

5-2018

Using IDI Guided Development to Increase Intercultural Competence

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Using IDI Guided Development to Increase Intercultural Competence

by

Durwin D. Hermanson

A Dissertation

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

Doctor of Education

in Educational Administration and Leadership

May, 2018

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Abstract

The qualitative case study examined Intercultural Development Inventory (IDI) pre-post test data and responses from a sample of preservice teachers. The study focused on the effect of the process of administering IDI Guided Development to increase the intercultural competence of preservice teachers.

The study was based on the conceptual framework of the Intercultural Development Continuum (IDC), adapted from the Developmental Model of Intercultural Sensitivity originally proposed by Dr. Milton Bennett. In addition, intercultural competence models, theories, practices, and strategies were examined, including Deardorff's Developing and Assessing Intercultural Competence Models, Kolb's Experiential Learning Theory, Mezirow's Transformative Learning Theory, Loden's Dimensions of Diversity Wheel, and Weigl's Cultural Self-Study.

The findings of the study revealed how effective IDI Guided Development, a comprehensive five-step developmental process, combined with individualized coaching guidance by an IDI Qualified Administrator, produced impressive increases in intercultural competence development.

Drawing on many educational theories and models, the study results demonstrated the importance of using a combination of a high-quality assessment tool, a transformative experiential learning process for change, measurable goals and outcomes, and a coach to facilitate the development of intercultural competence.

Acknowledgements

Thanks be to God for ordering the steps of my dissertation journey and helping me to walk them out. His plan and timing were perfect.

Along the journey I was privileged to work with Dr. Kay Worner, Dr. Roger Worner, Dr. John Eller, Dr. Daria Paul, and Dr. Lori Piowski. Their professional knowledge, insight, feedback, encouragement, positive attitudes, support, and guidance were invaluable.

A heartfelt thank you to my wife, Carol, for her love and devotion. I could not have completed this journey without her listening ear, daily encouragement, and never-ending support.

I greatly appreciated the encouragement from my children, family members, and friends.

Dedication

I dedicate this project to all individuals and groups who seek to increase their intercultural competence by shifting their cultural perspective and appropriately adapting their behavior to cultural differences and commonalities.

Additionally, I dedicate this dissertation to my grandchildren and future generations as they make this world a better place for all of us through their own intercultural competence.

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Chapter I: Introduction

Introduction

A major responsibility of teacher education programs is the development of each preservice teacher's intercultural competence (Liang & Zhang, 2009). The development of the preservice teacher's intercultural competence, includes both the knowledge and skills needed for effectively teaching diverse students. With intercultural competence skills, the prospective teacher is prepared to address specific differences from an adaptation perspective and achieve an inclusive learning environment (Diller & Moule, 2005).

Numerous studies have discussed and explored the characteristics of teacher preparation programs that improve preservice teachers' intercultural competence to teach diverse students in an inclusive learning environment, where inclusive teaching strategies and approaches meet the needs of students with a variety of backgrounds, learning styles, and abilities thereby helping students feel equally valued. (Cochran-Smith, 2004; Cushner, McClelland, & Safford, 2003; Garmon 2004; Gay, 2000; Grant, Elsbree, & Fondrie, 2004; Irvine, 2003; Liang & Zhang, 2009; Valentin, 2006). However, there has been little research conducted regarding the effect of using Intercultural Development Inventory (IDI) Guided Development to increase the intercultural competence of preservice teachers.

IDI Guided Development

IDI Guided Development is an innovative, comprehensive, assessment-driven approach to developing an individual's intercultural competence, the ability to shift one's cultural perspective and appropriately adapt one's behavior to cultural differences and commonalities in various situations. The approach is a proprietary developmental support system that involves the

identification of intercultural goals, intercultural challenges (stress points) that keep an individual from meeting the identified goals, and strategies that may be used to address the challenges (Hammer, 2016).

After a participant completes the IDI inventory, an IDI Qualified Administrator trained in the use of the IDI, reviews the participant's Individual Profile Report with him or her. The Individual Profile Report provides information about how the participant makes sense of and responds to cultural differences and commonalities. The IDI Individual Profile Report presents statistical summaries of the participant's Perceived Orientation, Developmental Orientation, Orientation Gap, Trailing Orientations, Leading Orientations, and Cultural Disengagement. The IDI generates both an Individual Profile Report and a customized Intercultural Development Plan (IDP). The intended outcome of the process is that the participant will increase his/her intercultural competence by working through the Intercultural Development Plan (IDP), specifically customized to the participant's IDI Profile results. The IDP provides a customized detailed plan or blueprint for the participant to work through to further develop his/her intercultural competence skills in shifting cultural perspective and adapting behavior (Hammer, Intercultural Development Inventory, 2012a).

“Developing intercultural competence is a *self-reflective, intentional process* focused on understanding patterns of difference and commonality between the individual (and his/her cultural group) and other culture group's perceptions, values and practices.” It is this self-reflective intentional process that is highlighted in the Intercultural Development Plan (Hammer, 2012b).

“Concentrated, self-reflective efforts at building intercultural competence, tailored to IDI profile results can result in a movement along the developmental continuum of one or more orientations” (Hammer, 2012b). These efforts can include a wide variety of learning opportunities and activities including: training programs; workplace activities; theatre, film and arts; educational classes; personal interaction; intercultural journal; books; travel; coaching; and site visits (Hammer, 2012b).

“It is not simply participating in activities or attending cultural events that is important, rather it is the *intentional reflection on the cultural patterns of commonality and difference* that make up these activities/events that will contribute to intercultural competence development.” (Hammer, 2012b).

To achieve a gain of one full orientation (or more) along the Intercultural Development Continuum, it is recommended that the participant plan to devote approximately 30 to 50 hours of concentrated effort at working on the Intercultural Development Plan over approximately 3 to 9 months (Hammer, 2012b).

The following five-step process guides the participant as he/she works through the Intercultural Development Plan (Hammer, 2012b):

- Review the participant’s IDI Individual Profile results consisting of his/her
 - Developmental Orientation
 - Perceived Orientation
 - Orientation Gap
 - Trailing Orientations
 - Leading Orientation

- Describe the participant's background in terms of his/her IDI Profile results
 - Reflect on his/her experiences with culturally diverse groups
 - Select three dimensions of diversity that have most influenced his/her views of cultural commonalities and differences and explain how the dimensions of diversity have affected the participant (i.e., gender, nationality, race/ethnicity, age, family background, abilities/disabilities, religion, educational background, home/geographic "roots", sexual orientation, socio-economic status, work experience)
- Identify intercultural developmental goals and progress indicators
 - Write 3-5 measurable goals
 - Write when the participant will know he/she has made progress on each goal
- Identify those intercultural stress points that are barriers to the participant's goal attainment
 - Identify work-related, personal, social or community challenges or situations where the participant is challenged to be more effective around cultural differences.
- Create the participant's Intercultural Development Plan (IDP)
 - Review and select from suggested questions, activities, and opportunities for intercultural development related to the participant's specific Intercultural Developmental Orientation and Leading Orientation

Theoretical Framework

The theoretical framework for the study was The Developmental Model of Intercultural Sensitivity (DMIS), developed by Dr. Milton Bennett (Bennett, 1986). Based on years of research, the DMIS model:

- Provides a rationale for “understanding how people experience cultural difference” (Bennett, 1986).
- Considers how a participant sees, thinks about, and interprets events around him/her (Bennett, 1986).
- “Highlights how a participant’s cultural patterns both guide and limit the experience of cultural difference” (Bennett, 1986).
- States, “cultural sensitivity and cultural differences represent a potential obstacle or benefit in developing relationships and communicating with other people” (Bennett, 1986.)
- Represents a set of six perspective stages that progressively show an increasing ability to understand and experience cultural differences (Bennett, 1986).

The first three stages are considered “ethnocentric” in that one’s own culture is viewed as the only culture, or to varying extents, the “better” culture.

The last three stages are considered “ethnorelative” in that the participant’s own culture is viewed as equal among many other cultures. The ethrelative stages are characterized by a positive mindset about cultural difference. These stages are indicative of a participant who tends to make more inclusive decisions.

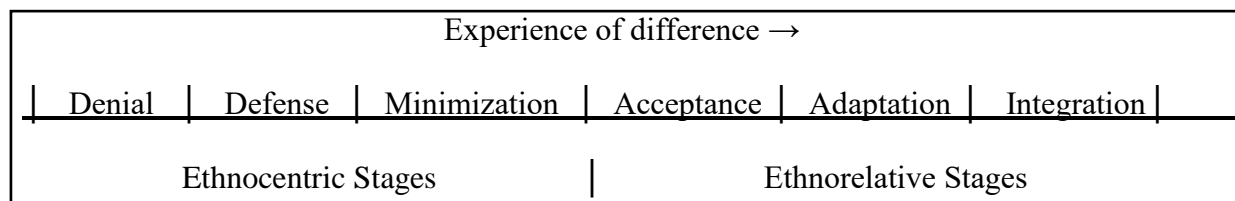


Figure 1. Development of intercultural sensitivity (©Bennett, 1986).

The following visual depiction briefly characterizes each stage of the DMIS along a continuum:

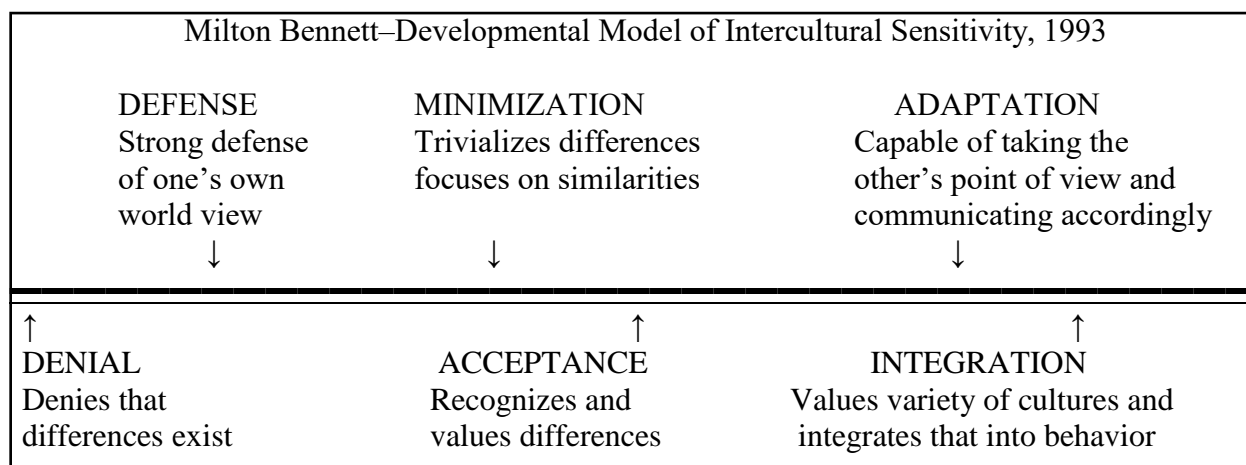


Figure 2. Continuum of intercultural sensitivity (©Bennett, 1986).

Conceptual Framework

Based on unique background experiences, people are not alike in their capabilities to recognize and effectively respond to cultural differences and commonalities. Intercultural competence reflects the degree to which one is able to effectively bridge cultural differences and commonalities in values, beliefs, expectations and practices (Hammer, 2011).

The study is based on the conceptual framework of the Intercultural Development Continuum (IDC), adapted from the Developmental Model of Intercultural Sensitivity originally proposed by Dr. Milton Bennett. The IDC describes a set of orientations toward cultural difference and commonality that are arrayed along a continuum from the more *mono-cultural*

mindsets of Denial and Polarization through the *transitional* orientation of Minimization to the *inter-cultural* or global mindsets of Acceptance and Adaptation (see Figure 1). The continuum indicates that individuals and groups with a more intercultural mindset have a greater capability for responding effectively to cultural differences and recognizing and building upon true commonalities. The capability of deeply shifting cultural perspective and bridging behavior across cultural differences are most fully achieved when one maintains an Adaptation perspective.

In other words, when among diverse groups of people, an adaptation orientation would be most effectively demonstrated by an individual who demonstrates the following behavior (Hammer, 2011):

- Adapting behavior to the cultural differences and commonalities in various situations
- Recognizing commonalities with others
- Shifting to the desired adaptive cultural perspective
- Taking another person's cultural point of view
- Understanding more deeply personal culturally-learned differences
- Communicating appropriately
- Acting on this increased insight in culturally appropriate ways that facilitate learning and personal growth

The Intercultural Development Continuum is descriptive of the manner in which individuals and groups experience cultural differences. It is prescriptive in identifying key developmental tasks for continued growth. The IDC identifies the capacity and approach that individuals and groups use to navigate intercultural goals and challenges. (Hammer, 2016, p. 31).

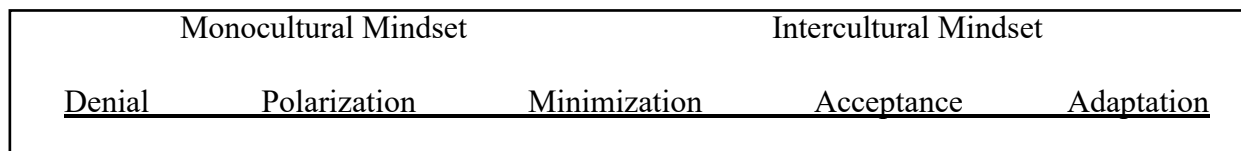


Figure 3. Intercultural development continuum.

Orientation descriptions.

Denial. An orientation that likely recognizes more observable cultural differences (e.g., food), but may not notice deeper cultural differences, and may avoid or withdraw from cultural differences.

Polarization. A judgmental orientation that views cultural differences in terms of “us” and “them”. This can take the form of:

Defense. An uncritical view toward one’s own cultural values and practices and an overly critical view toward other cultural values and practices.

Reversal. An overly critical orientation toward one’s own cultural values and practices and an uncritical view toward other cultural values and practices.

Minimization. An orientation that highlights cultural commonality and universal values and principles that may also mask deeper recognition and appreciation of cultural differences.

Acceptance. An orientation that recognizes and appreciates patterns of cultural difference and commonality in one’s own and other cultures.

Adaptation. An orientation that is capable of shifting cultural perspective and changing behavior in culturally appropriate and authentic ways.

Figure 4 below describes and compares monocultural mindsets and intercultural/global mindsets (Hammer, 2011).

<u>Monocultural Mindsets</u>	<u>Intercultural/Global Mindsets</u>
Makes sense of cultural differences and commonalities based on one's own cultural values and practices	Makes sense of cultural differences and commonalities based on one's own <i>and other</i> culture's values and practices
Uses <i>broad stereotypes to identify cultural difference</i>	Uses <i>cultural generalizations to recognize cultural difference</i>
Supports <i>less complex</i> perceptions and experiences of cultural difference and commonality	Supports <i>more complex</i> perceptions and experiences of cultural difference and commonality

Figure 4. Comparison of monocultural and intercultural/global mindsets.

Statement of the Problem

There has been little research conducted on the effect of using IDI Guided Development to increase the intercultural competence of preservice teachers, students who are planning to enter teaching as their future profession. The study provides pretest-posttest data using the Intercultural Development Inventory (IDI), IDI Guided Development, and the Intercultural Development Plan (IDP). The study was conducted during the spring of 2014. The participants in the study included 45 elementary education preservice teachers at a Minnesota State University who used their IDI Guided Development results to pursue an increase in their intercultural competence.

Purpose of the Study

The need for the development of intercultural competence is highlighted by three noteworthy citations:

As the diversity of students in the United States increases, there is a need for teachers to increase their intercultural competence, so they can most effectively teach students (DeJaeghere & Zhang 2008).

