	.349	-.471	.099
	Over 10 Years	-.280	.094	.010*	-.507	-.053
1 - 10 Years	Over 10 Years	-.094	.125	1.00	-.394	.207

\* $p < .05$

#### *Years Teaching in Schools*

A one-way analysis of variance (ANOVA) was carried out to determine whether the mean IDI scores differed for the teacher groups based upon years teaching in schools. The Bonferroni post hoc test was then used to determine the statistical difference between the groups. Table 4.14 shows the mean IDI scores for the different groups studied for the variable, years teaching in schools. The results of the ANOVA support the fifth hypothesis, namely that there is a significant difference between the IDI scores of teacher groups with different years of experience teaching in schools.

Table 4.14 Mean Scores and Standard Deviations for Years Teaching in Schools

	Years Teaching in Schools	<i>n</i>	Mean	<i>SD</i>
Developmental Score	5 Years or Less	73	91.34	14.35
	6 - 10 Years	76	95.64	15.28
	Over 10 Years	84	97.86	15.23
Denial/Defense	5 Years or Less	73	4.11	.625
	6 - 10 Years	76	4.26	.521
	Over 10 Years	84	4.31	.507
Reversal	5 Years or Less	73	3.80	.768
	6 - 10 Years	76	3.98	.735
	Over 10 Years	84	4.06	.727
Minimization	5 Years or Less	73	2.50	.649
	6 - 10 Years	76	2.43	.723
	Over 10 Years	84	2.49	.837
Acceptance/Adaptation	5 Years or Less	73	3.25	.607
	6 - 10 Years	76	3.40	.613
	Over 10 Years	84	3.41	.718
Encapsulated Marginality	5 Years or Less	73	4.31	.745
	6 - 10 Years	76	4.20	.948
	Over 10 Years	84	4.33	.668

The overall F-value for the mean developmental score,  $F(2, 230) = 3.78$ ,  $p < .05$ , was significant (see Table 4.15). Results of the post hoc comparisons, shown in Table 4.16, indicated that the mean IDI developmental score of the teacher group with over 10 years teaching in schools was significantly higher than the teacher group who had been teaching in schools for five years or less. The mean IDI developmental score for the teacher group with over 10 years teaching in schools was 97.86 ( $SD = 15.23$ ) compared to a mean score of 91.34 ( $SD = 14.35$ ) for the group with 5 years of less teaching in schools.

Table 4.15 ANOVA: Developmental Scores by Years Teaching in Schools

		Sum of Squares	df	Mean Square	F	Sig.
Developmental Score	Between Groups	1695.844	2	847.922	3.78	.024*
	Within Groups	51575.935	230	224.243		
	Total	53271.779	232			

\* $p < .05$

Table 4.16 Post Hoc: Comparisons of Developmental Scores in Relation to Years Teaching in Schools

(I) Years Teaching in Schools	(J) Years Teaching in Schools	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
5 Years or Less	6 – 10 Years	-4.299	2.454	.243	-10.218	1.619
	Over 10 Years	-6.524	2.396	.021*	-12.302	-.745
6 – 10 Years	Over 10 Years	-2.225	2.371	1.00	-7.92	3.493

\* $p < .05$

The difference between the mean Denial/Defense scale scores,  $F(2, 230) = 2.95$ ,  $p = .054$ , approached significance (see Table 4.17). The post hoc comparisons indicated that the mean Denial/Defense scale scores for the teacher group with over 10 years teaching in schools differ at the .059 level from the mean scores of the teacher group with 0 years teaching in schools (see Table 4.18).

Table 4.17 ANOVA: Denial/Defense Scale Scores by Years Teaching in Schools

		Sum of Squares	df	Mean Square	F	Sig.
Denial/Defense	Between Groups	1.790	2	.895	2.95	.054
	Within Groups	69.718	230	.303		
	Total	71.509	232			

$p < .05$

Table 4.18 Post Hoc: Comparisons of Denial/Defense Scale Scores in Relation to Years Teaching in Schools

(I) Years Teaching in Schools	(J) Years Teaching in Schools	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
5 Years or Less	6 - 10 Years	-.159	.090	.239	-.376	.059
	Over 10 Years	-.207	.088	.059	-.419	.006
6 - 10 Years	Over 10 Years	-.048	.087	1.00	-.258	.162

$p < .05$

*Years Teaching Ethnically Diverse Students*

A one-way analysis of variance (ANOVA) was carried out to determine whether the mean IDI scores differed for teacher groups based upon years teaching ethnically diverse students. The Bonferroni post hoc test was then used to determine the statistical difference between the groups. Table 4.19 shows the mean scores for the groups studied for the variable, years teaching ethnically diverse students.

