Intercultural Competence and College Readiness: A Mixed Methods Study of First-Year Students at a Community College and a Traditional 4-Year University

Dissertation

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Leona Amalia Houston, M.Ed.

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The Ohio State University

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Dissertation Committee:

Dr. Anika Ball Anthony, Advisor

Dr. Noelle Arnold

Dr. Susan Jones
Abstract

No standard measure for college and career readiness currently exists but a common goal for college readiness could potentially improve the rate of college completion. Towards the development of a common goal for college readiness, it should be noted that the workplace and colleges increasingly desire the skills of intercultural competence (ICC). Although it is not part of most notions of college readiness, behavioral research, employer demands, and many colleges have already identified intercultural competence as a skill that is in high demand; however, to date there is a lack of research that examines whether first-year college students perceive cultural competence as relevant to college and workplace readiness. The purpose of this mixed methods, explanatory, social justice, study was to investigate first-year college students’ perceptions of intercultural competence as a factor for college readiness and to understand the influences they perceived as having contributed to their development of intercultural competence.

This mixed methods study involved 67 first-year college students attending either a community college or a traditional 4-year university in a large, Midwestern U.S. city. For the first part of the study, I used the Intercultural Development Inventory (IDI) (Hammer, 2012) to assess and then compare college students’ levels of intercultural competence. Subsequently, data from the surveys were used to recruit eight participants for semi-structured interviews to explore students’ perceptions of intercultural
competence as a factor relevant to college and workplace readiness. Through the interviews, I also sought to gain an understanding of the factors participants perceived as having influenced their development of ICC. I used open coding, memo writing, and constant comparative analysis methods to generate themes from the eight individual semi-structured interviews (Charmaz, 2014; Strauss & Corbin, 1994).

Significant findings from the quantitative portion of the study are, first, that the mean level of intercultural competence overall ($n = 67$) was 83.48 which indicates that participants in this study were at the IDI Developmental Orientation of Polarization, or have an “us versus them” perspective, where individuals from diverse backgrounds typically feel uncomfortable (Hammer, 2012); second, there was no statistically significant difference in IDI scores between City Community College (CCC; $n = 24$) and Traditional State University (TSU; $n = 43$) students; and third, there was a statistically significant difference ($n = 67; p = .045$) between participants’ perceptions of the level of cultural understanding valued by their high schools and the level of cultural understanding first-year college students perceived will be valued by their future workplaces. Themes from the qualitative analysis included participants’ perception that high school and college support for ICC development is optional and that participants believe when first attending college in the U.S., what is needed is an IDI developmental orientation of Acceptance (recognizing different cultural beliefs and values without judgment) or Adaptation (as an extension of Acceptance, individuals adapt their behaviors in culturally specific ways concerning the diverse individuals with which they interact) (Hammer, 2012).
Analysis of the interview data indicates participants perceived intercultural competence was treated as optional across their secondary and post-secondary academic settings. This is problematic because participants also perceived that ICC will be highly valued by their workplace. Research has consistently shown that, for the average college student, these skills do not just happen but they can be taught (Bikson & Law, 1994; Brown, 2008; Deardorff, 2009; Green, 2000; Perez, Shim, King & Baxter Magolda, 2015; Shaw, Lee, & Williams, 2015; Zhao, 2002), and that they are increasingly desired by employers and colleges (American Association of Colleges and Universities [AACU], 2014; American Council on Education [ACE], 2015; Hart Research, 2015; Kylonnen, 2013). The findings from this research show first-year college students desire ICC skills, not just for the future workplace but also for their first-years on a college campus.
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Vita

1991 ................................................. Fairborn High School

1995 ................................................. B.A. Anthropology and Spanish, Miami University

1999 ................................................. M.Ed. Middle/Secondary Social Studies Education, Educational Policy and Management, University of Oregon

2010 to present ................................. Ph.D. Student in the College of Education and Human Ecology, Department of Educational Studies, The Ohio State University

Fields of Study

Major Field: Education: Educational Policy and Leadership

Social Justice; K–16 Education; Educational Administration; College Readiness; Internationalization; Intercultural Competence; Qualitative Research
Table of Contents