“The modern wave of globalization has created a demand for increased intercultural competence in college graduates who will soon enter the 21st century” (Griffith, Wolfeld, Armon, Rios, & Liu, 2016).

“People are not alike in their capabilities to recognize and effectively respond to cultural differences and commonalities” (Hammer, 2011, p. 3).

The purpose of the study was to examine Intercultural Development Inventory pre-post test data and responses from a sample of preservice teachers and describe the effect of the process of administering IDI Guided Development on increasing the intercultural competence of preservice teachers.

Assumptions of the Study

- Teacher candidates honestly respond to each of the statements on the Intercultural Development Inventory (IDI; Hammer, 2009b).
- The Individual IDI profile is an accurate indicator of each preservice teacher’s response to cultural differences.
- When responding to the IDI, each preservice teacher will think about his/her own cultural group and other cultural groups with which he/she has had the most experience.
- Participants responding to the IDI are not currently experiencing a significant professional or personal transitional experience in their lives.

Delimitations

The participants in the study were elementary education majors at a Minnesota State University.

The study was conducted over a 3-month period.

Research Questions

The research questions of the study were as follows:

1. To what extent did pre-post test results vary using the Intercultural Development Inventory?
2. Did the process of IDI guided development have a positive effect on the participants' intercultural competence growth?

Definition of the Terms

Acceptance. A mindset that recognizes and values differences.

Adaptation. Capable of taking the other's point of view and communicating accordingly.

Coaching. The process of one-on-one IDI Guided Development® with a trained and experienced IDI Qualified Administrator

Culture.

- *Objective Culture.* The artifacts and institutions created by a group of people, reflected in such areas as art, architecture, literature, dance, holidays, and collective history.
- *Subjective Culture.* Patterns of interpretations (values, beliefs, perceptions) and behavior learned from one's group that guides individual and group activity. The IDI measures the degree of subjective culture competence.

Cultural Disengagement. A sense of disconnection or detachment from a primary cultural group. Cultural Disengagement is not an orientation on the Intercultural Development Continuum, as it does not relate to intercultural competence. However, consideration of a Cultural Disengagement score that is “not resolved” suggests some lack of involvement in a primary cultural community (IDP).

Cultural Orientation or Orientation. An inclination to think, feel or act in a way that is culturally determined. It defines the basis of differences among cultures such as self-identity, interpersonal relationships, communication, and resolving conflict.

Defense. An uncritical view toward one’s own cultural values and practices and an overly critical view toward other cultural values and practices.

Denial. Denies that differences exist.

Developmental Orientation (DO). Indicates a person’s primary orientation toward cultural differences and commonalities along the intercultural development continuum as assessed by the IDI.

Diversity. The “mix” of differences around nationality, ethnicity, gender, age, physical abilities, sexual orientation, economic status, education, profession, religion, organizational affiliation. Diversity is assessed by determining representation of designated cultural/ethnic/other groups within an organization: intercultural competence, as assessed by the IDI, is “how” the diversity “mix” is achieved.

Diversity Dimension. Ways in which people develop their self-image and worldview, consisting of gender, nationality, race/ethnicity, age, family background, abilities/disabilities,

religion, educational background, home/geographic “roots”, sexual orientation, socio-economic status and work experience.

Ethnicity. A socially defined category of people who identify with each other based on a shared social experience or ancestry.

Ethnocentric stage. A stage of intercultural sensitivity where a participant views his/her own culture as the only or “better” culture.

Ethnorelative stage. A stage of intercultural sensitivity where a participant understands and experiences cultural differences from a positive, equal perspective or viewpoint.

IDI Guided Development. IDI Guided Development is an innovative, comprehensive, assessment-driven approach to developing an individual’s intercultural competence, particularly the ability to shift cultural perspective and appropriately adapt behavior to cultural differences and commonalities in various situations. This approach is a proprietary system based on Intercultural Development Inventory individual and/or group profile results and involves identification of goals, intercultural challenges (stress points), and strategies used to address challenges and supports (kinds of support in the organization for developing intercultural competence).

IDI Individual Profile Report. A report that provides information about how a person makes sense of and responds to cultural differences and commonalities. The IDI Profile Report presents statistical summaries including Perceived Orientation, Developmental Orientation, Orientation Gap, Trailing Orientations, Leading Orientations, and Cultural Disengagement.

IDI Qualified Administrator. A Qualified IDI Administrator (QA) is trained to create and interpret a graphic profile of the Intercultural Development Inventory for a group or individuals.

The QA explains stages of the Developmental Model of Intercultural Sensitivity (DMIS) which is the theoretical base of the Intercultural Development Inventory.

Inclusive Learning Environment. Inclusive teaching strategies refer to any number of teaching approaches that meet the needs of students with a variety of backgrounds, learning styles, and abilities. These strategies contribute to an overall inclusive learning environment, in which students feel equally valued.

Integration. Values a variety of cultures and incorporates that into behavior.

Intercultural Competence. The capability to shift cultural perspective and appropriately adapt behavior to cultural differences and commonalities. This capability is conceptualized in terms of a range of orientations along the Intercultural Development Continuum (IDC) of intercultural competence.

Intercultural Development Continuum (IDC). The Intercultural Development Continuum identifies a continuum of orientations toward cultural differences and commonalities measured by the IDI. The IDC is adapted from the Developmental Model of Intercultural Sensitivity (DMIS) originally proposed by Milton Bennett. These orientations range from the monocultural orientations of Denial and Polarization (Defense/Reversal) through the transitional orientation of Minimization to the Intercultural/Global orientations of Acceptance and Adaptation.

Intercultural Development Inventory (IDI). A statistically reliable, cross-culturally valid measure of intercultural competence.

Intercultural development Plan (IDP). A detailed plan or blueprint for the individual to further develop his/her intercultural competence.

Intercultural Journal. A book in which an individual records personal experiences and thoughts.

Intercultural Mindset. Makes sense of cultural differences and commonalities based on one's own and other cultural values and practices.

Leading Orientations (LO). Next step to take in further development of intercultural competence.

Minimization. Trivializes differences; focuses on similarities.

Monocultural mindset. Makes sense of cultural differences and commonalities based on one's own cultural values and practices.

Nationality. The status of belonging to a nation by origin, birth or naturalization.

Orientation Gap (OG). The difference along the intercultural development continuum between your Perceived Orientation and Developmental Orientation.

Perceived Orientation (PO). Reflects where a person places himself or herself along the Intercultural Development Continuum.

Polarization. An evaluative mindset that views cultural differences from an "us versus them" perspective.

Preservice Teacher. A student who is planning to enter teaching as their future profession.

Race. Each of the major divisions of humankind, having distinct physical characteristics.

Reversal. An overly critical orientation toward one's own cultural values and practices and an uncritical view toward other cultural values and practices.

Shifting cultural perspectives. The ability to recognize and appreciate patterns of cultural difference.

Stress Point. A circumstance or obstacle that keeps people apart or prevents communication or progress.

Trailing Orientations. If present, these unresolved orientations represent earlier orientations to a person's Developmental Orientation (DO) that may be used at particular times, around certain topics, or in specific situations often related to stress.

Summary

Chapter I presents the study's purpose, significance, and theoretical and conceptual frameworks, assumptions, delimitations, research questions, and definition of terms.

Chapter II details the review of literature pertinent to the study problem, purpose and outcomes.

Chapter II: Review of Related Literature

Introduction

“Developing intercultural competence is a core capability in the 21st century and involves cultural self-awareness, understanding the experiences of people from diverse communities, and the capability to adapt one’s mindset and behavior to bridge across differences” (Hammer, 2011).

The review of literature presents three areas related to developing intercultural competence for the study. The first section of the review of literature provides definitions of the term ‘Intercultural Competence’, including conceptual frameworks, models and rubrics related to the term. The second section provides theories, models, practices, and strategies that affect the development of intercultural competence. Finally, the third section provides a review of research related to assessing and measuring intercultural competence. A summary of the literature reviewed concludes Chapter II.

Intercultural Competence (ICC) Definitions, Models, Conceptual Frameworks, and Rubrics

According to the Educational Testing Service (ETS) Research Report (Griffith et al., 2016), the literature reveals numerous definitions of intercultural competence.

A review of the literature revealed a multitude of definitions of ICC. The ICC definitions used in the higher education literature tend to be associated with models used in education, training, and research (Griffith et al, 2016). These models can be divided into five categories: compositional, co-orientational, developmental, adaptational, and causal (Spitzberg & Changnon, 2009). Compositional models (e.g., Deardorff, 2006; Hunter, White, & Godbey, 2006; Ting-Toomey & Kurogi, 1998) merely described the characteristics (knowledge, skills,

and attitudes) of ICC. Co-orientational models (e.g., Fantini & Tirmizi, 2006; Kupka, 2008; Rathje, 2007) tend to describe the components or process of a successful intercultural interaction. Developmental models describe ICC in terms of individual development over time (e.g., Bennett, M. J., 1986; Gallois, Franklyn-Stokes, Giles, & Coupland, 1988) and combined the developmental components of the aforementioned models and presented them in an interactional context of adapting to a foreign culture. Finally, causal path models (e.g., Arasaratnam, 2008; Deardorff, 2006; D. A. Griffith & Harvey, 2000; Hammer, Wiseman, Rasmussen, & Brusckhe, 1998) attempt to integrate the characteristics of compositional models and situate them in an interaction in which variables influence each other to predict ICC. (Griffith et al., 2016).

Leung, Ang, and Tan (2014) devised a system that differentiates ICC models in three different intercultural ways.

- *Intercultural traits*. These stable personality traits drive a person's expected behavior, including one's being open to experiences and being tolerant of uncertainty.
- *Intercultural attitudes and worldviews*. The perception and evaluation of information from outside an individual's own culture.
- *Intercultural capabilities*. Whatever a person can do, think, or know that will allow him or her to interact successfully in an intercultural situation.

Neither scholars in the field of intercultural competence, nor higher education administrators, have reached agreement on the definition of intercultural competence and its foundational dimensions or components (Griffith et al., 2016).

In an existing study (Deardorff, 2006), administrators from 24 U.S. postsecondary institutions rated nine definitions of intercultural competence. The outcomes of that study included:

- Byram's (1997) definition of intercultural competence, focusing heavily on language proficiency, was rated highly.
- Lambert's definition of intercultural competence, which highlights task accomplishment in the global context, was also highly rated.
- Similar terms were being used by administrators to discuss intercultural competence, including *cross-cultural competence*, *global competence*, *intercultural competence*, and *global citizenship* (Deardorff, 2006, p. 247).
- There was a confirmed need for a general definition that could be used across student populations and contexts (Deardorff, 2006).
- Three themes prevailed across definitions generated by the people in attendance (Deardorff, 2006, p. 247).
 - "The awareness, valuing, and understanding of cultural differences"
 - "Experiencing other cultures"
 - "Self-awareness of one's own culture"
- On average, Deardorff's (2004) definitions of intercultural competence, the "ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills and attitudes" was rated the highest amongst the intercultural competence definitions given.

- The scholars generated definitions and specific elements of intercultural competence. Seven definitions and 22 elements were agreed upon by 80% (16 out of 23) of the group.
- Only one element, the understanding of others' world views, received 100% agreement from the raters.

Although this study may have achieved some clarity and alignment on defining ICC in the higher education context, further agreement remains elusive, in part due to the existence of multiple alternative models (e.g., Fantini & Tirmizi, 2006). In addition, abstract, complex phenomena are often better defined through the process of measurement, however many of the existing theories and models of ICC are not clarified through validated measurement. (Griffith et al., 2016)

Over time, the term 'intercultural competence' has been defined in a variety of ways (Bhawuk & Brislin, 1992; Hammer, Gudykunst, & Wiseman, 1978; Paige, 2004).

By and large, three common themes emerge from various definitions of intercultural competence; the practice of empathy, perspective taking, and adaptability, all of which implies awareness of the 'self' and orientations to the 'other' in achieving intended intercultural communication outcomes. (Liu, 2012, 269)

The National Council for Accreditation of Teacher Education (NCATE). Twelve sources of cultural identity (race, ethnicity, age, geographic region, sexuality, religion, social status, language, and ability) have been identified that influence teaching and learning and are universal in every culture (Cushner et al., 2003).

NCATE adheres to its definition of diversity in congruence to the 12 sources of cultural identity and defines diversity as the differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, sexual orientation and geographical area (NCATE, 2002). It is with this common ground about cultural diversity that NCATE and other teacher education

institutions establish diversity standards and culturally relevant curriculum to prepare pre-service teachers.

Cultural competence for pre-service teachers refers to dispositions of being aware of cultural differences, being culturally sensitive and able to respond to these differences appropriately (Diller & Moule, 2005, p. 5). Leading researchers in multicultural education conclude that teachers can improve school success of students if they are knowledgeable and accepting of the culture of their students (Gay, 2000; Grant et al., 2004; Irvine, 2003; Ladson-Billings, 1994). The knowledge, framework, belief and value, particularly knowledge about culture and its role in schooling have become an integral part of teacher education curriculum (Cochran-Smith, 2004) of culturally responsive teaching. Teacher education institutions along with pre-service teachers should serve as change agents by demonstrating appropriate behaviors in addressing diversity as part of the framework of learning, and how various aspects are related to one another, are not answered. In her study (Cochran-Smith, 2004), theories related to teachers' cultural competence were reviewed to identify key factors and the directions of the interrelationships among these factors. (Liang & Zhang, 2009)

“Garmon (2004) and Valentin (2006) suggest several factors that appear to play a critical role in the development of cultural competence such as: (a) openness to diversity; (b) personal beliefs and intercultural experiences; (c) self-awareness/self-reflectiveness; (d) educational background; and (e) commitment to social justice.”

Garmon (2004) identified self-reflectiveness of his/her own belief system and behavior as one of the key factors related to pre-service teacher's cultural competence among other factors such as personal or professional beliefs, intercultural and educational experiences. He defined self-awareness or self-reflection as having an awareness of one's own beliefs, values, and attitudes, as well as being willing or able to think critically about them. Gay (2005, p. 233) indicated that ‘teachers need to be conscious of their own cultural values and beliefs, of how these affect their attitudes and expectations towards students from different ethnic groups and how they are habitually exhibited in school behaviors’. Garmon (2004) found that teacher self-reflectiveness, intercultural experiences, educational backgrounds are critical factors to teachers' cultural sensitivity, positive interaction with students and commitment to social justice. However, how these factors interact to impact pre-service teachers' cultural sensitivity, positive interaction with students and commitment to social justice remain unanswered. (Liang & Zhang, 2009)

Using NCATE's concept of culturally responsive teaching, combined with cultural competence theory literature, Liang and Zhang (2009) conducted a study of 489 pre-service

teachers and the teachers' cultural competence indicators. The four interrelated dimensions studied were professional beliefs, self-reflectiveness, teacher expectations, and actions to improve social injustice. The study data from these preservice teachers indicated that beliefs and actions are mutually related. Beliefs guide actions and actions guide beliefs. (Liang & Zhang, 2009).

Milton Bennett's 1986 Developmental Model of Intercultural Sensitivity (DMIS).

“The Developmental Model of Intercultural Sensitivity is a framework that explains the development of increasing sophistication in our experience and navigation of differences.” (Bennett, 1993; Bennett & Bennett, 2004).

“This model begins with three ethnocentric stages, in which our own culture is experienced as central to reality in some particular way. The latter three stages of the model are termed ethnorelative, in which our own culture is viewed in the context of other cultures” (Bennett, 2011).