Table 4.19 Mean Scores and Standard Deviations for Years Teaching Ethnically Diverse Students

	Yrs Teaching Ethnically Diverse Students	<i>n</i>	Mean Score	<i>SD</i>
Developmental Score	5 Years or Less	78	90.95	14.53
	6 - 10 Years	79	96.29	15.43
	Over 10 Years	76	98.10	14.75
Denial/Defense	5 Years or Less	78	4.08	.627
	6 - 10 Years	79	4.29	.497
	Over 10 Years	76	4.33	.506
Reversal	5 Years or Less	78	3.79	.773
	6 - 10 Years	79	3.98	.731
	Over 10 Years	76	4.09	.714
Minimization	5 Years or Less	78	2.50	.670
	6 - 10 Years	79	2.48	.742
	Over 10 Years	76	2.43	.818
Acceptance/Adaptation	5 Years or Less	78	3.28	.610
	6 - 10 Years	79	3.36	.637
	Over 10 Years	76	3.43	.707
Encapsulated Marginality	5 Years or Less	78	4.31	.730
	6 - 10 Years	79	4.22	.940
	Over 10 Years	76	4.47	.680

Results of the ANOVA, presented in 4.20, showed a statistically significant difference,  $F(2, 230) = 4.82, p < .05$ , between the mean developmental scores of teacher groups. This supports the sixth hypothesis, namely that there is a significant difference between the mean IDI scores of teacher groups based upon years teaching ethnically diverse students. Results of the post hoc comparisons, presented in Table 4.21, showed a statistically significant difference in the mean development scores of the teacher groups in regards to the number of years teaching ethnically diverse students. There was a significant difference between the mean developmental score of the group

of teachers with over 10 years teaching ethnically diverse students ( $M = 98.10$ ,  $SD = 14.75$ ) and the group of teachers with 5 years or less ( $M = 90.95$ ,  $SD = 14.53$ ).

Table 4.20 ANOVA: *Developmental Scores by Years Teaching Ethnically Diverse Students*

		Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Developmental Score	Between Groups	2141.459	2	1070.729	4.82	.009*
	Within Groups	51130.321	230	222.306		
	Total	53271.779	232			

\* $p < .05$

Table 4.21 *Post Hoc: Comparisons of Developmental Scores in Relation to Years Teaching Ethnically Diverse Students*

(I) Years Teaching Ethnically Diverse Students	(J) Years Teaching Ethnically Diverse Students	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
5 Years or Less	6 - 10 Years	-5.346	2.380	.077	-11.086	.393
	Over 10 Years	-7.152	2.403	.010*	-12.948	-1.357
6 - 10 Years	Over 10 Years	-1.806	2.396	1.000	-7.584	3.971

\* $p < .05$

There was also a statistically significant difference between the mean Denial/Defense scale scores,  $F(2, 230) = 4.60$ ,  $p < .05$ , of teacher groups with different numbers of years teaching ethnically diverse students (see Table 4.22). The post hoc comparisons revealed that the group of teachers with over 10 years teaching ethnically diverse students had a statistically higher mean Denial/Defense scale score ( $M = 4.33$ ,  $SD = .51$ ) than the group with 5 years or less ( $M = 4.08$ ,  $SD = .63$ ) and the group with 6 – 10 years ( $M = 4.29$ ,  $SD = .50$ ) (see Table 4.23).

Table 4.22 ANOVA: Denial/Defense Scale Scores by Years Teaching Ethnically Diverse Students

		Sum of Squares	df	Mean Square	F	Sig.
Denial/Defense	Between Groups	2.751	2	1.376	4.60	.011*
	Within Groups	68.757	230	.299		
	Total	71.509	232			

\* $p < .05$

Table 4.23 Post Hoc: Comparisons of Denial/Defense Scale Scores in Relation to Years Teaching Ethnically Diverse Students

(I) Years Teaching Ethnically Diverse Students	(J) Years Teaching Ethnically Diverse Students	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
5 Years or Less	6 - 10 Years	.211	.087	.049*	-.422	-.001
	Over 10 Years	-.246	.088	.017*	-.459	-.034
6 - 10 Years	Over 10 Years	-.035	.088	1.00	-.247	.177

\* $p < .05$

A statistically significant difference was also found between the mean Reversal scale scores,  $F(2, 230) = 3.34$   $p < .05$ , of teacher groups with different numbers of years teaching ethnically diverse students (see Table 4.24). The post hoc comparisons, shown in Table 4.25, indicated that the group of teachers with over 10 years teaching ethnically diverse students had a statistically higher mean Reversal scale score ( $M = 4.09$ ,  $SD = .71$ ) than the group of teachers with 5 or less years ( $M = 3.79$ ,  $SD = .77$ ).