Abstract ........................................................................................................................................... ii
Acknowledgments ........................................................................................................................... v
Vita ................................................................................................................................................ vii
Table of Contents ......................................................................................................................... viii
List of Tables .................................................................................................................................. xiv
List of Figures ............................................................................................................................... xvi
Chapter 1: Introduction ................................................................................................................ 1
  Background to the Study ................................................................................................................ 2
  Problem Statement ........................................................................................................................ 7
  Purpose of the Study ..................................................................................................................... 8
  Significance of the Study ............................................................................................................. 9
Overview of Methodology ........................................................................................................... 11
  Participant Selection .................................................................................................................... 11
  Study Design ............................................................................................................................... 14
Research Questions ...................................................................................................................... 14
Limitations ...................................................................................................................................... 15
Delimitations .................................................................................................................................. 16
Key Terms ...................................................................................................................................... 17
  Intercultural Competence (ICC) ............................................................................................... 17
Chapter 5: Conclusion......................................................................................................126
Introduction......................................................................................................................126
Summary of Findings.......................................................................................................128

Findings 1: No significant difference in IDI scores for Community College and
Traditional University students.................................................................129
Finding 2: Acceptance or higher is needed for first-year college students ........130
Finding 3: Empathic recall aids in recognizing culturally appropriate behavior.... 131
Finding 4: Culture valued by HS is significantly different from future workplace. 133
Finding 5: Minimization is a safe approach to diversity.................................134

Discussion of Research Findings.....................................................................................135

College Students’ ICC Scores vs. ICC Beliefs.......................................................136
Students’ valued acceptance, but used minimization as a strategy...............136

Empathic recall vs. limited ICC emphasis in K-16 curriculum .......................137

Implications for Future Research..............................................................................138
Implications for Practice..........................................................................................139

Limitations of the Study..........................................................................................141
Contributions to the Literature...............................................................................142

Conclusion...............................................................................................................143

References.............................................................................................................145

Appendix A: IRB Approval City Community College (CCC).........................161
Appendix B: IRB Approval TSU 4-Year University.................................164
Appendix C: Customized Questions on the IDI .................................................166
Appendix D: Distribution of IDI Scores by Institution ....................................169
Appendix E: Recruitment Email for IDI Survey ............................................................171
Appendix F: Participant Consent Form ..........................................................................174
Appendix G: Interview Script.........................................................................................178
Appendix H: Interview Recruitment Efforts For Low and High Scorers .......................182
List of Tables

Table 1. Student Demographics for IDI Survey .............................................................. 55
Table 2. Student Demographics for Interviews ............................................................... 56
Table 3. Focused Coding from Round 4 of Coding.......................................................... 65
Table 4. Mean IDI Score for First-Year College Students ............................................... 72
Table 5. Frequencies of IDI Orientations by College Type .............................................. 74
Table 6. IDI Scoring Scale and Orientations .................................................................... 74
Table 7. Descriptives for IDI Developmental Orientations, CCC vs. TSU ...................... 77
Table 8. Test of Normality for IDI Developmental Orientations ..................................... 78
Table 9. Group Means for Developmental Orientation Scores ......................................... 82
Table 10. Levene's Test for Equality of Variances for IDI Scores ................................... 83
Table 11. IDI Scores for Males and Females .................................................................... 85
Table 12. Shapiro-Wilk Test for Normality for IDI Scores for Gender are Normal ........ 87
Table 13. Mean IDI Developmental Orientation Scores for Males vs. Females is Statistically Significant ..................................................................................................... 88
Table 14. Mean Scores for CCC and TSU, Culture Valued by High School .................... 91
Table 15. Test of Normality for Culture Valued by High School ..................................... 92
Table 16. Distributions for Culture Valued by Future Workplace with Outliers .......... 93
Table 17. Normality Not Met for Culture Valued by Future Workplace ......................... 95
Table 18. Comparison of Medians for CCC and TSU students on CVHS and CVFW... 97
Table 19. Overview of Interview Participants and Interview Locations ....................... 101
Table 20. Participant Overview and ICC needed for First Year of College ................... 113
Table 21. Comparison of Means for Value of Culture by High School, College, and
Future Workplace............................................................................................................ 118
Table 22. ICC as Valuable to Future Workplace............................................................ 121
List of Figures