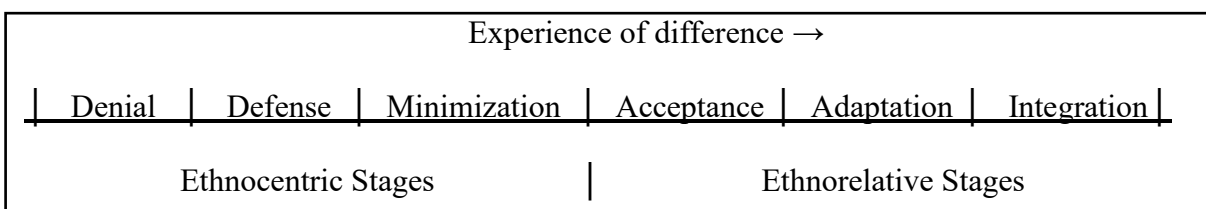


Figure 5. Development of intercultural sensitivity: Experience of difference (©Bennett, 1986).

The six stages of DMIS, illustrated in Figure 5, represent a set of perspectives with successfully greater ability to understand and have a more complete experience of cultural difference (Bennett, 1986).

The following image briefly characterizes each stage of the DMIS:

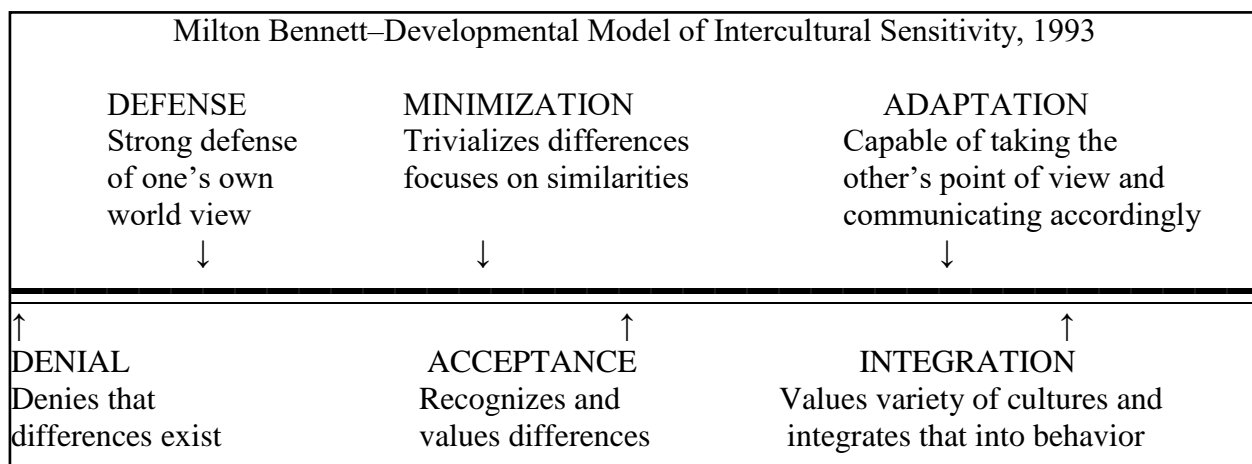


Figure 6. Stages of the developmental model of intercultural sensitivity (©Bennett, 1993).

People in general are at different levels of intercultural competence development. Milton Bennett’s 1986 Developmental Model of Intercultural Sensitivity (DMIS) helps to understand the six stages to achieving an intercultural mindset.

Intercultural Development Inventory (IDI). The following is a definition of intercultural competence from the IDI. “These international and domestic cross-cultural outcomes are achieved through the development of intercultural competence—*the capability to shift cultural perspective and appropriately adapt behavior to cultural differences and commonalities* (Hammer, 2009a).

This development of intercultural competence involves gaining a more complex understanding of how one engages cultural diversity—reflected in:

- Deeper cultural self-understanding (how one makes sense of and responds to cultural differences in terms of one’s own culturally learned perceptions, values and practices) and

- Deeper cultural other-understanding (different ways people from other cultural groups make sense of and respond to cultural differences” (Hammer, 2009a).

The Developmental Model of Intercultural Sensitivity (DMIS) and the Intercultural Development Inventory (IDI) define intercultural competence as an individual’s worldview, in other words an individual’s perceptions and responses to cultural difference (Bennett 1986, 1993; Hammer & Bennett, 2001; Hammer, Bennett, & Wiseman, 2003).

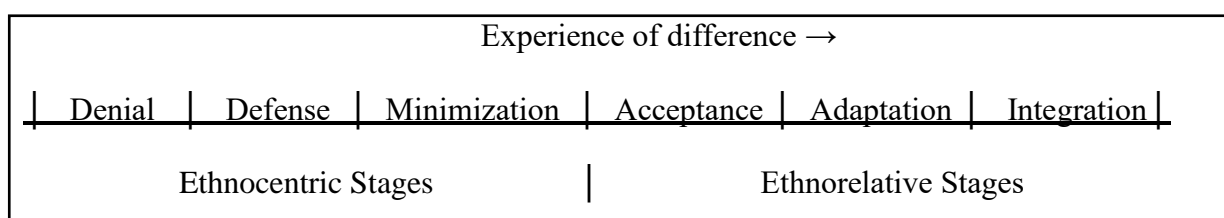


Figure 7. Ethnocentric stages and ethnorelative stages of intercultural sensitivity (©Bennett, 1986).

Using the DMIS model, the goal is for a person to move from an ethnocentric mindset to an ethnorelative mindset. A person with an ethnocentric mindset only evaluates other people and cultures according to the standards of his/her own culture. Whereas, a person with an ethnorelative mindset is comfortable with many standards and customs and adapts his/her behavior to many different interpersonal settings. The stages in the DMIS model are:

Stage 1: Denial–The ability to recognize the more observable cultural differences but may avoid or withdraw from these cultural differences.

Stage 2: Polarization–A judgmental orientation that views cultural differences in terms of “us” and “them”.

- Defense: Critical view of other culture values.
- Reversal: Critical view of one’s own cultural values and not critical of the other.

Stage 3: Minimization–Sees cultural commonality and universal values that may also mask deeper recognition and appreciation of cultural differences.

Stage 4: Acceptance–Recognizes and appreciates patterns of cultural differences and commonalities in one’s own and other cultures.

Stage 5: Adaptation–Able to shift cultural perspective and change behavior in culturally appropriate and authentic ways.

Stage 6: Integration–Able to move smoothly in and out of different cultural worldviews and develop a feeling of membership in a new culture.

The DMIS model has been used as a guide in planning experiential learning opportunities. Such opportunities develop an individual’s intercultural competence by shifting one’s cultural perspective and adapting one’s behavior to cultural commonalities and differences. (J. M. Bennett, 1986; M. J. Bennett, 1986; Bennett, 1993; Paige, 2004).

The Intercultural Development Continuum (IDC). “The goal is to move from a monocultural mindset, in which we make sense of cultural differences and commonalities based on our own values and practices and use stereotypes to identify cultural differences, to an intercultural or global mindset. In an intercultural mindset, we use our own and other culture’s values and practices to make sense of cultural differences” (J. M. Bennett, 1986).

Bennett’s DMIS evolved into the Intercultural Development Continuum (Hammer, 2009d) which emphasizes experiencing and perceiving cultural differences from a monocultural mindset to a more complex intercultural mindset.

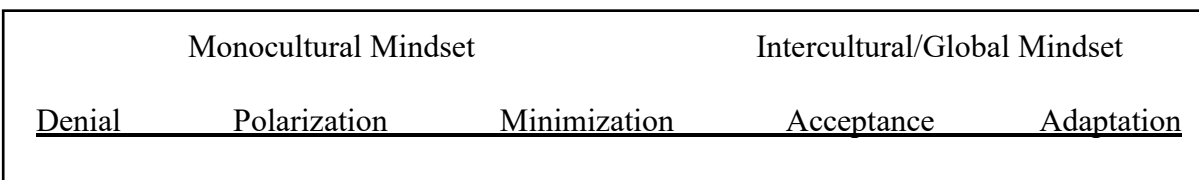


Figure 8. Intercultural development continuum.

Figure 9 below describes and compares monocultural mindsets and intercultural mindsets (Hammer, 2011).

<u>Monocultural Mindsets</u>	<u>Intercultural/Global Mindsets</u>
Makes sense of cultural differences and commonalities based on one's own cultural values and practices	Makes sense of cultural differences and commonalities based on one's own <i>and other</i> culture's values and practices
Uses <i>broad stereotypes to identify cultural difference</i>	Uses <i>cultural generalizations to recognize cultural difference</i>
Supports <i>less complex</i> perceptions and experiences of cultural difference and commonality	Supports <i>more complex</i> perceptions and experiences of cultural difference and commonality

Figure 9. Comparison of monocultural and intercultural/global mindsets.

Intercultural orientation descriptions.

Denial. An orientation that likely recognizes more observable cultural differences (e.g., food), but may not notice deeper cultural differences, and may avoid or withdraw from cultural differences.

Polarization. A judgmental orientation that views cultural differences in terms of “us” and “them”. This can take the form of:

Defense. An uncritical view toward one's own cultural values and practices and an overly critical view toward other cultural values and practices.

Reversal. An overly critical orientation toward one's own cultural values and practices and an uncritical view toward other cultural values and practices.

Minimization. An orientation that highlights cultural commonality and universal values and principles that may also mask deeper recognition and appreciation of cultural differences.

Acceptance. An orientation that recognizes and appreciates patterns of cultural difference and commonality in one's own and other cultures.

Adaptation. An orientation that is capable of shifting cultural perspective and changing behavior in culturally appropriate and authentic ways.

Deardorff's theoretical framework. "Knowledge of the self and the other, and awareness of cultural difference, are essential tools in reaching intercultural competence. Intercultural competence is also process-oriented" (Deardorff, 2006).

One meaningful outcome of internationalization efforts at postsecondary institutions is the development of interculturally competent students. Yet few universities address the development of interculturally competent students as an anticipated outcome of internationalization in which the concept of "intercultural competence" is specifically defined. This lack of specificity in defining intercultural competence is due presumably to the difficulty of identifying the specific components of this complex concept. Even fewer institutions have designated methods for documenting and measuring intercultural competence.

In 2004, Darla Deardorff conducted a study to determine a definition and appropriate assessment of intercultural competence as agreed upon by a panel of 20 internationally known intercultural scholars.

The Deardorff study (2004) was very important because it determined:

a definition of and appropriate methods of intercultural competence as agreed on by a panel of internationally known intercultural scholars. It was validated by a sample of higher education administrators and can be used by administrators in identifying and assessing intercultural competence as a student outcome of internationalization efforts. It was the first study to document consensus on intercultural competence and it determined

that it is best to use a mix of quantitative and qualitative methods to assess intercultural competence including interviews, observation, and judgement by self and others.

Thus, once competence is defined, it is measurable (Klemp, 1979, p. 41).

Based on her study, Deardorff's theoretical framework (Deardorff, 2004) consisted of two models, the Pyramid Model of Intercultural Competence and the Process Model of Intercultural Competence. Both models, based on the findings of other researchers, emphasized the importance of a person's attitudes towards learning. Byram firmly believed that attitude is the fundamental starting point of developing intercultural competence (Byram, 1997). Lynch and Hanson (1998) agreed with him by stating, "After all the books have been read and the skills learned and practiced, the cross-cultural effectiveness of each of us will vary. And it will vary more by what we bring to the learning than by what we have learned" (p. 510). Okayama, Furuto, and Edmondson (2001) also stressed the importance of attitude in developing intercultural competence by stating that "what may be most important is ... to maintain culturally competent attitudes as we continue to attain new knowledge and skills while building new relationships. Awareness, the valuing of all cultures, and a willingness to make changes are underlying attitudes that support everything that can be taught or learned." (p. 97)

Deardorff's Process Model of Intercultural Competence (2006), was based on five elements including attitudes, knowledge, skills, internal outcomes, and external outcomes.

Each of the elements of Deardorff's Process Model of Intercultural Competence (2006) is explained below:

- Attitudes: Respect, openness, and curiosity. "Respect demonstrates that you value others who are from different backgrounds, and openness and curiosity are necessary

to move outside of your comfort zone. These three attitudes are foundational for the development of knowledge and skills needed for intercultural competence.”

- Knowledge and Comprehension: “In order to achieve intercultural competence, you must have a cultural self-awareness, culture-specific knowledge, deep cultural knowledge (understanding of other world views), and sociolinguistic awareness. Understanding the world from others’ perspectives is fundamental to intercultural competence.”
- Skills: “Observing, listening, evaluating, analyzing, interpreting, and relating are skills necessary for processing knowledge. When interacting with others from diverse backgrounds, you cannot rely on knowledge alone. You will also need to use these skills in order to understand and process information.”
- Internal Outcomes: “The attitudes, knowledge, and skills lead to an internal outcome that consists of flexibility, adaptability, and empathy. These abilities allow individuals to achieve intercultural competence to some degree. At this point, you are able to begin to see from others’ perspectives and respond to others according to the way in which the other desires to be treated.”
- External Outcomes: “The behavior and communication skills demonstrated by an individual based on their attitudes, knowledge, skills and internal outcomes are the external outcomes experienced by others. The effective and appropriate behavior and communication are the visible external outcomes of intercultural competence.”

The fundamental attitudes of respect, openness, and curiosity and discovery are important to the learning that is associated with developing intercultural competence. The desired outcome

is for the person to move himself or herself from a personal level to an interpersonal/interactive level. The degree to which an individual develops intercultural competence is directly dependent on one's development of the foundational components of the Pyramid Model of Intercultural Competence (Deardorff, 2006).

The Pyramid Model of Intercultural Competence provided a basis for needed assessment indicators, along with the specific skills for acquiring and processing knowledge of one's own culture as well as other cultures.

Deardorff's models, as a pair, are useful in visualizing the desired internal and external outcomes of intercultural competence. A shift in a person's frame of reference was the desired internal outcome. Effective and appropriate behavior and communication in intercultural situations is the desired external outcome. Deardorff (2011) acknowledges these key points of the theoretical models:

1. "Intercultural competence development is an ongoing process, and thus it becomes important for individuals to be given opportunities to reflect on and assess the development of their own intercultural competence. In addition, this suggests that assessment should be integrated throughout targeted interventions."
2. "Critical-thinking skills play a crucial role in an individual's ability to acquire and evaluate knowledge. This means that critical-thinking assessment could also be an appropriate part of intercultural assessment."
3. "Attitudes- particularly respect (which is manifested variously in cultures), openness and curiosity-serve as the basis of this model and have an impact on all other aspects

of intercultural competence. Address attitudinal assessment, then becomes an important consideration.”

4. “The ability to see from others’ perspectives.”

The intercultural knowledge and competence VALUE rubric. The Association of American Colleges and Universities (AAC&U) in 2005 launched the Liberal Education and America’s Promise (LEAP) initiative. LEAP defines the aims of liberal education in terms of Principles of Excellence, along with a companion set of Essential Learner Outcomes. The LEAP Essential Learner Outcomes represent a consensus among educators and employers about the kinds of learning students need as preparation for successful participation in civic life and the global economy (Association of American Colleges and Universities, 2009a).

In 2009, the AAC&U released a set of 16 Valid Assessment of Learning in Undergraduate Education (VALUE) rubrics to assess these higher education student outcomes based on authentic student work. According to the Intercultural Knowledge and Competence VALUE Rubric, the term ‘intercultural knowledge and competence’ is “a set of cognitive, effective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts” (Bennett, 2008). Simply stated, it is the ability to understand and adapt behavior to cultural difference and commonality.

College and faculty experts, representing colleges and universities throughout the United States, developed this rubric with the intent that it would be used as a framework of student expectations and learning. With its use, colleges and universities were able to share the evidence of student learning and understanding through a common dialog. The rubric was intended to be used at an institutional level for evaluating and discussing student learning, not grading.