Table 4.24 ANOVA: Reversal Scale Scores by Years Teaching Ethnically Diverse Students

		Sum of Squares	df	Mean Square	F	Sig.
Reversal	Between Groups	3.659	2	1.830	3.34	.037*
	Within Groups	125.909	230	.547		
	Total	129.569	232			

\* $p < .05$

Table 4.25 Post Hoc: Comparisons of Reversal Scale Scores in Relation to Years Teaching Ethnically Diverse Students

(I) Years Teaching Ethnically Diverse Students	(J) Years Teaching Ethnically Diverse Students	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
5 Years or Less	6 - 10 Years	-.193	.118	.313	-.477	.092
	Over 10 Years	-.304	.119	.034*	-.592	-.017
6 - 10 Years	Over 10 Years	-.112	.119	1.000	-.398	.175

\* $p < .05$

#### *Years Teaching in a Bilingual Classroom*

A one-way analysis of variance (ANOVA) was carried out to determine whether the mean IDI scores differed for teacher groups based upon years teaching in a bilingual classroom. The Bonferroni post hoc test was then used to determine the statistical difference between the groups. Table 4.26 shows the mean scores for each group studied for the variable, years teaching in a bilingual classroom.



Table 4.26 *Mean Scores and Standard Deviations for Years Teaching in a Bilingual Classroom*

	Yrs Teaching in a Bilingual Classroom	<i>n</i>	Mean Score	<i>SD</i>
Developmental Score	0 Years	133	96.08	14.57
	1 - 10 Years	77	92.54	16.52
	Over 10 Years	23	97.92	12.91
Denial/Defense	0 years	133	4.25	.530
	1 - 10 Years	77	4.16	.611
	Over 10 Years	23	4.35	.484
Reversal	0 Years	133	4.03	.711
	1 - 10 Years	77	3.78	.792
	Over 10 Years	23	4.08	.737
Minimization	0 Years	133	2.49	.725
	1 - 10 Years	77	2.49	.776
	Over 10 Years	23	2.30	.741
Acceptance/Adaptation	0 Years	133	3.27	.611
	1 - 10 Years	77	3.44	.633
	Over 10 Years	23	3.60	.856
Encapsulated Marginality	0 Years	133	4.29	.817
	1 - 10 Years	77	4.35	.836
	Over 10 Years	23	4.54	.469

The results of the ANOVA with regard to years teaching in a bilingual classroom indicated no significant difference at the  $p < .05$  level in the mean developmental scores between teacher groups with different years teaching in a bilingual classroom (see Table 4.27).

Table 4.27 *ANOVA: Developmental Scores by Years Teaching in a Bilingual Classroom*

		Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Developmental Score	Between Groups	817.344	2	408.672	1.792	.169
	Within Groups	52454.436	230	228.063		
	Total	53271.780	232			

$p < .05$

This result does not support the seventh hypothesis, namely that there is a statistically significant difference between the mean IDI scores of groups of teachers with different years of experience teaching in a bilingual classroom

Results of the ANOVA tests indicated that the mean Reversal scale scores for the groups approached statistically significant difference,  $F(2, 230) = 2.99, p < .05$  (see Table 4.28). Post hoc comparisons indicated that the mean Reversal scale scores differ at the .05 level for the teacher group with over 10 years teaching in a bilingual classroom and the teacher group with 0 years (see Table 4.29).