Figure 1. The IDI Developmental Continuum ................................................................. 27
Figure 2. Conley’s Four Factors for College Readiness .................................................. 38
Figure 3. Box Plot Showing Marginal Outliers ............................................................... 60
Figure 4. Snapshot of Initial Nvivo Codes and References ............................................. 63
Figure 5. Scatter Plot of IDI Scores for CCC and TSU Students Combined Showing a Normal Distribution .......................................................................................................... 73
Figure 6. Range and Frequency of IDI Scores for All First-Year College Students .......... 75
Figure 7. Q-Q Plot of CCC Developmental Orientation Scores ...................................... 79
Figure 8. Q-Q Plot of TSU Student Developmental Orientation Scores ......................... 80
Figure 9. Boxplot of CCC and TSU Students Showing Two Marginal Outliers at CCC 81
Figure 10. Normal Distribution of IDI Scores for Females ............................................. 85
Figure 11. Normal Distribution of IDI Scores for Males ............................................... 86
Figure 12. Boxplot Showing Three Outliers for Culture Valued by Future Workplace.. 94
Figure 13. IDI Developmental Orientation Scores ......................................................... 102
Figure 14. IDI Developmental Orientation Scale .......................................................... 102
Chapter 1: Introduction

The aim of this study was to explore first-year college students’ perceptions of intercultural competence as a potential factor for college readiness and to understand the ways in which students view their pre-collegiate and first-year experiences did, or did not, contribute to their intercultural competence development. This study is of particular interest to those working to prepare students for the increasingly diverse college campus, for success as a global citizen, and for life as professionals who understand and value diversity in the workplace where it is necessary to operate across borders to remain globally competitive (ACE, 2015). This study is of broad interest to policy makers and researchers who desire to create a uniform standard for college readiness, to those who want to better understand and facilitate college students’ development of intercultural competence, and for those who desire to legitimize the skills of cultural competence at the institutional level. The outcome of this study, which was among the first to research first-year college students’ perceptions of intercultural competence (ICC) as a skill necessary for college readiness, provides student perceptions on the relevance of ICC to college readiness, perceptions of existing institutional practices around diversity, the perceived value of ICC to the future workplace, as well as insights into the academic and non-academic factors that first-year college students believe led to their development of intercultural competence.
Throughout the dissertation cultural competence and intercultural competence are used interchangeably because although institutions have attempted to clarify the construct, there is no agreement of learning goals, outcomes, or best practices (Deardorff, 2014; Hovland, 2006, 2009; Streitwieser & Light, 2010). The IDI specifically uses the term intercultural competence but my use of both terms demonstrates that I recognize there are several terms and several measures of cultural competence; the IDI is only one instrument among many.

**Background to the Study**

“(N)o standard measure for college and career readiness currently exists,” (National Forum on Education Statistics, 2015, p. 3) and this has resulted in a “patchwork of college readiness policies” across states (Blume & Zumeta, 2014, p. 1071). As college completion is “a matter of urgent concern” to the individuals directly affected, as well as for public policymakers at the federal, state, and local levels (Baum, Ma, & Payea, 2010, p. 1), it is important to note that a common goal for college readiness could improve the rate of college completion (Callan et al., 2006). As college readiness has become a national policy priority in the U.S., and because colleges have become increasingly diverse in recent years, practices that require intentional learning for the skills of cultural competence should be included in the skillsets for college readiness (Dixon, 2001; Pope, Mueller, & Reynolds, 2009; Strayhorn, 2014a).