The rubric provided fundamental criteria for each learning outcome, along with performance descriptors demonstrating progressively sophisticated levels of attainment of intercultural competence. Centered on a person's knowledge, skills and attitudes, the rubric helped identify and assess a student's internalization of intercultural competence.

The Intercultural Knowledge and Competence VALUE Rubric highlighted the need to integrate intercultural competence into the education of individual students, so they meet the needs of a global community in the 21st century. The framing language of the rubric stated,

Beyond mere exposure to culturally different others, the campus community requires the capacity to: meaningfully engage those others, place social justice in historical and political context, and put culture at the core of transformative learning. The Intercultural Knowledge and Competence VALUE Rubric suggests a systematic way to measure our capacity to identify our own cultural patterns, compare and contrast them with others, and adapt empathetically and flexibly to unfamiliar ways of being. (Association of American Colleges and Universities, 2009b)

The rubric levels are based on Milton Bennett's Developmental Model of Intercultural Sensitivity (Bennett, 1993). The rubric criteria were also based on D. K. Deardorff's intercultural framework, the first research-based consensus model of intercultural competence (Deardorff, 2006). Researchers have acknowledged that intercultural knowledge and competence is more complex than what is reflected within the rubric, however the rubric identifies six of the key components: Cultural Self-Awareness, Knowledge of Cultural Worldview Frameworks, Empathy, Verbal and Nonverbal Communication, Curiosity, and Openness. Definitions that were developed to clarify terms and concepts used in the rubric were:

- Culture: All knowledge and values shared by a group;

- Cultural rules and biases: Boundaries within which an individual operates in order to feel a sense of belonging to a society or group, based on the values shared by that society or group;
- Empathy: “Empathy is the imaginary participation in another person’s experience, including emotional and intellectual dimensions, by imagining his or her perspective (not by assuming the person’s position” (Bennett, 1998).
- Intercultural experience: The experience of an interaction with an individual or groups of people whose culture is different from your own.
- Intercultural/cultural differences: The differences in rules, behaviors communication and biases, based on cultural values that are different from one’s own culture.
- Suspends judgment in valuing interactions with culturally different others: Postpones assessment or evaluation (positive or negative) of interactions with people culturally different from oneself. Disconnecting from the process of automatic judgment and taking time to reflect on possibly multiple meanings; and
- Worldview: Worldview is the cognitive and affective lens through which people construe their experiences and make sense of the world around them. (Intercultural Knowledge and Competence VALUE Rubric; Association of American Colleges and Universities).

Theories, Models, Practices, and Strategies That May Affect the Development of Intercultural Competence

ICC is developmental in nature in which one’s worldview can change dynamically over time through experiences and reflective learning. These experiences may be formal education, non-formal learning, and experiences combined with reflection about cultural perspectives and ways of being. (DeJaeghere & Cao, 2009)

This section provides a general overview of the research that may affect the development of intercultural competence. Areas related to this section include learning theories, models, practices, and strategies.

Published works were selected based on their perceived importance to the development of intercultural competence and the study. The selection was based on:

- a) the number of additional studies cited in the work
- b) the number of additional studies which appeared to rely on or base arguments and evidence on the preceding works
- c) studies whose research had similar starting points, conclusions, or was specifically aligned with the main body of research

The dimensions of diversity wheel. The Dimensions of Diversity Wheel was first printed in Marilyn Loden and Judy Rosener's (1991) book, *Workforce America! Managing Employee Diversity as a Vital Resource*. A revised version of the Diversity Wheel was next published in 1996 in Loden's book, *Implementing Diversity*. The model depicted the dimensions or ways in which people develop their self-image and worldview. The six primary dimensions consisted of: age, gender, mental/physical abilities and characteristics, race, ethnic heritage, and sexual orientation. The secondary dimensions consisted of: education, geographic location, military experience, work experience, income, religion, first language, organization role and level, communication style, family status, and work style (Loden, 1996).

A few years later Gardenswartz and Rowe (2003) made adapted changes to Loden's Diversity Wheel model. Their Four Layers of Diversity replaced the core and secondary diversity dimensions with what they termed "*internal and external dimensions*", added a personality

circle in the center of the diversity wheel, and added an outside organizational dimensions circle encompassing the entire diversity wheel. The first layer of diversity, personality, includes an individual's likes and dislikes, values, and beliefs. One's personality develops early in life. It is at the core of the model because throughout one's lifetime it both influences and is influenced by the other three layers. The internal dimensions, consisting of age, gender, sexual orientation, physical ability, ethnicity, and race, are relatively outside the individual's control. This layer of dimensions is what we first notice in others and upon which we may make judgements, assumptions or divisive efforts. The external dimensions, over which we may have more control or influence, consist of geographical location, income, personal habits, recreational habits, religion, educational background, work experience, appearance, parental status, and marital status. The organizational dimensions, reflective of how we are treated at our workplace, are comprised of functional level/classification, work content/field, division/department unit/group, seniority, work location, union affiliation, and management status (Gardenswartz & Rowe, 2003).

Marilyn Loden updated her Dimensions of Diversity model in 1996 (Lou & Dean, 2010) to represent a global view of the primary and secondary dimensions that influence intercultural identity. The inner circle now includes nine primary dimensions of diversity that she believed are particularly important in the shaping of an individual's values, self-image, identity, opportunities, and perceptions of others. The inner circle is now comprised of spiritual beliefs, class, income, gender, physical abilities and characteristics, age, ethnicity, race, and sexuality. The outer circle has been expanded to include eleven secondary dimensions of diversity that play a significant role in recognizing and understanding differences in individuals and groups of

people. Thus, the outer circle now consists of political beliefs, cognitive style, work experience, communication style, education, geographic location, organization role and level, military experience, work style, first language, and family status. Loden thought that “these primary and secondary dimensions are the differences more likely to lead to culture clash and conflict when they are ignored, devalued or misunderstood by others” (www.loden.com). She believed “at the very least, the model can be used to initiate conversations about similarities and differences that cross societal and cultural boundaries” (Lou & Dean, 2010).

Experiential learning theory. “...there is an intimate and necessary relation between the processes of actual experience and education” (Dewey, 1938, 1997).

John Dewey’s underlying philosophy of experience and education was that at various times or in different circumstances, a freer or more structured approach may be more appropriate. Most often, however, a learner needs some amount of freedom to develop experience-based understanding; likewise, in most educational settings, learners need some degree of guidance as well. (Juch, 1983)

Drawing on Dewey’s experience and education philosophy, David A. Kolb proposed an experiential learning theory in 1984 which works on two levels: a four-stage cycle of learning and four separate learning styles with the learner being at the center of the learning process (Kolb, 1984).

Kolb’s famous experiential learning cycle consisted of these four stages for the learner: concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1984)

Effective learning was observable when a person progressed through the four-stage cycle by:

1. Doing or having an experience, followed by
2. Observing and reflecting on the experience, which leads to
3. Learning new ideas or drawing conclusions from the experience, which are then
4. Applied by the learner to the world around them as new experiences

Kolb contended that the learning cycle can begin at any one of the four stages, and it should be approached as a continuous cycle.

Greenaway (2002) believed that the stages of a 'learning cycle' can be self-managed, or even 'unmanaged', in the sense that learning from experience is a normal everyday process for most people.

As stated earlier, Kolb's experiential learning theory worked on two levels, a four-stage cycle of learning and four separate learning styles. A great deal of Kolb's theory concerns the learner's internal cognitive processes. Kolb stated, "Learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 1984, p. 38).

Kolb (1974) viewed learning as an integrated process, with each stage being supportive of the other. It is possible to enter the cycle at any stage; however effective learning only occurs when a learner is able to execute all four stages of the model.

Kolb's learning theory (1974) set out four distinct learning styles, which are based on a four-stage learning cycle. Kolb explained that different people have a preferred learning style due to various factors. Whatever influences the preferred learning style is the product of two pairs of variables, or two separate 'choices' that we make. The Learning Styles model is best presented as a two-by-two matrix where each learning style represents a combination of two preferred styles. Kolb presented these two continuums as lines of axis, each with 'conflicting'

modes at either end. The east-west axis was called the Processing Continuum (how we approach a task), and the north-south axis was called the Perception Continuum (our emotional response), or (how we think or feel about it). Kolb believed that one cannot perform both variables on a single axis at the same time (e.g., thinking and feeling or watching and doing) and that a person's learning style was a product of these two-choice decisions. The model also presented Kolb's terminology for the four learning styles: diverging, assimilating, converging, and accommodating.

The Learning Style Inventory version 4.0 (KLSI 4.0), revised in 2011, was the latest revision of the original Learning Style Inventory developed by David A. Kolb, based on Kolb's 1984 experiential learning, designed to help individuals identify the way they learn from experience (<https://learningfromexperience.com/research-library/the-kolb-learning-style-inventory-4-0/>).

Saul McLeod published brief descriptions of Kolb's four learning styles as they related to Kolb's Experiential Learning Cycle (2013):

Diverging (feeling and watching–CE/RO)

These people are able to look at things from different perspectives. They are sensitive. They prefer to watch rather than do, tending to gather information and use imagination to solve problems. They are best at viewing concrete situations at several different viewpoints. Kolb called this style 'diverging' because these people perform better in situations that require ideas-generation, for example, brainstorming. People with a diverging learning style have broad cultural interests and like to gather information. They are interested in people, tend to be imaginative and emotional, and tend to be strong in the arts. People with the diverging style prefer to work in groups, to listen with an open mind and to receive personal feedback. (McLeod, 2013)

Assimilating (watching and thinking–AC/RO)

The Assimilating learning preference is for a concise, logical approach. Ideas and concepts are more important than people. These people require good clear explanation rather than practical opportunity. They excel at understanding wide-ranging information and organizing it in a clear logical format. People with an assimilating learning style are less focused on people and more interested in ideas and abstract concepts. People with this style are more attracted to logically sound theories than approaches based on

practical value. People with this style prefer readings, lectures, exploring analytical models, and having time to think things through. (McLeod, 2013)

Converging (doing and thinking–AC/AE)

People with a converging learning style can solve problems and will use their learning to find solutions to practical issues. They prefer technical tasks and are less concerned with people and interpersonal aspects. People with a converging learning style are best at finding practical uses for ideas and theories. They can solve problems and make decisions by finding solutions to questions and problems.

People with a converging learning style are more attracted to technical tasks and problems than social or interpersonal issues. A converging learning style enables specialist and technology abilities. People with a converging style like to experiment with new ideas, to simulate, and to work with practical applications. (McLeod, 2013)

Accommodating (doing and feeling–CE/AE)

The Accommodating learning style is ‘hands-on’, and relies on intuition rather than logic. These people use other people’s analysis, and prefer to take a practical, experiential approach. They are attracted to new challenges and experiences, and to carrying out plans. They commonly act on ‘gut’ instinct rather than logical analysis. People with an accommodating learning style will tend to rely on others for information rather than carry out their own analysis. (McLeod, 2013)

S. McLeod (2013) maintained that teachers could use both Kolb’s (1984) learning stages and Experiential Learning Cycle to provide and develop more appropriate learning opportunities to ensure activities are designed and carried out in ways that match each learner’s learning style. In addition, McLeod pointed out that through the application of the experiential learning cycle, teachers may help their students learn more effectively by identifying and strengthening their students’ less preferred learning style. “Ideally, activities and material should be developed in ways that draw on abilities from each stage of the experiential learning cycle and take the students through the whole process in sequence (McLeod, 2013).

Transformative learning theory.

“...transformative learning occurs when something causes people to examine their assumptions about the world (Cranton 2016). Over their lifetime, people develop a

perspective of how they see the world. Much of what they come to believe has been simply accepted as fact from their family, culture, and other sources, such as the media or community, without being questioned. People build a set of assumptions or beliefs about the world which underlie their behavior. This set of assumptions was the frame of reference through which people operate. (Kroth & Boverie, 2014)

Kitchenham (2008) stated in his *Journal of Transformative Education* article that it is important [critical] to note [perceive] that people can change [transform] their points of view “by trying on another’s point of view” (Mezirow, 2000).

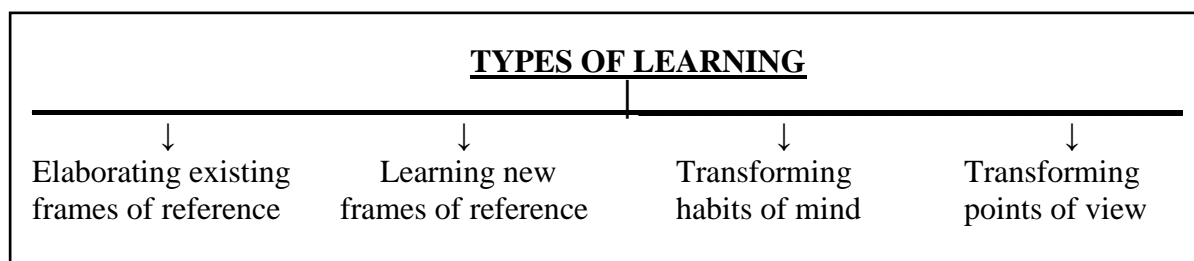


Figure 10. Mezirow’s four types of learning reflecting the revised theory of transformative learning (2000).

Mezirow (1997) believed:

- Transformative learning is the cognitive process of effecting change in a frame of reference.
- Frames of reference are composed of two dimensions: habits of mind and points of view.
- Habits of mind, such as ethnocentrism, are harder to change than points of view.
- Habits of mind influence our point of view and the resulting thoughts or feelings associated with them, but points of view may change over time as a result of influences such as reflection, appropriation and feedback.

- Transformative learning takes place by discussing with others the “reasons” presented in support of competing interpretations, by critically examining evidence, arguments, and alternative points of view.
- When circumstances permit, transformative learners move toward a frame of reference that is more inclusive, discriminating, self-reflective, and integrative of experience.

Mezirow’s Transformative Learning Theory (1991) suggested that the supporting of significant changes occur through three main stages:

- Becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world
- Changing these structures of habitual expectation to make possible a more inclusive discriminating, and integrating perspective
- Making choices or otherwise acting upon these new understandings

According to Edward W. Taylor (2008), transformative learning theory sought to explain how humans revise and reinterpret meaning).

Mezirow and Taylor agreed,

Transformative learning theory (Mezirow, 1991) was perhaps the leading adult learning theory of their day (Taylor 2007), and students, practitioners, and faculty were still finding ways to practice it. This useful theory has been applied to a variety of settings, in such areas as higher education, workplace education, community, and social change (Mezirow & Taylor, 2009).

Mezirow, an American sociologist and Emeritus Professor of Adult and Continuing Education at Teachers College, Columbia University:

- emphasized that transformative learning (1997) is rooted in the way human beings communicate and is not linked exclusively with significant life events of the learner.
- believed students make shifts in their worldview through a combination of reflection and communication, thereby producing more inclusive worldviews.
- understood one of the benefits of transformational learning was the development of greater autonomy as a person, a defining condition of adulthood.
- described a transformative learning environment as one in which those participating have full information, are free from coercion, have equal opportunity to assume various roles, can become critically reflective of assumptions, are empathetic and good listeners, and are willing to search for common ground or a synthesis of different points of view.
- identified several ways to stimulate transformational learning, including journal writing, metaphors, life history exploration, learning contracts, group projects, role play, case studies, and using literature to stimulate critical consciousness. He believed these could stimulate critical reflection and rational communication, essential elements of the transformative process in his model.
- strongly emphasized that transformational learning came about through discussion and exploration of concepts relating to these kinds of experiences and was not an advocate of creating intense emotional experiences in transformative learning.