Table 4.28 ANOVA: Reversal Scale Scores by Years Teaching in a Bilingual Classroom

		Sum of Squares	df	Mean Square	F	Sig.
Reversal	Between Groups	3.280	2	1.640	2.99	.052
	Within Groups	126.289	230	.549		
	Total	129.569	232			

$p < .05$

Table 4.29 Post Hoc: Comparisons of Reversal Scale Scores in Relation to Years Teaching in a Bilingual Classroom

(I) Years Teaching in a Bilingual Classroom	(J) Years Teaching in a Bilingual Classroom	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
0 Years	1 - 10 Years	.242	.106	.071	-.014	.498
	Over 10 Years	-.055	.167	1.00	-.459	.348
1 - 10 Years	Over 10 Years	-.297	.176	.279	-.722	.128

$p < .05$

Results of the ANOVA tests also indicated a statistically significant difference,  $F(2, 230) = 3.40, p < .05$ , in the mean Acceptance/Adaptation scale scores of groups of teachers with different years teaching in a bilingual classroom (see Table 4.30). Post hoc comparison revealed that the mean Acceptance/Adaptation scale scores for the teacher group with over 10 years teaching in a bilingual classroom differ at the .079 level from the mean scores of the teacher group with 0 years teaching in a bilingual classroom (see Table 4.31).

Table 4.30 ANOVA: Acceptance/Adaptation Scale Scores by Years Teaching in a Bilingual Classroom

		Sum of Squares	df	Mean Square	F	Sig.
Acceptance/Adaptation	Between Groups	2.834	2	1.417	3.40	.035*
	Within Groups	95.854	230	.417		
	Total	98.688	232			

\* $p < .05$

Table 4.31 Post Hoc: Comparisons of Acceptance/Adaptation Scores in Relation to Years Teaching in a Bilingual Classroom

(I) Years Teaching in a Bilingual Classroom	(J) Years Teaching in a Bilingual Classroom	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
0 Years	1 - 10 Years	-.169	.092	.206	-.392	.054
	Over 10 Years	-.326	.146	.079	-.677	.026
1 - 10 Years	Over 10 Years	-.157	.153	.925	-.527	.213

$p < .05$

## Chapter 5

### SUMMARY AND DISCUSSION

In this study, the Intercultural Development Inventory (IDI) was used to measure the intercultural sensitivity of teachers working in a Texas school district. Demographic and background information gathered from the study participants was used to determine if the teachers' level of intercultural sensitivity (IDI scores) differed based upon these variables: gender, age, level of education, years living in a bicultural setting, years teaching in schools, years teaching ethnically diverse students, and years teaching in a bilingual classroom. This chapter presents a summary and discussion of the findings from the data analysis, the contributions to practice, and the strengths and limitations of the study. Recommendations for future research conclude the chapter.

#### Discussion of the Findings

An analysis of the study participants' IDI scores indicates that 90.99% have an IDI score in the ethnocentric phase of the developmental continuum. The overall developmental score on the IDI for the group of teachers was 95.09. This score is below 100, the mid-point of the Minimization scale. This finding is similar to the findings of Fretheim (2007), Helmer (2007), and Westrick and Yuen (2007) who found the overall IDI scores of teachers to be in the Minimization stage of the DMIS. The scores in these studies ranged from 91.32 to 101.74. The mean score for this group of teachers examined in this study, 95.09, falls near the middle of this 10 point range of scores.

The placement of the teachers in Minimization means that while teachers may have a familiarity with different cultures and be aware of differences in cultural patterns

such as values, beliefs, and communication styles, they may minimize students' cultural differences and apply universal values and principles in their educational practice. The problem with this, as Bennett (1993) points out, is that "these assumed universal characteristics are almost always derived from the native culture of the person making the assertion" (p. 42). As such, teachers operating from this worldview orientation, mask the underlying differences between themselves and their students by assuming that their students are fundamentally the same as themselves. This can be a major obstacle to teachers because it prevents them from fully understanding or respecting the worlds of their students and as Villegas and Lucas (2002) point out, this setting of "unacknowledged norms," although unintentional, can place students at a disadvantage in the learning process.

The study also attempted to determine whether there are significant differences in the intercultural sensitivity of various teacher groups in terms of different demographic and background variables. An examination of the independent variables in a correlation matrix showed the variables, years teaching in schools and years teaching ethnically diverse students, to be strongly related. This relationship may be because many teachers who were surveyed viewed the majority, if not all, of their teaching experience to have been with ethnically diverse students. As such, they gave the same or similar answers when questioned regarding their number of years teaching in schools and their number of years teaching ethnically diverse students. While the purpose of this study was to examine the differences between groups for the variables rather than to determine which variable might best predict intercultural sensitivity, it should be noted

that the strong relationship of these two variables makes it difficult to make any claims about whether the difference in scores is attributed to teaching experience in general, or to the teaching experience specifically with diverse students.