The American Association of Colleges and Universities (AACU), the American Association of Community Colleges (AACC), and The Partnership for 21st Century Learning (P21), have all identified the skills of global or intercultural competence as
necessary to being well-informed citizens, and for success in diverse and complex life and work environments. (AACC, 2012; AACU, 2014; P21, 2017). A short list of the social and workplace benefits of cultural competence are: increased intellectual development, more mature interpersonal relationships (Pope et al., 200), being flexible balancing diverse views to arrive at workable solutions (Kivunja, 2015), increased creativity and innovation, productive problem-solving (Köppel & Sandner, 2008), and effective verbal and non-verbal behaviors (Pavitt & Haight, 1985; Spitzberg, 1983). In addition to these desirable social and workplace skills, intercultural competence should be included as a college readiness skill because when students are more exposed to diversity prior to college they are more likely to feel comfortable in diverse college settings (Strayhorn, 2014a). Additionally, some of the direct benefits to students and their institutions include: increased interaction among diverse individuals, more understanding, and critical thinking as well as “higher satisfaction with and more positive perceptions of the campus experience and environment” (Pope et al., 2009, p. 646-647).

As educational and governmental organizations, as well as the scholarly research, demonstrate the benefits of cultural competence for individuals, society, the workplace, and college campuses it seems surprising that intercultural competence is not already included in notions of college readiness.

There is a great deal of discussion in the scholarly literature today concerning what college readiness should include. Currently the literature on college readiness centers on not only the cognitive or academic factors, but illustrates many examples of other, non-cognitive or non-academic factors that are crucial for college and life. Some
of these non-academic skills and behaviors include grit (Adams, 2012; Strayhorn, 2014b), resilience (Luthar, Cicchetti, & Becker, 2000; Luthar, Grossman, & Small, 2015), and intercultural maturity (King & Baxter Magolda, 2005; Perez et al., 2015).

Academic rigor has historically been used to measure college readiness but college readiness has also included such things as educator perception (ACT, 2013), high school graduation (Greene & Forster, 2003), level of remedial coursework necessary (NCES, 2013; Roderick, Nagaoka, & Coca, 2009), standardized national test scores (Kyllonen, 2013), courses taken, high school GPA, and academic behaviors such as study skills (Conley, McGaughy, Kirtner, van der Valk, & Wenzl, 2010). The results of these indicators vary. In 2013, ACT (American College Test) reported that 89% of high school teachers thought their students were prepared for college success but only 26% of college professors perceived students to be well prepared for college. In this case, college readiness was defined by educator perception. In another example, from the National Center for Education Statistics (NCES), the percentage of students who required remedial coursework was used as a measure of college readiness (NCES, 2013). Though these traditional measures have been used almost exclusively, they have been found to account for only 25% of the variance in educational outcomes while nearly 70% of the variance in educational outcomes derives from nonacademic and non-cognitive factors (Strayhorn, 2014a). Research by Kyllonen (2013) shows cultural understanding as an important non-cognitive “soft skill” and “cultural awareness” is a skill that may be as, or even more, important in determining workplace and school success than cognitive skills (p. 22).
Nonacademic, non-cognitive factors have been shown to correlate with college student success, yet little is known about what these skills include. In addition to the body of literature on college student development, several studies have been conducted to understand how particular groups of college students define and perceive their own college readiness (Boden, 2011; Byrd & MacDonald, 2005; Farrell, 2010; Holles, 2016; Koch, Slate, & Moore, 2012; Strayhorn, 2014a). These studies have found that students differ widely in their perceptions of college readiness (Holles, 2016) and that this difference can be attributed to level of academic preparation (Boden, 2011), race or ethnicity (Strayhorn, 2010; 2014a), perceptions of ability (Koch et al., 2012), and status as a first-generation college student (Byrd & MacDonald, 2005). One study on the perceptions students have about their college readiness found that Latino and Black males stated parental encouragement was important to perceptions of college readiness (Strayhorn, 2010). In another study, high-achieving students identified that academic preparation and life experiences were key to their perceptions of readiness (Holles, 2016). Studying student perceptions of their own college readiness is valuable for reducing barriers to college preparation, particularly for underserved minorities (Strayhorn, 2014a).