“Building intercultural competence involves increasing cultural self-awareness; deepening understanding of the experiences, values, perceptions, and behaviors of people from

diverse cultural communities; and expanding the capability to shift cultural perspective and adapt behavior to bridge across cultural differences” (Hammer, 2009d, 2010, 2011).

Cranton (2016) wrote in her book, *Understanding and Promoting Transformative Learning: A Guide to Theory and Practice*, “Education leads to change—changes in the amount of knowledge people have, changes in skills and competencies, changes in the way we communicate and understand each other, changes in our sense of self, and changes in our social world.”

Transformational learning has powerful potential for enhancing and accelerating the change process in students, however, there are important considerations for instructors and students. Baumgartner (2001) advocated the following instructor and student characteristics and roles which facilitate transformational learning in the classroom.

- Encourage students to reflect on and share their feelings and thoughts in class.
- Be holistically oriented, aware of body, mind, and spirit in the learning process.
- Become transcendent of his own beliefs and accepting of others’ beliefs.
- Cultivate awareness of alternate ways of learning.
- Establish an environment characterized by trust and care.
- Facilitate sensitive relationships among the participants.
- Demonstrate ability to serve as an experienced mentor reflecting on his own journey.
- Help students question reality in ways that promote shifts in their worldview.

Figure 11. Instructor characteristics and roles which facilitate transformational learning.

- Students must be free to determine their own reality, as opposed to social realities defined by others or by cultural institutions.
- Students must be ready for and open to change.
- Those with a wider variety of life experiences, including prior stressful life events, are likely to experience more transformation.
- Cultivate the ability to transcend past contexts of learning and experience.
- Students must be willing and able to integrate critical reflection into their school work and personal life.
- Students must be able to access both rational and affective mental functioning.
- Have sufficient maturity to deal with paradigm shifts and material which differs from their current beliefs.

Figure 12. Student characteristics and roles which facilitate transformational learning.

Transformative learning cannot be taught; it is the learner who experiences transformative learning. Most important, facilitating and engaging in the process of transformative learning require a great deal of effort, courage, and authenticity on the part of both the educator and the learner, because there is considerable risk and the effort may or may not result in reward. (Grabove, 1997)

Constructivism. “Because knowledge is constructed from prior experience, the meanings that people make of specific experiences are highly diverse and individual. The network patterns in individual brains are the product of experience; no two brains have the same networks” (Zull, 2002).

The process and experience of transformative learning reflects the uniqueness of each individual and the context within which it is practiced. James Zull (2002) helped us understand the physical effect experience has on learning. Zull’s Four Pillars of Learning (gathering data,

reflection, creating and testing) were related to the inner-workings of the brain. Zull stated, “Transformation is deep and abiding change when we truly grasp something new and use it in our life. That change emerges as we go through the learning cycle, demonstrating it in our actions, beliefs and behaviors” (Zull, 2012). As students are learning they are actively engaged in the art of changing the brain (Zull, 2002) These brain processes (gathering data, reflection, creating and testing) dynamic, fluid, and linked to one another. As Zull explains in *The Art of Changing the Brain* (Zull, 2002), there is extensive wiring carrying information both forward and backward between the regions of the brain cortex that are heavily engaged by these cognitive functions. He emphasized the importance of students being aware of their own mental processing and theorizing, or metacognition.

Moving clockwise from the top of the diagram below shows how the experiential learning cycle links to the reflective brain-based learning cycle.

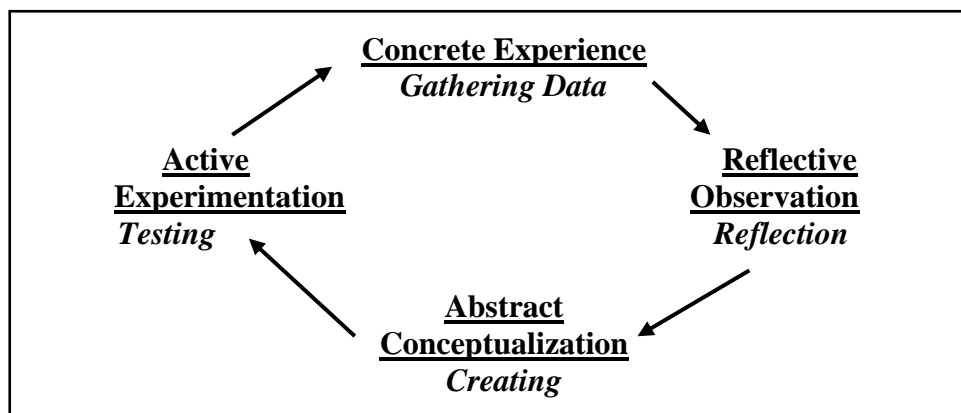


Figure 13. Kolb’s Model of Experiential Learning/Zull’s 4 Pillars of Learning.

Cultural self-awareness and perspective shifting. Anthropologist Raymonde Carroll in her book, *Cultural Misunderstandings: The French-American Experience* (1988), personified an effective cultural analysis methodology which encouraged the inquiring observer to look for the

“bizarre” and then try to imagine a world in which the “bizarre becomes “normal”, or logically acceptable, within its own cultural context. Reflecting on life experiences and the conflict they may bring, Carroll suggested a neutral interpretation, either written or mental, of the experience be given from the perspectives of all cultures represented. Carroll affirmed, “In other words, I must try to enter, for an instant, the cultural imagination of the other” (Carroll, 1988). Thus, these experiences provided individuals the opportunity to demonstrate their capability to shift their cultural perspective and adapt their behavior to cultural commonalities and differences (Hammer, 2011).

Effective teaching and learning practices. The National Research Council’s *How People Learn: Brain, Mind, Experience, and School: Expanded Edition* (Bransford, Brown, & Cocking, 2000), reviewed the literature on learning as the basis for recommending evidence-based principles for good teaching. The National Research Council described four major characteristics around which to organize learning environments:

- The learners and what they bring to the educational setting
- The knowledge that they are poised to acquire, make sense of, and transfer
- The assessment practices provided for feedback and revision
- The multiple community contexts that set norms and expectations

“In redesigning teaching practices, effective revisions must take into account the issue of alignment, which means coordinating learning opportunities with learning goals in order to increase the likelihood that students will reach desired learning outcomes” (Bransford et al, 2000).

In 2004, Janet M. Bennett and Milton J. Bennett outlined a model for the development of intercultural sensitivity using an integrative approach. “According to this model, individuals respond to cultural differences in identifiable stages. In the first stage, those who see culture as a barrier tend to deny, resist, or minimize differences. In the second, those who see culture as a resource tend to accept and appreciate differences” (Bennett & Bennett, 2004). To develop an individual’s cultural competence, appropriate opportunities need to be created in order for a person to move from stage one to stage two (Landis, Bennett, & Bennett, 2004).

Educational research, as pointed out by Bennett and Salonen (2007), has shown that individuals must do more than just be present at cultural events to develop their intercultural competence. Instead, they support the research findings that “intercultural competence is advanced through developmental opportunities, grounded in theory and facilitated experiences” (Bennett & Salonen, 2007). As a result, these experiences provide individuals the opportunity to demonstrate their capability to shift their cultural perspective and adapt their behavior to cultural commonalities and differences (Hammer, 2009d).

Intercultural competence through cultural self-study. In 2009, Robert C. Weigl published a report entitled, *Intercultural competence through cultural self-study: A strategy for adult learners*. His study consisted of individuals learning a set of concepts and categories to describe what culture is, and then applying those concepts and culture categories to oneself before applying them to others. Weigl’s qualitative study consisted of 376 University of Virginia cross-cultural psychology students he had taught for over twelve years. Using his findings, Weigl put forth five propositions connecting a cultural self-study to the development of intercultural competence.

Proposition 1. Cultural self-studiers become more curious about other cultures.

Proposition 2. Concepts and categories used to describe oneself subsequently will be used more sensitively and accurately to describe others.

Proposition 3. Self-studiers are more likely to anticipate the pervasiveness and authority with which culture operates in others' lives.

Proposition 4. Cultural self-awareness increases self-studiers' capacity to identify bias.

Proposition 5. Self-studiers discover an emerging capacity to arrest their automatic enactment of their culture in order to more accurately participate in the experiences of those from another culture.

His eight categories of self-study are:

1. Historical roots and longstanding memberships.
2. Beliefs, values, and worldviews.
3. Settings and scripts important in one's socialization.
4. Group experiences.
5. Personal characteristics rewarded by one's culture related to gender, age and social class.
6. The scripting of one's personhood.
7. Cognitive style
8. Overview of your cultural programming and identity.

Weigl acknowledged a large group of theorists, practitioners, and researchers who contributed to his efforts in developing this self-study protocol (Weigl, 2009).

The learning contract. Malcolm Knowles (1975, 1987), an expert in the field of adult learning, promoted using a “learning contract” as a plan for acquiring specified knowledge, understanding skills, attitudes, or values by a learner. A typical individualized learning contract contained the following:

- The specific, measurable learning objectives to be accomplished
- The variety of resources and strategies to be used in accomplishing them
- The evidence that would be collected to indicate the extent to which the objectives had been accomplished
- How this evidence would be judged or validated
- The target date for completing each objective
- Documented results
- Evaluation of learning

Individual and group reflection strategies used to prepare preservice teachers. As classrooms become more diverse, one of the essential goals of teacher education programs is to prepare preservice teachers to work with children of diverse populations (Cochran-Smith, 2000; Ladson-Billings, 1995). Preservice teachers who come from a dominant White culture will clearly face this challenge (Sleeter, 2001). One effective teaching practice used by preservice teachers to grasp the issues of cultural awareness, sensitivity, and diversity involves regularly reflecting on one’s identity in relationship to others (Garmon, 2005).

The developing art of intercultural facilitation. According to Janet M. Bennett (2012), the success of any intercultural learning activity depends on how the facilitator sets up the

activity and debriefs it. Figure 14 provides Bennett's brief checklist for setting up such an activity.

Bennett contended the debriefing naturally emerges from the setup, as it focused on the stated objectives, the specific concepts, and the agreed upon questions. Moreover, the follow-up session should provide opportunities for unexpected insights, observations from various intercultural perspectives, and random, rich, spontaneous comments that often emerge in intercultural discussions.

1. Introduce the activity, emphasizing (as appropriate) the cultural concept or framework being explored.
2. Relate the planned activity to participants' context and establish its relevance.
3. Provide the participants with the necessary cultural data, history, or background to enhance their learning during the activity.
4. Deliver reassurances to address resistance and fear.
5. Clearly state the objectives for using the activity, as well as a specific question you expect them to answer, or specific observations you expect them to make.
6. Supply the participants with written objectives, guidelines, and checklists as appropriate.
7. Outline the specific debriefing questions you will use after the activity.

Figure 14. Setting up an intercultural competence learning activity (Bennett, 2012).

Research Related to Assessing and Measuring Intercultural Competence

The modern wave of globalization has created a demand for increased intercultural competence (ICC) in college graduates who will soon enter the 21st century workforce. Despite the wide attention to the concepts and assessment of ICC, few assessments meet the standards for a next-generation assessment in areas of construct clarity, innovative item types, response processes, and validity evidence. (Griffith et al., 2016)

Developing and assessing intercultural competence using Deardorff's theoretical framework. All institutions within Deardorff's 2006 study agreed it was important to assess students' intercultural competence. Eighty percent or more of the intercultural scholars and administrators in the study reached consensus on 22 essential elements of intercultural competence, consisting primarily of communication and behavioral elements. Deardorff organized these agreed upon elements of intercultural competence into two visual models that could be used for the purposes of developing and assessing intercultural competence.

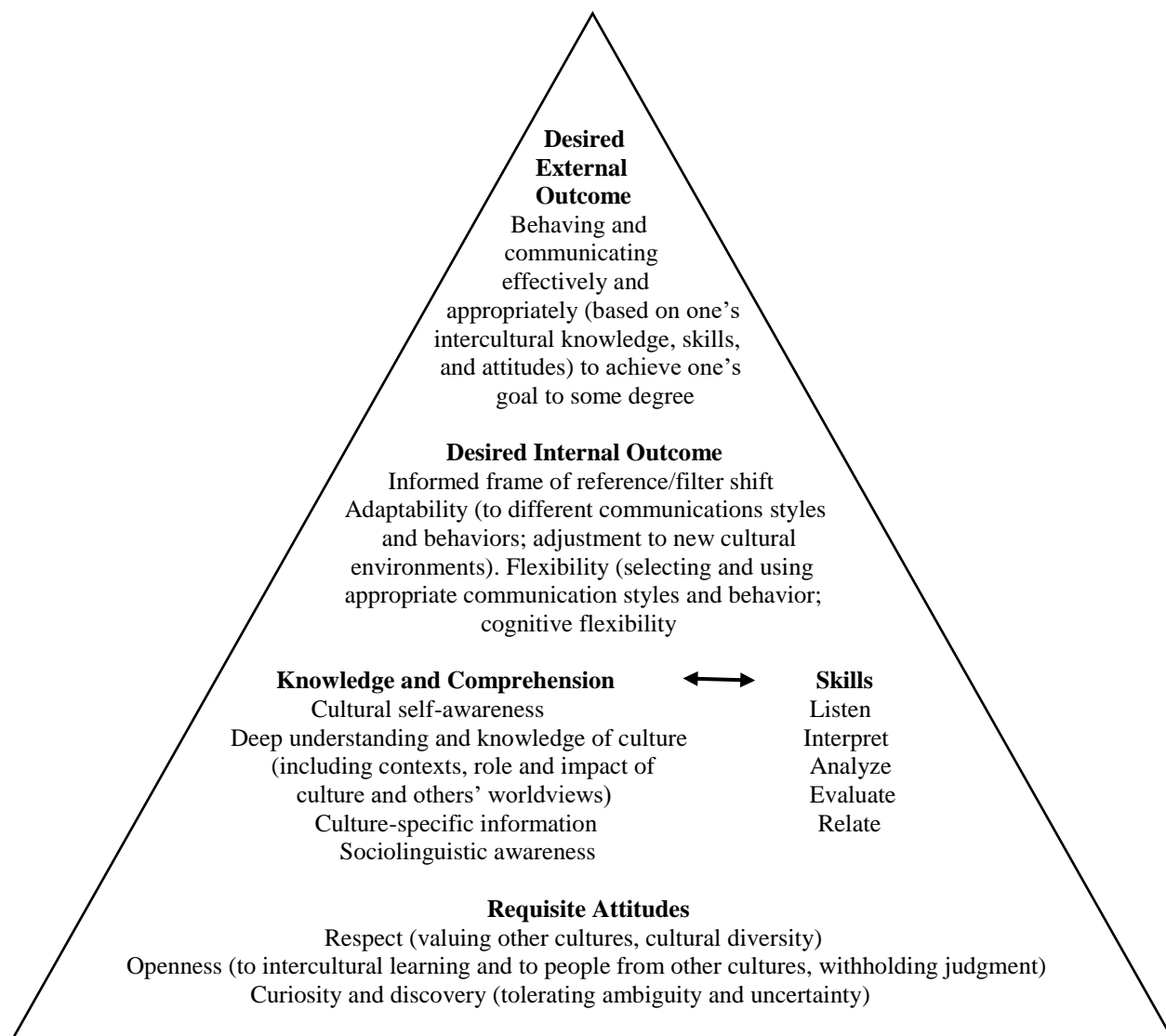


Figure 15. Deardorff's Pyramid Model of Intercultural Competence.