For this study, it was assumed that teachers who have had greater intercultural living and work experience may reflect developmentally higher levels of intercultural sensitivity. The findings of this study revealed a statistically significant difference between the mean developmental score for groups examined for two of the variables, years teaching in schools and years teaching ethnically diverse students. For both of these variables, the group of teachers with over 10 years experience had a higher mean developmental score than those with fewer years. These findings lend support to the study's assumption that teachers with more experience teaching ethnically diverse students have higher levels of intercultural sensitivity. This finding for the variable, years teaching in schools, does not align with the results of DeJaeghere and Zhang's (2008) study. In their investigation of whether years working as a certified teacher and years working in the school district were significantly correlated with intercultural competence, DeJaeghere and Zhang (2008) concluded that experience as a teacher had no significant correlation with intercultural competence. DeJaeghere and Zhang's study, however, does not distinguish teachers' experience working with ethnically diverse students from teaching experience not involving ethnically diverse students. Further analysis would be needed to compare the relative importance of these two variables.

The results of this study showed no significant differences in the developmental scores between teacher groups for two other variables related to teachers' intercultural

experience, years living in a bicultural setting and years teaching in a bilingual classroom. While the variable, years living in a bicultural setting, has not specifically been examined in previous studies, nor did this study examine the full context of each respondent's experiences living in a bicultural setting, the findings for this variable are similar to the findings of several other studies which have examined teachers' experiences living in other cultures. Ayas (2006) found no statistically significant differences in the intercultural sensitivity between those who had spent greater or lesser amounts of time living in another culture. Helmer (2007) found that the levels of intercultural sensitivity were negatively correlated for the group of teachers that had lived overseas longer than 10 years. These findings disagree with Westrick and Yuen (2007), however, who identified teachers with the higher developmental scores on the IDI to have greater length of time spent living in other cultures than those teachers with lower developmental scores. In another study, Fretheim (2007) noted a trend that years experience living and working overseas had a noticeable effect on the IDI developmental scores being higher although no statistically significant correlation was noted.

The variable, years teaching in a bilingual classroom, also has not been examined in previous studies. Almost half of the teachers participating in this study had no years teaching in a bilingual classroom and there was no statistically significant difference between their mean developmental scores and the scores of those teachers with bilingual classroom teaching experience. Results of the ANOVA tests indicated that differences between groups for the Reversal scores approached significance.

Results also indicated a statistically significant difference in the mean Acceptance/Adaptation scores but the post hoc comparisons revealed no significant differences. The examination of the variables in the correlation matrix showed a moderate correlation between years teaching in a bilingual classroom and years teaching ethnically diverse students. However, this finding of only a moderate correlation suggests that these two variables are not the same thing. With no other studies to compare to, and such a large percentage of teachers having no years teaching in a bilingual classroom, further study should be undertaken to examine this variable with a different population before drawing any conclusions.

The results of the T-tests indicated no statistically significant differences between the mean developmental score for groups examined based upon age, gender, and level of education. The findings from this study regarding the variable of gender are similar to the research findings of Fretheim (2007) and Westrick and Yuen (2007) who found no significant differences between the mean scores for males and females. The study's findings disagree, however, with Ayas (2006) and Helmer (2007) who found that females have higher levels of intercultural sensitivity than males. In their study, DeJaeghere and Cao (2009) found that females showed a significant difference in mean scores from the first administration to the second administration of the IDI. Both male and female mean score differences represented a medium effect size. The findings related to gender in the present study should be viewed with caution due to the sample limitations on male respondents and the unequal sample size between females and male ( $n = 202$ ;  $n = 31$ , respectively) used in the analyses. Only 13.3% of the participants



were males and this small number may have disguised any differences between groups. The inconsistent research findings concerning intercultural sensitivity and gender suggest a need for additional research before any definitive conclusions can be reached regarding differences in the levels of intercultural sensitivity between males and females.

The results of this study also showed no significant differences in the mean developmental scores between teacher groups based upon age. Similar to the findings for gender, the findings of this study with regards to age agree with the results of some previous studies and disagrees with others. The findings of Ayas (2006) and Lai (2006), for example, suggest that there is no significant difference in intercultural sensitivity based upon age. Westrick & Yuen (2007) and Helmer (2007), on the other hand, found differences based upon age. In their examination of the intercultural sensitivity of teachers at several schools, Westrick and Yuen found that over 50% of the faculty at the school identified to have the higher levels of intercultural competence were over the age of 40. Helmer (2007) found that the group of teachers under 50 had higher levels of intercultural sensitivity. Differences in the age groupings make it difficult to compare the findings of studies for this variable. And, like the variable of gender, the inconsistent findings suggest a need for additional research before any definitive conclusions can be reached regarding differences in the levels of intercultural sensitivity based upon age.