The scholarly literature indicates there is a wide range of nonacademic and noncognitive factors that may contribute to college readiness and success and scholars have suggested more research in this area should be conducted. So far, research has shown that cultural competence is a necessary skill for college, life, and work. As post-secondary enrollment continues to expand, and college student diversity continues to
grow, with the percentage of students of color at colleges today at 27%, colleges have not only the potential, but the need, to become more intentional in their efforts to support an increasingly diverse student body (Dixon, 2001; Pope et al., 2009). Racial diversity has been shown to positively affect students’ social and academic experiences (Gurin, Dey, Hurtado, & Gurin, 2002; Landreman, Rasmussen, King, & Jiang, 2007; Pascarella & Terenzini, 2005), and *The American Freshmen*, found that 59.2% of college freshmen reported “understanding of other countries and cultures was “very important” or “essential” (Eagan, Stolzenberg, Aragon, Suchard, & Rios-Aguilar, 2015, p. 8). Further, when college students feel more comfortable they may be more satisfied with the campus experience and show better educational outcomes (Pope et al., 2009; Strayhorn, 2014a).

Despite increased diversity on college campuses, scholarly research on college students and intercultural competence demonstrates that first-year college students, as well as college students in general, overwhelmingly score at low to moderate levels of competence (Bikson & Law, 1994; Brown, 2008; Castles, 2012; Green, 2000; Perez et al., 2015; Shaw et al., 2015; Zhao, 2002). College students also likely view culture from an “us versus them” mindset (Castles, 2012; Hammer, 2012). Research has shown that, as with college readiness, there are non-academic, as well as academic, factors that contribute to higher levels of intercultural competence. Gender, race, and marginalization are some of the non-academic factors that have been found to contribute to higher scores of intercultural competence, as measured by the Intercultural Development Inventory (IDI). Furthermore, females and students of color tend to score
higher on assessments of intercultural competence and related constructs than do White males (Brown, 2008; Goldstein & Kim, 2005; Volberding, 2013). Another non-academic factor that has been found to contribute to higher cultural competence is marginalization. Brown (2008) found that college students who experienced a combination of engagement with diverse individuals along with feelings of “discomfort, feeling tense, silenced, guarded, or even hurt” had higher IDI scores than those who had not had those combined experiences (p. 134). Her findings are consistent with the theories of resilience (Luthar et al., 2000; Luthar et al., 2015), intercultural maturity (King & Baxter Magolda, 2005), and self-authorship (Barber, King, & Baxter Magolda, 2013; Baxter Magolda, 2014), wherein individuals can develop intercultural competence through successfully overcoming obstacles, often presented through at-risk life events (Luthar et al., 2000; Luthar et al., 2015; Pizzolato, 2003), or marginalization (Pizzolato, 2004).

These previous studies, as well as numerous studies from the study abroad literature demonstrate that intercultural competence can be learned in an educational setting but it must be demonstrably and formally taught (Paige, Cohen & Shively, 2004) by culturally competent educators (Deardorff, 2009); these skills do not “just happen” as individuals travel (Deardorff, de Wit, & Heyl, 2012, p. 194). In other words, if intercultural competence is not specifically taught, it might be learned; but it also might not.

**Problem Statement**

There is a lack of consistency among scholars, state policies, assessments, college admissions requirements, and student perceptions disagree concerning what college
entails, and the majority of college readiness measures do not include intercultural competence. Furthermore, the majority of college readiness measures do not include intercultural competence despite the workplace behavioral research, employer demands, and many colleges having already identified intercultural competence as a skill that is in high demand (AACU, 2014; AACC, 2012; ACE, 2015; Hart Research, 2015; Kylonnen, 2013). Although there has been much research on college readiness, ICC development and levels of ICC among traditional college students, there is a lack of scholarship in three areas that my research seeks to address: first, there is a gap in the literature that relates intercultural competence to college readiness, second, there is a lack of research on how community college students perceive and develop ICC, and third, there is little research that examines college students’ perceptions about ICC as a skill relevant for college and workplace readiness (Thompson, 2008).