Professor Darla Deardorff explained, "This pyramid model of intercultural competence" (Figure 15) allows for degrees of competence (the more components acquired and developed increases probability of greater degree of intercultural competence as an external outcome), and although it provides some delineation of the definition, it is not limited to those components included in the model. This model enables the development of specific assessment indicators within a context or situation while also providing a basis for general assessment of intercultural

competence, thus embracing both general and specific definitions of intercultural competence. This model of intercultural competence moves from the individual level of attitudes and personal attributes to the interactive cultural level in regard to the outcomes. The specific skills delineated in this model are skills for acquiring and processing knowledge about other cultures as well as one's own culture. The model also emphasizes the importance of attitude and the comprehension of knowledge (Bloom, 1965).

A unique element of this pyramid model of intercultural competence is its emphasis on the internal as well as external outcomes of intercultural competence. The internal outcome, which involves an internal shift in frame of reference, although not requisite, enhances the external (observable) outcome of intercultural competence. The external outcome can be described as essentially "behaving and communicating appropriately and effectively in intercultural situations" (Deardorff, 2004, p. 196). Definitions of effective and appropriate are taken from Spitzberg's (1989) work, "where appropriateness is the avoidance of violating valued rules and effectiveness is the achievement of valued objectives."

Through Deardorff's 2006 study, the attitudes of respect (valuing other cultures), openness (withholding judgment) and curiosity and discovery (tolerating ambiguity), were viewed as fundamental to intercultural competence. Consensus was reached on specific intercultural competence skills that could be assessed, including the abilities to listen, observe, evaluate, analyze, interpret, and relate. Desired internal and external outcomes were reached which included adaptability, flexibility, ethnorelative view, empathy, and effective and appropriate communication and behavior in an intercultural situation.

Another way of organizing and displaying the final data is the process model developed by Deardorff (2004). This process model of intercultural competence, while containing

the same elements as the first pyramid model of intercultural competence; depicts the complexity of acquiring intercultural competence in outlining more of the movement and process orientation that occurs between the various elements. This model denotes movement from the personal level to the interpersonal level (intercultural interaction). As in the pyramid model, it is possible to go from attitudes and/or attitudes and skills/knowledge directly to the external outcome, but the degree of appropriateness and effectiveness of the outcome may not be nearly as high as when the entire cycle is completed and begins again. The unique element of internal as well as external outcomes is also maintained with this process model, and in fact, it would be possible for an individual to achieve the external outcome of behaving and communicating appropriately and effectively in intercultural situations without having fully achieved the internal outcome of a shift in the frame of reference. However, the degree of appropriateness and effectiveness would be more limited than if the internal outcome had also been achieved. (Deardorff, 2006)

This process model also demonstrates the ongoing process of intercultural competence development, which means it is a continual process of improvement, and as such, one may never achieve ultimate intercultural competence. As with the pyramid model, the attitudinal element in this process model is the most critical, and as such, attitudes, are indicated, as the starting point in the cycle. (Deardorff, 2006)

In summary, intercultural scholars agreed from Deardorff's 2006 study that:

- Intercultural competence consisted of many components working simultaneously.
- Understanding others' worldviews (defined as basic perceptions and understandings of the world itself) was fundamental to intercultural competence.

Deardorff asserted that her two intercultural competence models, the pyramid model of intercultural competence and the process model of intercultural competence, "can help educators specifically identify characteristics of intercultural competence that can be prioritized and translated into clear learning objectives that are actually measured or evaluated through assessment plans" (Deardorff, 2011).

As a part of these assessment plans to assess intercultural competence, Deardorff (2011) outlined an assessment process that included the following:

1. Define what the development of intercultural competence is.
2. Establish the purpose of why you are developing your intercultural competence.
3. Set your intercultural competence goals.
4. Identify your measurable objectives.
5. Collect direct and indirect evidence of learning.

Direct assessment evidence of intercultural competence may include learning contracts, e-portfolios, critical reflection, and performance. Indirect assessment evidence of intercultural competence may include surveys, inventories, interviews, and focus groups (Deardorff, 2011).

The Educational Testing Service (ETS; Griffith et al.) reports in its 2016 report, “Assessing Intercultural Competence in Higher Education: Existing Research and Future Directions,” that higher education institutions recognize the benefits of measuring their students’ intercultural competence. However, many of the assessments available to university administrators are self-report measures which lack reliability or validity.

ETS also verifies the importance of higher education institutions use of valid and reliable assessments to develop and graduate interculturally competent students and market their success (Griffith et al., 2016).

The ABC’s model.

Schmidt (1998, 1999) developed the ABC’s Model based on the following premises. One must be familiar with one’s cultural background and values before understanding others’ cultural backgrounds (Banks, 1994; Zeichner, 1993). Learning about others’ life experiences exposes one to others’ cultures. (Schmidt, 1998). Cross-cultural analysis of one’s own and others’ cultures in turn, enhances one’s awareness of similarities and differences among various cultures. (Spindler & Spindler, 1987)

The ABC's Model (Schmidt, 1999) includes five components:

- A detailed autobiography written by each student that includes key life events related to education, family, religious tradition, recreation, victories, and defeats.
- A biography of a person culturally different from the student, written from in-depth, unstructured interviews (Spradley, 1987) that include key life events.
- A cross-cultural analysis of similarities and differences between the life stories of the student, and the person culturally different from the student, is charted. (Spindler & Spindler, 1987).
- An analysis of cultural differences examined in writing with encouragement for students to explain personal discomforts and identify positive affect.
- Modification for classroom practice and communication plans for literacy development and home/school connections, based on the preceding process, are designed to a study that explored the following: Schmidt, P. R. (1999). Focus on research: Know thyself and understand others. *Language Arts*, 76, 332-340.

Schmidt (1998) used the ABC's Model with preservice and inservice teachers in her multicultural education course. The application of the model indicated that the preservice and inservice teachers developed sensitivity to their attitudes, feelings, and behaviors toward differences. Hong Xu (2000), assistant professor at Texas Tech University, adapted Schmidt's ABC's Model with her preservice teachers. Results indicated the preservice teachers examined and clearly identified their values and beliefs, along with an openness toward the acceptance of cultural differences with their students. Others responded to differences with feelings of discomfort, concern, and challenge.

Existing intercultural competence assessments. There are few instruments that assess a person's intercultural competence or sensitivity. For the study, the Intercultural Development Inventory was chosen, an indirect assessment, and the Intercultural Development Plan using IDI Guided Development (Hammer, 2012a) as a direct learning contract, with critical reflection, and performance (Deardorff, 2011).

“In the mid-1980s, Milton Bennett conceptualized the Developmental Model of Intercultural Sensitivity” (Bennett, M., 1986, 1993). He and Mitch Hammer later constructed the Intercultural Development Inventory, which was subsequently adopted by colleges and corporations to gauge orientations toward difference, as a diagnostic tool to ascertain a potential learner's readiness for cross-cultural training, and as a pre- and post- instrument to measure development from ethnocentric to more ethnorelative orientations.

The Intercultural Development Inventory (IDI) (Hammer & Bennett, 2001) was developed to “assess intercultural competence—the capability to shift cultural perspective and appropriately adapt to cultural differences and commonalities.” The Intercultural Development Inventory is a 50-item questionnaire available online that can be completed in 15–20 minutes. An individual's IDI assessment results indicate how a person constructs his or her view of cultural difference. These results are then applied to the Intercultural Development Continuum (IDC) which describes a set of knowledge/attitude/skill sets or orientations toward cultural difference and commonality. This continuum is adapted from the Developmental Model of Intercultural Sensitivity originally proposed by Milton Bennett. The continuum is ordered “from the more monocultural mindsets of Denial and Polarization, through the transitional orientation of Minimization, to the intercultural or global mindsets of Acceptance and Adaptation.” The

capability of deeply shifting cultural perspective and bridging behavior across cultural differences is most fully achieved when one maintains an Adaptation perspective. Various studies have provided data to show that the IDI is highly reliable and valid.

“A growing body of research assesses the development of intercultural competence using the Intercultural Development Inventory” (DeJaeghere & Cao, 2009). DeJaeghere and Cao (2009) reported that most studies that have used the IDI have assessed the intercultural competence of high school and undergraduate students studying or living abroad (e.g., Anderson, Lawton, Rexeisen, & Hubbard, 2006; Paige, Hegeman, & Jon, 2006; Straffon, 2003; Vande Berg, Balkcum, Scheid, & Whalen, 2004). A small number of studies have assessed non-U.S. teachers (Fretheim, 2007; Westrick & Yuen, 2007). Very few studies have used the IDI (Hammer & Bennett, 2001) to assess teachers’ cultural competence levels in the United States (Bayles, 2009; Mahon, 2006). Mahon’s intercultural competence study of 155 elementary and secondary school teachers indicated that more than 60% of them were at the developmental level of minimization. Bayles’ (2009) study of 233 elementary school teachers in a large southern urban district indicated that 91% of them were at the developmental levels of denial or minimization. Both studies indicated monocultural worldviews of most of these teachers. “The IDI is an appropriate instrument for assessing educators in schools because of the nature of the developmental process that can be supported through learning and experiences, e.g., professional development” (DeJaeghere & Cao, 2009). DeJaeghere and Cao’s 2009 study of 86 elementary school teachers from a Midwestern U.S. urban area indicated that intercultural competence can be developed through school professional development, without an “immersion” experience overseas. Using the DMIS as a process model, it assessed IDI guided development over a longer

period of time (from 2.5 to 4 years) during which a series of school-based professional development initiatives were undertaken. The training that was provided included IDI assessments, group profile presentations, and individual profile discussions. The data were used to target the intercultural strengths and needs of the group (Hammer & Bennett, 2001). In addition to the district and school-level professional development, teachers were encouraged to promote their personal intercultural development through learning opportunities that included reading books, taking courses and participating in community activities. After the professional development learning opportunities, teachers retook the IDI with results showing a significant increase in the teachers' IDI scores. Further analysis suggested that educators can increase their intercultural competence considerably through guided professional development (DeJaeghere & Cao, 2009). In their study, DeJaeghere and Cao used the Intercultural Development Inventory dually as a needs assessment and program evaluation tool.

Short, formative assessments with feedback can help move students forward developmentally in a manner that supports transformative learning: identifying and discussing an activating event that highlights the limitations of a student's current knowledge, reflecting critically about why the student might hold those assumptions, discussing alternative approaches with others, and testing new perspectives. These prompts could be given as written, oral, or electronically mediated assignments encouraging students to become more reflective, experiential, and intercultural. (Vande Berg, Paige, & Lou, 2012)

Summary

Chapter II reviewed literature in three areas related to the study. The first section provided definitions related to the term 'Intercultural Competence', including conceptual frameworks, models and rubrics. The second section provided theories, models, practices, and strategies that may affect the development of intercultural competence. Lastly, the third section provided a review of research related to assessing and measuring intercultural competence.

The review of literature provided an overview of what has been researched so far on the development of intercultural competence and it showed there is a need for more research on how the guided development process of building intercultural competence involves cultural self-awareness, understanding the experiences of people from diverse communities, and the capability to adapt one's mindset and behavior to bridge across differences.

Chapter III details the methodology pertinent to the study research questions, participants, human subject approval, instruments for data collection, research design, treatment of data, procedures and timeline.

Chapter III: Methodology

Introduction

The study examined the Intercultural Development Inventory pre-post test data and responses from 45 preservice elementary teachers attending a Minnesota State University to describe the effect of the administration of the IDI Guided Development process on their intercultural competence development.

IDI Guided Development is an innovative, comprehensive, assessment-driven approach to developing an individual's intercultural competence, particularly the ability to shift cultural perspective and appropriately adapt behavior to cultural differences and commonalities in various situations. The approach is a proprietary developmental support system that involves the identification of intercultural goals and intercultural challenges (stress points) that prevent individuals from meeting identified goals and strategies that may be used to address intercultural challenges (Hammer, 2012a).

Developing intercultural competence is a *self-reflective, intentional process* focused on understanding patterns of difference and commonality between the individual (and his/her cultural group) and other culture group's perceptions, values and practices. It is this self-reflective intentional process that is highlighted in the Intercultural Development Plan" (Hammer, 2012b)

"Concentrated, self-reflective efforts at building intercultural competence, tailored to IDI profile results may result in a movement along the developmental continuum of one or more orientations" (Hammer, 2012b). These efforts can include a range of learning opportunities and activities including: training programs; workplace activities; theatre, film and arts; educational classes; personal interaction; intercultural journal; books; travel; coaching; and site visits (Hammer, 2012b).

“It is not simply participating in activities or attending cultural events that is important, rather it is the *intentional reflection on the cultural patterns of commonality and difference* that make up these activities/events that will contribute to intercultural competence development.” (Hammer, 2012b).

Research Questions

The research questions of the study were as follows:

1. To what extent did pre-post test results vary using the Intercultural Development Inventory?
2. Did the process of IDI guided development have a positive effect on the participants’ intercultural competence growth?

Participants

The study’s population was comprised of 45 undergraduate students at a Minnesota State University. Participation in the study was voluntary. The 45 participants selected to participate in the study were elementary preservice teachers at a Minnesota State University where the faculty in the College of Education at the Minnesota State University conducted culturally responsive teaching which integrated a focus on cross-cultural communication and cross-cultural relations.

Participants were at least 18 years of age or older and participated in the study from the end of January through the end of April 2014. Participants may have withdrawn from participation at any time and for any reason, without any consequences.

Human Subject Approval–Institutional Review Board (IRB)

The researcher’s training on the conduct of a study involving human subjects was completed on October 6, 2017.

Following approval of the preliminary study design by the researcher's doctoral committee on November 16, 2017, the study design was submitted to the Instructional Review Board (IRB) for review on November 27, 2017. Final approval was secured from the IRB on November 27, 2017. Data collection measures, analysis and instruments included proper controls to ensure confidentiality for all participants and establish that no damage would occur to the universities or participants associated with those universities. The approval document from the IRB is included as Appendix A.

Instruments for Data Collection and Analysis

The two research instruments employed in the study were the Intercultural Development Inventory and the Intercultural Development Plan.

The Intercultural Development Inventory (IDI). "The Intercultural Development Inventory or IDI, is a statistically reliable, cross-culturally valid measure of intercultural competence adapted from the Developmental Model of Intercultural Sensitivity". (Hammer et al., 2003). "The IDI has been demonstrated through research to have high predictive validity to both bottom-line cross-cultural outcomes in organizations and intercultural goal accomplishments in education" (Hammer, 2011; Vande Berg, Paige, & Lou, 2012).

The IDI is a 50-item, theory-based instrument, taken online, and is currently available in seventeen languages. The IDI is a norm-referenced assessment that measures an individual's or group's level of intercultural competence along a developmental continuum with mindsets that range from Denial (disagree that cultural difference exists), Polarization (Denial/Reversal; view cultural differences from an "us versus them" perspective), Minimization (trivialize cultural differences; focus on cultural similarities), Acceptance (recognize and value cultural

differences), to Adaptation (take another person's cultural point of view and communicate accordingly).

After a student completes the Intercultural Development Inventory, the IDI generates individual intercultural competence profiles and a customized Intercultural Development Plan (IDP), a detailed plan for the individual to further develop his/her intercultural competence. An IDI Qualified Administrator, trained in the use of the IDI, reviews the IDI results with the participant.

In the study, the individual IDI scores were needed to help participants prepare their individual Intercultural Development Plans. Afterwards for the purposes of the study, the IDI scores were combined into a group profile and a group developmental orientation score.

The IDI data results illustrate the intercultural development of the group by comparing the pretest and posttest Developmental Orientation Scores (the group's primary IDI developmental orientation toward cultural differences and commonalities along the intercultural development continuum).

IDI guided development. The use of the IDI to help IDI Qualified Administrators build intercultural competence in their educational institutions and organizations was termed by Dr. Mitchell R. Hammer, "IDI Guided Development".