The finding of this study with regard to level of education revealed no significant differences between the mean developmental scores of the group of teachers

with a graduate degree and the group of teachers with only an undergraduate degree. This deviates from the findings of Westrick and Yuen (2007), Fretheim (2007), and Helmer (2007) who concluded that higher levels of education were associated with higher developmental scores.

This research was guided by The Developmental Model of Intercultural Sensitivity (Bennett, 1993). This model focuses on an individual's worldview and assumes that the attitudes and behaviors of that individual are manifestations of their worldview. The DMIS delineates a series of stages along a continuum from ethnocentrism to ethnorelativism from which a person may operate when experiencing other cultures. According to the model, an individual must experience difference and then construe meaning from that experience in order for intercultural development to take place. Teachers in this study have experienced difference through the number of years that they have been teaching in schools and working with ethnically diverse students. Those teachers with greater numbers of years teaching and working with ethnically diverse students showed significantly higher levels of intercultural sensitivity implying that as teachers have more experience teaching and working with ethnically diverse students their intercultural sensitivity increases. This positive finding suggests that these experiences are very important to intercultural competence. The results of this study also suggest, however, that this group of teachers as a whole have an ethnocentric worldview. Based on this finding, one may conclude that they may face significant challenges when it comes to working with diverse students. These are important

findings considering the great responsibility that teachers carry in regard to working with diverse students.

### Contributions to Practice

It is impossible to deny that cultural differences exist in educational organizations today. Working daily in a setting of cultural difference would certainly raise the need for educators to examine and reflect upon their own worldviews toward difference. An acceptance of and adaptation to cultural differences is important if educators are going to be able to work effectively with diverse students, parents, and communities. And, if educational organizations are truly dedicated to the higher purposes of education, namely cultural democracy and global citizenship, an interculturally competent workforce of educators seems imperative to facilitate the intercultural development of students. The results of this study are useful for informing educational policies and practices to achieve both of these outcomes. These outcomes may be difficult if not impossible to achieve, however, without first measuring educators' understanding and sensitivity to difference and then taking action to address their intercultural development. As Bennett (2003) suggests, if educational leaders can recognize "the underlying cognitive orientation toward cultural difference, predictions about behavior and attitudes can be made and education can be tailored to facilitate development into the next stage [of intercultural development]" (p.163).

The finding that this group of teachers scored in the ethnocentric stage of Minimization offers the leaders in this district the potential, as well as the important task, to influence the development of higher levels of intercultural sensitivity. This

finding, congruent with those of similar studies, may also offer encouragement to other educational organizations to assess and examine the intercultural sensitivity of their educators. Illuminating the current levels of intercultural development may support the need for professional development or diversity and multicultural programs in any educational organization who embraces the goals of cultural democracy and global citizenship. It may also draw attention to the need to better assess whether curriculum and classroom instruction are congruent with the cultural value systems of a diverse student population.

The results of this study may also evidence the need to implement hiring practices that incorporate the assessment of potential or newly hired employees' levels of intercultural sensitivity. The IDI is a statistically reliable and valid instrument which educational organizations might find to be a valuable diagnostic tool to incorporate into this process. Data produced using the IDI could provide useful information for creating new teacher orientation programs, and, as Bennett (2003) recommends, the design of professional development based upon particular developmental stages. Results of the IDI for the teachers in this study indicate that the teachers, functioning in Minimization, will need professional development specifically designed to foster a deepened understanding of one's own culture and the increased understanding of cultural differences. "Building on cultural self-awareness, the learners can examine the contrast between their own cultures and other cultures with which they will be working" (Bennett, p. 163).