**Purpose of the Study**

The purpose of this explanatory mixed methods study was to examine differences between community college and traditional college students’ ICC. This study also sought to examine first-year college students’ perceptions of intercultural competence as a factor for college readiness and the future workplace, and to understand influences students perceived as having contributed to their development of intercultural competence. Because U.S. systems of education are increasingly diverse and because higher education is well-equipped to deliver the skills of cultural competence (Patriquin, 2016; Romano & Dellow, 2009). I have adopted a social justice approach which aims to critique
conventional practices (Denzin & Lincoln, 2011), in an effort to advance minority and underserved student access to, and persistence in, college.

**Significance of the Study**

This study was informed by four areas of existing scholarly research. First, the study design and interview questions were informed by the scholarly literature on the academic, and non-academic factors for college readiness, as well as by the literature on students’ perceptions of the skills needed for college readiness (ACT, 2013; Adams, 2012; Boden, 2011; Byrd & MacDonald, 2005; Conley, 2007a, 2010; Conley, 2010; Conley, McGaughy, Kirtner, van der Valk, & Wenzl, 2010; Farrell, 2010; Greene & Forster, 2003; Holles, 2016; King & Baxter Magolda, 2005; Koch et al., 2012; Kyllonen, 2013; Lee, 2011; Luthar et al., 2000; Luthar et al., 2015; Perez et al., 2015; Roderick et al., 2009; Strayhorn, 2014a; Strayhorn, 2014b). Second, the study design and interview questions were informed by the literature citing the need for the skills, and the benefits, of intercultural competence at the social, college and professional levels (AACC, 2012; AACU, 2014; Kivunja, 2015; Köppel & Sandner, 2008; Pavitt & Haight, 1985; Pope et al., 2009; P21, 2017; Spitzberg, 1983; Strayhorn, 2014a; Strayhorn, 2014b). Third, the study design, sample selection, and interview questions drew upon previous studies on college student development of cultural competence (Berg, Paige, & Lou, 2012; Bikson & Law, 1994; Brown, 2008; Castles, 2012; Deardorff, 2009; Deardorff, Spitzberg & Changnon, 2009; Goldstein & Kim, 2005; Gopal, 2011; Green, 2000; Lou & Bosley, 2012; Perez et al., 2015; Shaw et al., 2015; Smith, 2010; Thompson, 2008; Volberding, 2013; Zhao, 2002). Finally, sample selection was also informed by existing research on
traditional 4-year university (4-year selective university), as compared to community college (or 2-year institution) students because the literature shows community college and traditional university students differ in many ways (AACC, 2005; CCC, 2016; Horn, Nevill, & Griffith, 2006; Manns, 2014; NCES, 2016; Patriquin, 2016; Riley, Bustamante, & Edmonson, 2016; Roderick et al., 2009; TSU, 2016).

It is my intent that this study serves as a starting point for an expanded definition of college readiness. Broadly, this study has promise to add to the literatures on college readiness and on first-year college students’ perceptions and development of intercultural competence. The workplace and some colleges have already identified cultural competence as a valuable and necessary skill but college knowledge is “distributed inequitably in society” (Conley, 2008, p. 10) and appreciation for diversity, both in research and practice, on college campuses has been in short supply (Dixon, 2001; Levine & Cureton, 1998). If ICC is integrated with college readiness, this may create more equity and opportunity in two ways: first, by formally asserting that cultural awareness and acceptance on college campuses is a part of a college-ready and college-going curriculum; and second, through emphasis and appreciation of the higher levels of ICC which some racially diverse, female, and underserved students may already possess. If first-year college students perceive intercultural competence as a factor for college readiness, a stronger argument can be made that a common goal of college readiness should include the skills of intercultural competence. Additionally, findings from this study may contribute to the body of literature that helps educators better understand how
students’ experiences and identities shape their intercultural competence development (as suggested by Perez et al., 2015).

Overview of Methodology

To conduct this study I used a sequential explanatory mixed methods design (Creswell, Plano, Gutmann, & Hanson, 2003). The first phase involved the use of quantitative methods to assess and compare levels of intercultural competence between two groups of first-year college students. In the second phase, I used qualitative interviews to understand how intercultural competence is perceived by first-year students as relevant to college readiness and their future workplace. Participants in this study were first-year college students ages 18 to 19 ($n = 67$) who were enrolled in equivalent credit-bearing courses and attending either a community college (henceforth City Community College; CCC) or a traditional 4-year university (henceforth Traditional State University; TSU). The next two sub sections briefly explain the rationales for population selection and methods used for this study.