IDI Guided Development is an innovative, comprehensive, assessment driven approach to building intercultural competence targeted to accomplish intercultural goals through the Intercultural Development Inventory. IDI Guided Development is a systematic process for using the IDI profile results to select individual coaching strategies for individuals, to identify training activities to building intercultural competence for groups, and to more effectively develop diversity and inclusion solutions that span the domestic arena to the global environment. IDI Guided Development links IDI profile results to the goals and challenges individuals and groups face in navigating cultural differences — insuring that learning interventions go beyond "awareness building" to direct impact on critical needs and concerns. (Hammer, 2012a, p. 37)

Intercultural Development Plan (IDP). The Intercultural Development Plan or IDP, was developed and copywritten in 2012 by Dr. Mitchell Hammer for use with the IDI. The IDP is used in conjunction with an individual's IDI profile results. The study researcher, an IDI Qualified Administrator, provided individualized coaching to each preservice teacher as they developed and engaged with a customized plan of suggested activities to increase his/her intercultural competence.

Research Design

Participants accessed the Intercultural Development Inventory through the online IDI assessment website. After the participants completed the IDI inventory, each participant met for one hour with the IDI Qualified Administrator to review the participant's Individual Profile Report and develop his/her Intercultural Development Plan.

The study used a qualitative case study design (Slavin, 2007, p. 150). The research was conducted to determine the participants' and group's intercultural competence. A descriptive research method (Slavin, 2007, p. 99) was used to measure the growth change in the participants' intercultural competence over time, between the pretest and posttest. The study focused on the effect of the process of administering IDI Guided Development to increase the intercultural competence of preservice teachers.

Treatment of Data

The participants' demographic data were collected during the pretest and posttest. The data included gender, age, total amount of time a participant had lived in another country, education level, the world region in which the participant primarily lived during his/her

formative years to age 18, whether the participant was a member of an ethnic minority, and the country of citizenship of the participant.

The descriptive statistics analysis used in the study included a quasi-experiment, pre-post comparison design. In the quasi-experimental comparison design, subjects were assigned treatments non-randomly (Slavin, 2007, p. 51). Posttest scores were compared to pretest scores without a control group (Slavin, 2007, p. 57).

The IDI Group Profile Reports provided descriptive statistics, summarizing characteristics of the data in a form the participants and study researcher could understand and use (Slavin, 2007, p. 241).

The group's Perceived Orientation (PO Score) represented the group's perception of themselves on the Intercultural Developmental Continuum, and the group's Developmental Orientation (DO Score) represented the point at which the IDI located the group's primary orientation toward cultural differences and commonalities on the Intercultural Development Continuum.

Developmental Orientation profile scores ranged from 55 to 145. The Developmental Orientation profile provided standardized z-scores in which "100" represented the mean, 50th percentile, with a standard deviation of 15. The standardized profile score was presented in the same format as other measures including IQ scores, where "100" represents the average IQ of individuals. (Hammer, 2016, p. 143).

Using the pretest and posttest data, the perceived orientation and developmental orientation scores were compared and analyzed. These comparisons showed the changes in the group's perceived and developmental orientation levels after IDI Guided Development.

The calculated difference between the group's Perceived and Developmental Orientations was the Orientation Gap. The desired goal was to have as small a gap as possible between the perceived and developmental orientations, ideally a difference score less than seven.

The significance of the group's range of developmental orientations was evaluated.

Procedures and Timeline

The study was conducted during the spring semester of 2014 from the end of January through the end of April.

- Although there were no anticipated risks to participating in the study, in the event participants felt uncomfortable with or threatened by the materials or procedures included in the research, the university professor assigned to the participant and the research investigator were available to discuss the research and answer additional questions that the participant may have had.
- Data were considered confidential.
- Any information the participant supplied was analyzed and interpreted in conjunction with data from others in their group.
- Data supplied by the participant were used to develop an individual profile and Intercultural Development Plan (IDP).
- Participants completed the online version of the Intercultural Development Inventory (Hammer 2009c), a measure of cultural competency, twice during the semester.
- The pretest was administered at the beginning of the semester.
- The posttest was administered at the end of the semester.

- Participants completed the IDI online as a pretest. Results of the IDI Group Report were provided to participants during a one-hour group feedback session scheduled with the researcher, an IDI Qualified Administrator.
- In a separate one-hour session, each participant developed an Intercultural Development Plan with the coaching assistance of the IDI Qualified Administrator.
- Each participant implemented a customized Intercultural Development Plan during the spring semester.
- During the semester, the preservice teacher committed to engaging in 30 to 50 hours of intercultural learning opportunities the participant selected from at least three categories in the IDP.
- At the completion of the semester, each participant was re-administered an IDI posttest to measure his or her growth in intercultural competence.
- The pretest and posttest data for each participant were compared to determine the nature of intercultural competence growth that had occurred.
- Each preservice teacher responded at the completion of the semester to study research question, #2, Did the process of facilitated guided development have a positive effect on your intercultural competence growth? In other words, after the participants completed their Intercultural Development Plans and the IDI posttest the researcher gave each of the participants an Intercultural Development Plan (IDP) Reflective Feedback Survey during an Elementary Education preservice coursework classroom session. The participants completed the survey during class and gave it to the researcher prior to leaving the classroom.

Summary

The study examined the Intercultural Development Inventory pre-post test data and responses from a group of forty-five Minnesota State University preservice elementary school teachers to describe the effect that the administration of the IDI Guided Development process had on their intercultural competence development.

In the study, the preservice teachers completed the Intercultural Development Inventory (IDI) designed to assess their intercultural competence. The participants developed and completed an Intercultural Development Plan (IDP) within three months' time by engaging in suggested developmental opportunities for the purpose of increasing intercultural competence. The preservice teachers committed approximately 30 to 50 hours to complete their Intercultural Development Plan. Pre-post test data were compared to measure the effect of the IDI Guided Development process on their intercultural competence.

Chapter IV: Results

Overview of the Study

The study examined Intercultural Development Inventory pre-post test data and responses from a sample of preservice teachers. Additionally, the case study described the effect the process of administering IDI Guided Development had on increasing the intercultural competence of a sample of preservice teachers.

Chapter IV is organized by research question and accompanying numerical or narrative pretest-posttest descriptive statistics.

IDI Developmental Orientation Profile Scores

When discussing the results of the study, it is important to note that the IDI Developmental Orientation profile scores ranged from 55 to 145. The Developmental Orientation profiles provide standardized (z-score) scores in which “100” represents the mean (50th percentile) with a standard deviation of 15. This standardized profile score is thus presented in the same format as other measures (e.g., IQ, where “100” represents the average IQ of individuals). (Hammer, 2016).

Orientation score ranges on the Intercultural Development Continuum were:

- Denial orientation scores range from 55.00-69.99.
- Polarization: Defense/Reversal orientation scores range from 70.00 to 84.99.
- Minimization orientation scores range from 85.00 to 114.99.
- Acceptance orientation scores range from 115 to 129.99.
- Adaptation orientation scores range from 130.00 to 145.00.

Research Question One

To what extent did pre-post test results vary using the Intercultural Development Inventory?

The question sought to determine the pretest and posttest results of the participants' primary orientation toward cultural differences and commonalities along the intercultural development continuum as assessed by the Intercultural Development Inventory. The data were used to determine whether or not there were changes in the participants' responses in sixteen inventory areas including the group's perceived orientation, developmental orientations, the orientation gap, and the group's cultural disengagement.

Table 1 describes the changes in IDI perceived orientations, developmental orientations, and the orientation gap. Table 2 reveals the percentage changes in IDI developmental orientations. Table 3 reports the changes of the culturally disengaged participants. Table 4 depicts the most impactful intercultural development plan learning opportunities.

Changes in the Intercultural Development Pre-Post Test Scores

Table 1

Changes in the IDI Perceived Orientation, Developmental Orientation, and Orientation Gap (N = 45)

Intercultural Development Inventory (IDI) Group Profile Data	Pretest	Posttest	Change in Pretest- Posttest Scores
<i>Perceived Orientation</i> Where the group places itself on the Intercultural Development Continuum	120.6	129.7	+ 9.1
<i>Developmental Orientation</i> Where the IDI places the group on the Intercultural Development Continuum	94.6	112.2	+17.6
<i>Orientation Gap</i> The numerical difference between the perceived and developmental orientations	26.0	17.5	-8.5

Table 1 data reports changes in the Intercultural Development Pre-Post Test Scores through the process of administering IDI Guided Development to a sample of preservice teachers which had the following effects on the group's pre-post test results:

- The perceived orientation score, where respondents placed themselves along the Intercultural Development Continuum, advanced from 120.6 on the pretest, to 129.7 on the posttest, an increase of 9.1 points. The higher score indicated more participants perceived they had developed their intercultural competence toward an adaptation orientation, revealing they had shifted their cultural perspective and changed their behavior in culturally appropriate and authentic ways.
- The developmental orientation score, where the IDI placed the participants' primary orientation toward cultural differences and commonalities along the Intercultural Development Continuum, advanced from a pretest profile score of 94.6 to a posttest score of 112.2, an increase of 17.6 points. The higher score indicated that more participants had developed their intercultural competence toward an adaptation orientation, revealing they had shifted their cultural perspective and changed their behavior in culturally appropriate and authentic ways.
- The orientation gap, the numerical difference between the perceived and developmental orientations, decreased from 26.0 points on the pretest to 17.5 points on the posttest. A numerical difference of 7 or less, is considered an acceptable orientation gap difference. Thus, the results of the study signified a closing of the orientation gap between the preservice teachers' perceived and developmental orientations.

Percentage Changes in the Group Participants' Developmental Orientations

Table 2

Percentage Changes in IDI Developmental Orientations (N = 45)

Percentage Changes in IDI Developmental Orientations	Pretest	Posttest	Change in Pretest-Posttest Scores
<i>Denial</i> • Denied that cultural differences exist	0%	0%	0%
<i>Polarization</i> • Viewed cultural differences from an “us versus them” perspective	37.5%	8.9%	-28.6 %
<i>Minimization</i> • Trivialized cultural differences; focused on similarities	54.1%	37.8%	-16.3%
<i>Acceptance</i> • Recognized cultural values and differences	8.3%	40.0%	+31.7%
<i>Adaptation</i> • Took the other person’s cultural point of view and communicated accordingly	0.0%	13.3%	+13.3%
Total	99.9 %	100%	+0.1%

Table 2 data describes percentage changes in IDI developmental orientations. The percentage changes in the group participants’ pretest to posttest developmental orientations, where a respondent’s primary orientation toward cultural differences and commonalities along the intercultural development continuum as assessed by the IDI, vary:

- No participants had a pretest or posttest denial orientation, a mindset that denies that cultural differences exist.
- The percentage of participants with a polarization developmental orientation, a mindset that views cultural differences from an “us versus them” perspective, decreased by 28.6%.

- The percentage of participants with a minimization developmental orientation, a mindset that trivializes differences and focuses on similarities, decreased by 16.3%.
- The percentage of participants with an acceptance developmental orientation, a mindset that recognizes and values differences, increased by 31.7%.
- The percentage of participants with an adaptation developmental orientation, a mindset capable of taking the other’s point of view and communicating accordingly, increased by 13.3%.

Changes of Culturally Disengaged Participants

Table 3

Changes of Culturally Disengaged Participants (N = 45)

IDI Cultural Disengagement Being disconnected or detached from the primary cultural group	Pretest Score	Posttest Score	Change in Pretest-Posttest Scores
<ul style="list-style-type: none"> • Scores less than 4.00 indicated the group is not “resolved” and experienced to some degree a lack of involvement in core aspects of being a member of a cultural community. 	4.0	4.7	+0.7
Participants Culturally Disengaged (<i>Resolved</i>) <ul style="list-style-type: none"> • Experienced no sense of being disconnected from a primary cultural group 	27 (60.0%)	42 (93.3%)	+33.3%
Participants Culturally Disengaged (<i>Unresolved</i>) <ul style="list-style-type: none"> • Experienced a sense of being disconnected from a primary cultural group 	18 (40%)	3 (6.6%)	-33.4%
Total	100%	99.9%	-0.1%

Table 3 data illustrates the changes of culturally disengaged participants.

The IDI pretest indicated that 18 of 45 (40.0%) participants were culturally disengaged, lacking involvement in a primary cultural community, however after participating in IDI Guided

Development, only three participants (6.6%) were reported as culturally disengaged or disconnected from a primary cultural community.

After IDI Guided Development 42 of 45 (93.3%) participants had resolved their cultural disengagement and were now involved with or connected to a primary cultural community.

Research Question Two

Did the process of IDI Guided Development have a positive effect on the participants' intercultural competence growth?

The IDI Guided Development process used each participant's individualized IDI profile results combined with concentrated, self-reflective activities to develop his/her intercultural competence along the developmental continuum.

Each participant chose three or four categories from the IDP list of ten key learning opportunities. Figure 16, the IDP list of ten key learning opportunities, defines what each category may consist of.

Training Programs: Training programs offered by an organization, educational institution or community that focuses on intercultural relations.

Workplace Activities: Workplace committees and groups in which you can participate to build your intercultural skills.

Theatre, Film & Arts: Attendance at cross-cultural movies, plays, and other artistic exhibits and performances.

Educational Classes: Classes at a community college or university that focus on cross-cultural communication and cross-cultural relations.

Personal Interactions: Intentional work-related, personal, social, or community interactions with people from different cultures.

Intercultural Journal: Keeping an intercultural journal in which you reflect on cultural differences and commonalities you observe in your daily interactions with people from other cultural groups.

Books: Reading books that specifically describe and explain patterns of cultural difference and similarity.

Travel: Cross-cultural travel opportunities on the horizon where you can systematically observe and engage cultural diversity.

Coaching: The process of one-on-one IDI Guided Development® with a trained and experienced IDI Qualified Administrator

Site Visits: Specific cultural/ethnic site visits that can increase your knowledge about diverse cultural experiences

Figure 16. IDP list of ten key learning opportunities from the IDP.

The IDP stressed the importance of pre-service teachers not simply participating in cultural activities or attending cultural events. Instead, the IDP emphasized intercultural competence development was most impacted by reflecting on the cultural patterns of commonality and difference that made up the cultural activities or events.

Table 4

Most Impactful Intercultural Development Plan Learning Opportunities

What Intercultural Development Plan learning opportunities did preservice teachers' rate as most impactful in meeting their Intercultural Development Plan goals and removing intercultural stress points?	Most Impactful N = 45	Second Most Impactful N = 45	Third Most Impactful N = 45	Impact Totals N = 135	Percent of respondents who chose the learning opportunity as either the first, second or third most impactful choice (% of 45 respondents)
<i>Training Programs</i>	0	1	2	3	6.6%
<i>Workplace Activities</i>	1	4	6	11	24.4%
<i>Theatre, Film & Arts</i>	0	6	3	9	20.0%
<i>Educational Classes</i>	7	14	5	26	57.7%
<i>Personal Interactions</i>	28	8	2	38	84.4%
<i>Intercultural Journal</i>	4	2	4	10	22.2%
<i>Books</i>	0	3	8	11	24.4%
<i>Travel</i>	3	0	0	3	6.6%
<i>Coaching (IDI Guided Development)</i>	2	6	15	23	51.1%
<i>Site Visits</i>	0	1	0	1	2.2%
Number of Choices	45	45	45	135	

After the participants completed their Intercultural Development Plans and the IDI posttest, they were given the Intercultural Development Plan (IDP) Reflective Feedback Survey. The Table 4 survey showed 23 of 45 (51.1%) of respondents indicated coaching, the process of one-on-one IDI Guided Development® with a trained and experienced IDI Qualified Administrator, had a positive, impactful effect on their intercultural competence growth.