The development of an interculturally competent organization is complex and does not rely on a one-time measure of only some individuals' intercultural sensitivity. It relies on extending the measurement of intercultural sensitivity to a broader group to include superintendents, school board members, district and school level administrators, teachers, and students in order to understand the levels of ethnocentrism of all stakeholders and then develop their intercultural skills. It requires the ongoing assessment of the entire educational environment in relationship to intercultural sensitivity and incorporating intercultural sensitivity into all aspects of policymaking and practice. It means that educational leaders must clarify the connections between intercultural competence and the principles of a democratic education and create policies that clearly communicate a vision of a culturally competent educational organization. This may demand significant time and financial resources as well as the reexamination of current practices related to hiring, curriculum, instruction, assessment, professional development and resource allocation.

To create culturally responsive schools where students are encouraged to “be neighbors capable of respecting and utilizing their differences” (p.36) as Barnlund (1989) suggests, educators need to have intercultural competence. This means fully embracing diversity as an opportunity to learn and then, as Bennett and Bennett (2004) point out, developing the cultural self-awareness, the ability to use cultural generalizations without stereotyping, the attitudes such as curiosity which motivate an individual to seek out cultural differences, and the ability to analyze intercultural situations and adapt behavior accordingly. These attitudes and behaviors that constitute

intercultural competence must then to be clearly demonstrated it in all facets of educational policy and practice.

### Strengths of the Study

The DMIS provided a solid theoretical framework for examining the intercultural development of the teachers studied. The use of this model offered a way to look at teachers' development along a continuum of intercultural sensitivity. The IDI, a commonly used assessment with good psychometric properties, also proved useful in this study. This tool offered a means to quantify the teachers' general worldview orientations and responses to cultural difference.

The use of ANOVA testing allowed the researcher to determine whether mean scores differed for very specific groups of teachers for each variable as well as determine which group had the higher mean scores. The researcher identified, for example, that the group of teachers with over 10 years experience had significantly higher mean IDI developmental scores than teachers with 5 years or less years experience for two of the variables studied. The examination of both the developmental scores as well as scale scores adds further strength to the study. Analysis of the scale scores provides greater insight into the subtle movements of intercultural sensitivity that may be missed when looking only at the overall developmental score.

### Limitations of the Study

The findings of this study should be interpreted with care due to the limited population studied. The teachers in this study were all working at bilingual schools in one Texas school district. The results are informative of teacher intercultural sensitivity

for these types of schools but may not be representative of elementary teachers at other schools in the district or at schools in other districts.

Another limitation is in regard to the variable, gender. While the sample size for each variable examined, including gender, was over 30 and considered an appropriate sample size, the sample was dominated by female teachers. While this reflects the current status of the teaching profession, the low number of male participants in the study may have disguised any differences in scores between males and females. The results for the variable, gender, should therefore be interpreted with caution.

Data regarding the ethnicity of participants was not gathered. This is another limitation to this study. This data would have allowed the researcher to determine differences in intercultural sensitivity based on ethnicity.

The variable nature of intercultural experience is another limitation to this study. The variable, years living in a bicultural setting, for example, was a broad variable which could be constituted by a wide range of experience. While care was given to clarify the variables used to gather information about the teachers' intercultural living and work experience, the teachers' interpretations of the variables may have differed and thus affected their answers to the questions. Greater refinement of the variables might have ensured correct interpretation of the question and allowed for better understanding of which types of experiences most influence intercultural sensitivity.

## Recommendations for Future Research

Researchers assert that it is important for educators to be sensitive to the cultural differences that are present in schools (Diller & Moule, 2005; Gay, 2000; Ladson-Billings, 2001; Villegas & Lucas, 2002). Questions remain, though, about what causes some individuals to have greater intercultural sensitivity than others. This study builds on previous research by looking at several variables related to intercultural experience that have not been previously examined and sheds more light on the intercultural development of teachers in Texas bilingual schools. However, much more research is needed. Previous studies that have addressed this topic have focused primarily on intercultural experiences abroad. While this current study advances the field by examining the intercultural experiences of teachers in Texas bilingual schools, it is just a beginning in terms of understanding how these experiences may contribute to the intercultural sensitivity of educators.

The types of intercultural living and work experiences that a person may have vary greatly. Results of this study, as well as the findings of DeJaeghere and Cao (2009), suggest that intercultural experiences with ethnically diverse students in the U.S. impact intercultural competence. Future research is needed to explore more completely the full context of participants' experiences living and working with cultural difference. The inclusion of qualitative data gathered from individual interviews or focus groups into studies of this type may provide valuable insight into the range and depth of these experiences and allow researchers to offer more detailed explanations



about the differences in individuals' intercultural sensitivity and to better isolate which types of experiences best predict intercultural sensitivity.

There is also little consensus about how an individual can be taught or encouraged to have a greater level of intercultural sensitivity. Future research needs to address what types of programs and professional development may positively affect intercultural development. Studies are especially needed to explore innovative in-country immersion opportunities for educators who do not consider living or studying in another country to be a viable means for gaining intercultural experience. While some recent work has been attempted in this area (DeJaeghere & Cao, 2009, DeJaeghere and Zhang, 2008), more studies are needed in which the IDI is used as a pre- and post-assessment tool to determine the effects of participation in programs or professional development activities aimed at increasing intercultural sensitivity.

As the literature reviewed for this study indicates, much has appeared that points to the need for K-12 educators to develop intercultural competence. Future studies need to expand the exploration of intercultural development to include a larger population. The intercultural sensitivity of superintendents, school board members, district and school level administrators, and students need to be measured and examined along with that of teachers if educational organizations are to become culturally competent environments in which all stakeholders can address cultural issues.

A final area for research addresses the assumption that being an interculturally competent educator "makes a difference." Many questions remain unanswered concerning the nature of that difference. Does the intercultural sensitivity of educators,

for example, impact student performance in the classroom, or even greater, in a 21st century global world, and if so, how? Do higher levels of intercultural sensitivity of educators increase the worldmindness of students? Is there a significant relationship between the intercultural sensitivity of educators and improved communication with parents and the community? As educational leaders face the challenges of a global world and work to meet the important goals of 21st century education, the need for educators to be interculturally competent seems logical. Future research is needed, however, to test the assumptions about whether intercultural competence does in fact make a difference and to determine the overall impact of educators' intercultural sensitivity upon effective teaching and student learning.

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## Appendix A

### CONSENT FORM

#### Assessing the Intercultural Sensitivity of Elementary Teachers in a Texas School District

You are invited to be in a research study of intercultural sensitivity of elementary teachers in a Texas school district. You were selected as a possible participant because you are currently working as an elementary teacher at a bilingual campus in Arlington ISD. I ask that you read this form and ask any questions you may have before agreeing to be in this study.

This study is conducted by: Peggy Bayles, EdD. candidate at the University of Minnesota, Department of Educational Policy and Administration.

The purpose of this study is to assess the levels of intercultural sensitivity of elementary teachers in a Texas school district and explore relationships between levels of intercultural sensitivity and various demographic/background variables.

If you agree to be in this study, I would ask you to complete the *Intercultural Development Inventory* and a demographic survey. Completing the IDI will take approximately 20 minutes.

There are no known risks to participating in this study. The primary benefit to participating in this study is that your school and the district will find out some interesting information about intercultural sensitivity that may enhance teaching/administration in our district.

The data from individuals' IDI will remain confidential. Individual information will not be shared with anyone in the school district. The district will not be mentioned by name nor will I include any information that will make it possible to identify a subject in any sort of report I might publish. Research records will be stored securely and only the primary investigator will have access to the records.

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota or the Arlington ISD. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

You may ask any questions you have now. If you have questions later, you are encouraged to contact the researcher at [pbayles@aisd.net](mailto:pbayles@aisd.net). If you have any questions or concerns regarding the study and would like to talk to someone other than the researcher, you are encouraged to contact Research Subjects' Advocate line, D528 Mayo, 420 Delaware Street S.E., Minneapolis, MN 55455, USA; telephone (612) 625-1650 or Dr. Deanne Magnusson, advisor; telephone (612) 626-9647.

*You will be given a copy of this form to keep for your records.*

Statement of Consent:

I have read the above information. I have asked questions and have received answers. I consent to participate in this study.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature of Investigator \_\_\_\_\_ Date \_\_\_\_\_

## Appendix B

### PART TWO – DEMOGRAPHIC AND BACKGROUND INFORMATION

The following demographic questions will help to categorize and analyze the data. Please provide the response that best describes you.

1. Gender:  Male  
 Female
2. Age: \_\_\_\_\_
3. Highest educational level completed:  Bachelor's degree  
 Master's degree  
 Educational Specialist degree  
 Doctorate degree  
 Other (*please specify*) \_\_\_\_\_
4. Number of years living in a bicultural setting: \_\_\_\_\_
5. Number of years teaching in schools: \_\_\_\_\_
6. Number of years teaching ethnically diverse students: \_\_\_\_\_
7. Number of years teaching in a bilingual classroom: \_\_\_\_\_