Unrelated to research question two, Table 4 revealed other IDP data gathered from the participants. The participants reported two other IDP learning opportunities seemed to have an impact on meeting their intercultural development plan goals. They were personal interactions, intentional work-related, personal, social, or community interactions with people from different cultures, with 38 of 45 (84.4%) respondents, and educational classes, classes at a community college or university that focus on cross-cultural communication and cross-cultural relations, with 26 of 45 (57.8%) respondents citing these learning opportunities as first, second, or third most impactful.

Table 4 data indicated that following the participants' completion of their Intercultural Development Plans, 23 of 45 (51.5%) indicated the process of IDI Guided Development (coaching) had a positive, impactful effect on their intercultural competence growth.

The process of developing intercultural competence Hammer (2011) stated is, "a core capability in the 21st century and involves cultural self-awareness, understanding the experiences of people from diverse communities, and the capability to adapt one's mindset and behavior to bridge across differences".

Summary

Chapter IV presented the findings of the study's two research questions.

Intercultural Development Inventory pre-post test data from a sample of preservice teachers were reported. The study group's perceived orientation and developmental orientation both increased. The study group's orientation gap decreased. Overall, the participants' posttest intercultural development orientations moved toward an adaptation developmental orientation on the intercultural development continuum.

Additionally, over half the preservice teachers indicated the process of Intercultural Guided Development had a positive effect on their intercultural competence growth.

Given these results, Chapter V provides the overall meaning of the results of the study, along with the researcher's comments and conclusions on the findings and recommendations for further research.

Chapter V: Summary, Conclusions, Discussion, Limitations, and Recommendations

Introduction

Chapter V provides an overview of the results of the study, Using IDI Guided Development to Increase Intercultural Competence. Contents of the chapter include the purpose of the study, the researcher's study conclusions, including common findings and differences between the literature review and the study, a discussion of the study's results, limitations, recommendations for further research, and recommendations for improving IDI Guided Development practice, leadership, and organizational development.

Purpose of the Study

The purpose of the study was to examine Intercultural Development Inventory pre-post test data and responses from a sample of preservice teachers. Additionally, the case study intended to describe the effect the process of administering IDI Guided Development had on increasing the intercultural competence of a sample of forty-five preservice teachers at a Minnesota State University.

The results of the study were believed to be important to preservice teachers, teacher preparation programs, colleges, universities, and the public because development of preservice teachers' intercultural competencies provide the knowledge and skills required of teachers to effectively teach diverse students. With intercultural competence skills, prospective teachers are prepared to address specific differences from an adaptation perspective and achieve an inclusive learning environment (Diller & Moule, 2005).

Conclusions of the Study

Common findings between the literature review and the study.

1. The study's IDI Guided Development included identified, assessed and measured clear intercultural competence learning objectives. The reviewed research stressed the importance of identified, assessed, and measured clear intercultural competence learning objectives (Deardorff, 2004, 2011).
2. The study verified the findings of Deardorff; a shift in a person's frame of reference, appropriate adaptive behavior and communication in intercultural situations, desired internal and external intercultural competence outcomes, a shift in a person's frame of reference, and appropriate adaptive behavior and communication in intercultural situations. The research review highlighted Deardorff's Process Model of Intercultural Competence and Deardorff's Pyramid Model of Intercultural Competence (2006). These models visualized the desired internal and external intercultural competence outcomes.
3. The study and reviewed research supported the interrelationship of one's own culture combined with a deep understanding of the role and impact of others' cultures, life experiences and worldviews, thereby enhancing one's awareness of similarities and differences among various cultures (Banks, 1994; Schmidt, 1998; Spindler & Spindler, 1987; Zeichner, 1993).
4. The reviewed literature pointed out that the Developmental Model of Intercultural Sensitivity (DMIS) operated as a guide in planning developmental experiential learning opportunities. Such developmental experiential learning opportunities,

- grounded in theory and facilitated experiences, were exercised in the study to develop an individual's intercultural competence by shifting one's cultural perspective and adapting one's behavior to cultural commonalities and differences. (J. M. Bennett, 1986; M. J. Bennett, 1986; Bennett, 1993; Bennett & Bennett, 2004; Paige, 2004; Landis, Bennett, & Bennett, 2004).
5. The study and reviewed research (Bennett & Salonen, 2007) pointed out individuals must do more than just be present at cultural events to develop their intercultural competence. Bennett and Salonen supported the research findings that "intercultural competence is advanced through developmental opportunities, (Bennett & Salonen, 2007). As a result, these experiences provided individuals the opportunity to demonstrate their capability to shift their cultural perspective and adapted their behavior to cultural commonalities and differences (Hammer, 2009d).
 6. The review of literature and the study supported the view that "Building intercultural competence involves increasing cultural self-awareness; deepening understanding of the experiences, values, perceptions, and behaviors of people from diverse cultural communities; and expanding the capability to shift cultural perspective and adapt behavior to bridge across cultural differences" (Hammer, 2009d, 2010, 2011).

The greatest difference between the literature review and the study. The greatest difference between previous research cited in the literature review and the study was the use of IDI Guided Development to help an individual increase his/her intercultural competence. The IDI Guided Development consisted of three elements:

1. A comprehensive five-step developmental process based on the participant's unique IDI profile results and developmental orientation
2. A customized personal plan of action, the Intercultural Development Plan (IDP)
3. Coaching by an IDI Qualified Administrator

Prior studies reported did not use IDI Guided Development, with the coaching guidance of an IDI Qualified Administrator, to increase intercultural competence.

Discussion

Drawing on the many educational principles of teaching and learning in the literature review, the study results demonstrated the importance of using a combination of high-quality assessment tools, a learning process for change, measurable goals and outcomes, and a coach to facilitate the learning.

At the onset of the study the researcher, an IDI Qualified Administrator, coached or assisted and encouraged each participant as he/she designed his/her Intercultural Development Plan (IDP).

Participants' involvement was integral to the success of the study. The engaged learner met intercultural goals which resulted in the students' development toward an adaptation orientation, where a shift in cultural perspective occurred and changed behavior in culturally appropriate and authentic ways.

The IDI Guided Development process incorporated the following keys to quality student-involved Assessment for Learning (Stiggins, 2007):

1. Participants benefited by having developed their own intercultural competence.
2. The intercultural goals were clear targets for the participants.

3. The IDP was a form of self-assessment for the participants to reflect on their learning and intercultural development.
4. Throughout the process students supported their learning with ongoing reflection.

The literature review highlighted many intercultural competence research studies; however, the research was not sufficiently inclusive in utilizing a well-designed, guided developmental process that incorporated experiential learning opportunities and brain-based learning strategies to develop the participants' intercultural competence. A well-designed guided process appeared to be absent. This may have unfortunately limited the transformational intercultural development of the participants in those studies.

After IDI Guided Development the percentage of participants in the study that changed their ethnocentric stage of intercultural sensitivity, where they viewed their own culture as the only or "better" culture, decreased markedly from 91.6% to 46.7%. Also, in the study the percentage of participants at the ethnorelative stage of intercultural sensitivity, where participants increasingly understood and experienced cultural differences from positive, equal perspectives or viewpoints, increased significantly from 8.3% to 53.3%. As a result, participants with ethnorelative positive mindsets about cultural differences tend to make more inclusive decisions.

Limitations

According to Roberts (2010), limitations are aspects of the study over which the researcher has no control and may therefore affect the results or the interpretation of the results.

The study's limitations are:

1. The participants were enrolled in one university and, therefore, the sample was not representative of other universities at a state, regional or national level.

2. The participants were university students and not necessarily inclusive of the general United States population.
3. The participants were primarily from one geographic region of the United States and not necessarily representative of participants located throughout the world.

Recommendations for Further Research

Based on the study's research conclusions, the recommendations for further research include:

1. Conduct a follow-up study with preservice teachers who have had this IDI experience to see how IDI Guided Development affects their teaching in the field.
2. Expand the number of colleges and universities testing the theoretical model presented in the study, which would increase the study data regarding the use of IDI Guided Development and increase the development of college and university students' intercultural competence.
3. Expand the study's data by creating college and university field of study student subgroups, which would inflate the scope of using the theoretical model of IDI Guided Development with many more disciplines that have not researched the development of students' intercultural competence.
4. Conduct the study with higher education faculty and staff participants only, which would help these educational employees develop their intercultural competence and provide them group and individual IDI profile reports.

5. Expand the study participants to K-12 teachers and administrators, which would increase the study data regarding the use of IDI Guided Development to increase the intercultural competence of adults in K-12 education.
6. Expand the pool of participants to non-educators, which would increase the study data regarding the use of IDI Guided Development to increase the intercultural competence of persons who are not in the field of education.
7. Conduct a study of participants that continues the IDI Guided Development process with a second round of IDI Guided Development. Such a study would use each participant's IDI posttest profile data from round 1, along with its accompanying, newly generated Intercultural Development Plan to advance his/her intercultural competence orientation on the Intercultural Continuum, with the anticipation of increasing her/her perceived orientation and developmental orientation scores.

Recommendations for Improving Practice, Leadership, and Organizational Development

1. The study emboldens colleges and universities to change established practices in designing and delivering programs that include the use of IDI Guided Development in the development of preservice teachers' intercultural competence.
2. More educators need to frame intercultural competence learning and teaching differently than is now often the case, by using IDI Guided Development to increase the intercultural competence of all college and university students.
3. More colleges and universities need to meet the intercultural competence needs of their faculty and staff by providing them IDI Guided Development.

4. Colleges and universities will need to allocate funds to provide IDI Guided Development to increase the intercultural competence of their students, faculty and staff.
5. The study results encourage K-12 schools to use IDI Guided Development as an important component of ongoing, high-quality professional development and learning communities.
6. The study emphasizes the importance of increasing the intercultural competence of K-12 and higher education faculty and staff, so they are more capable of adapting or shifting cultural perspective and changing behavior in culturally appropriate and authentic ways with students.

Summary

Chapter V included a review of the purpose of the study, research results of the study, the researcher's study conclusions, limitations of the study, recommendations for further research, and recommendations for how to improve educational practice, leadership, and organizational development by using IDI Guided Development to increase intercultural competence.

The IDI Guided Development® used in the study consisted of three elements:

1. A comprehensive five-step developmental process based on the participant's unique Intercultural Development Inventory profile results and developmental orientation
2. A customized personal plan of action, the Intercultural Development Plan (IDP)
3. One-on-one coaching by an IDI Qualified Administrator

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Appendix A: Institutional Review Board Approval



Institutional Review Board (IRB)
 720 4th Avenue South AS 210, St. Cloud, MN 56301-4498

Name: Durwin Hermanson
Email: hedu1202@stcloudstate.edu

**IRB PROTOCOL
 DETERMINATION:
 Exempt Review**

Project Title: Using Guided Development to Increase Intercultural Competence

Advisor Kay Womer

The Institutional Review Board has reviewed your protocol to conduct research involving human subjects. Your project has been: **APPROVED**

Please note the following important information concerning IRB projects:

- The principal investigator assumes the responsibilities for the protection of participants in this project. Any adverse events must be reported to the IRB as soon as possible (ex. research related injuries, harmful outcomes, significant withdrawal of subject population, etc.).
- For expedited or full board review, the principal investigator must submit a Continuing Review/Final Report form in advance of the expiration date indicated on this letter to report conclusion of the research or request an extension.
- Exempt review only requires the submission of a Continuing Review/Final Report form in advance of the expiration date indicated in this letter if an extension of time is needed.
- Approved consent forms display the official IRB stamp which documents approval and expiration dates. If a renewal is requested and approved, new consent forms will be officially stamped and reflect the new approval and expiration dates.
- The principal investigator must seek approval for any changes to the study (ex. research design, consent process, survey/interview instruments, funding source, etc.). The IRB reserves the right to review the research at any time.

If we can be of further assistance, feel free to contact the IRB at 320-308-4932 or email ResearchNow@stcloudstate.edu and please reference the SCSU IRB number when corresponding.

IRB Chair:

Dr. Benjamin Witts
 Associate Professor- Applied Behavior Analysis
 Department of Community Psychology, Counseling, and Family Therapy

IRB Institutional Official:

Dr. Latha Ramakrishnan
 Interim Associate Provost for Research
 Dean of Graduate Studies

OFFICE USE ONLY

SCSU IRB# 1754 - 2223	Type: Exempt Review	Today's Date: 11/27/2017
1st Year Approval Date: 11/27/2017	2nd Year Approval Date:	3rd Year Approval Date:
1st Year Expiration Date:	2nd Year Expiration Date:	3rd Year Expiration Date:

Appendix B: Adult Informed Consent Form

Consent Form

You have been asked to participate in a research project for the College of Education teacher licensure programs. The purpose of this research is to evaluate the impact of our curriculum and instructional strategies on the development of students' cultural competency. Any information you supply will be analyzed and interpreted in conjunction with data from other people. Faculty members will use this information to evaluate the effectiveness of their instruction in meeting college and departmental cultural diversity goals. If you have questions or concerns about the treatment of human subjects, please contact:

IRB Administrator,
Dean Barry Ries
507-389-2321

If you agree to participate in this research, you will be asked to provide some written information about yourself. You will complete the on-line version of the Inter-cultural Developmental Inventory (a measure of cultural competency) two times (during your first semester in your teacher education program and again prior to student teaching). You have the option of skipping questions you do not choose to answer.

Any data that you supply will be used for course assessment purposes only. There will be no assessment or grading attached to you as an individual. To ensure that your name will never be associated with your responses, this form will be kept separate from the materials that you complete for this research and your inventory profile will be coded and your name removed. Your participation is voluntary, which means that you may withdraw from participation at any time and for any reason, without any consequences.

Although there are no anticipated risks to participating in this study, in the event that some participants feel uncomfortable or uneasy with the materials included in this research, your instructor for this course, and/or the Principal Investigator for the project, Dr. Daria Paul Dona, or Co-Investigator, Durwin Hermanson are available to discuss the research and answer any additional questions that may arise.

By signing below, I am indicating that (1) I understand the basic procedure of the study, (2) I am aware that participation is voluntary and that I may discontinue participation at any time, (3) I affirm that I am at least 18 years of age, and (4) I understand that refusal to participate at any time will involve no penalty or loss of benefits to which I am otherwise entitled. I hereby give my consent to participate.

Participant's Signature

Date

Research-Related Contact Information:

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Appendix C: Intercultural Development Plan (IDP) Reflective Feedback Survey

Intercultural Development Plan (IDP) Reflective Feedback

Now that you've completed your Intercultural Development Plan, which included at least three intercultural learning opportunities to meet your intercultural goals, rank which learning opportunities had the most impact in meeting your Intercultural Development Plan goals and removing intercultural stress points.

Most impactful = 1

Second most impactful = 2

Third most impactful = 3

_____ Training Programs

_____ Workplace Activities

_____ Theatre, Film & Arts

_____ Educational Classes

_____ Personal Interactions

_____ Intercultural Journal

_____ Books

_____ Travel

_____ Coaching

_____ Site Visits

Appendix D: IDI Guided Development® Guide Sheet

IDI Guided Development®

IDI Guided Development is an innovative, comprehensive, assessment-driven approach to developing an individual's intercultural competence, particularly the ability to shift cultural perspective and appropriately adapt behavior to cultural differences and commonalities in various situations. This approach is a proprietary system based on Intercultural Development Inventory individual and/or group profile results and involves identification of goals, intercultural challenges (stress points), and strategies used to address challenges and supports (kinds of support in the organization for developing intercultural competence).

IDI Coaching

IDI coaching is the process of one-on-one IDI Guided Development® with a trained and experienced IDI Qualified Administrator.