Participant Selection

First-year community college students and students attending a traditional 4-year university were selected for comparison in this study for five reasons. First, both the AACC and the AACU have identified the skills of cultural competence as valuable and necessary at the college level (AACC 2012; AACU, 2014). Second, because TSU is a more selective institution and CCC has open enrollment, in general, students can be expected to differ on traditional measures of college readiness (Classifications, 2015). Third, much research has been conducted on traditional college students and ICC, but
little ICC research has been conducted among community college students. Pope, Mueller, and Reynolds (2009) suggest that research on traditionally understudied college populations should be conducted in an effort to better understand how different groups and subgroups of students perceive and experience multicultural practices across collegiate contexts. Fourth, the scholarly literature and data on traditional 4-year and community college students show there are differences in the two populations. Community colleges provide access to higher education to populations who might have been excluded from the opportunity to attend a 4-year school (Riley et al., 2016). These populations often include women, low-income groups, and students of color, and as an effect, diversity among community college enrollments has increased significantly in the past 20 years (AACC, 2005; Riley et al., 2016).

This study was conducted at two post-secondary institutions in the same U.S. Midwestern state; however, there are demographic differences across the institutions’ student populations. At the time of data collection, students of color enrollment at CCC was 37% whereas at TSU students of color enrollment was only 18.6% (CCC, 2016; TSU, 2016). The percentage of females to males at CCC was also slightly different from TSU; 53% of CCC students were female whereas at TSU only 51% were female. Additionally, the percentage of students who identified as being first generation college students was 47% at CCC and at TSU that number was 24%. Finally, previous research on college students and ICC has shown that students of color, females (Brown, 2008; Goldstein & Kim, 2005), and students who had an understanding of marginalization
Bennett, 2004; Brown, 2008; Hightower, 2016) scored higher on assessments of cultural competence.

I recruited first-year college students for this study for three reasons. First, little is known about the ICC development of first-year students and about how they perceive ICC as relevant to their undergraduate experience (Shaw et al., 2015). Second, society expects high school graduates to be college or career ready but there is no unified definition of college readiness. First-year college students, as recent high school graduates, may have unique perceptions about what college readiness should entail (Darche & Stam, 2012; Strayhorn, 2014a). Third, it is important to understand initial levels of ICC among first-year students so that continued growth involving intercultural competence can be monitored and assisted (Bowman & Brandenburger, 2012).

For this study, I sought to recruit participants from each college with similar characteristics such as course level and the course subjects in which students were enrolled. Only students enrolled in equivalent college credit-bearing Math or English classes were surveyed. By controlling for course-level work (only non-remedial courses) college readiness was more comparable across groups as much as possible so that more reliable comparisons could be made between the two groups. Furthermore, a recent study by Garson (2016) showed that academic disciplines are statistically significant predictors for scores on the IDI. By controlling for courses students were enrolled in, general subject-area (Math and English only), students of all academic disciplines were equally likely to be selected.
Study Design

For the initial, quantitative portion of this explanatory sequential mixed methods study, I measured ICC among first year college students using the Intercultural Development Inventory (IDI). The IDI objective items were scored by IDI, LLC to calculate individual scores along the Intercultural Development Continuum (Hammer, 2012). For the second phase of this study I conducted eight individual semi-structured interviews and analyzed them using grounded theory methods such as open coding, memo writing, and constant comparative analysis (Charmaz, 2014; Glaser & Strauss, 2009; Strauss & Corbin, 1994). Finally, because U.S. systems of education are increasingly diverse yet college knowledge is inequitably distributed, I adopted a social justice approach because I value equity and fairness in the educational experience. Without the skills of intercultural competence as a factor for college readiness, hegemony and the dominant culture determine “whose knowledge is of most worth” (Apple, 2009, p. 198) and my work in this dissertation is an effort to, in some small way, positively affect minority and underserved student access to, and persistence in, college. Additional detail on the selection and use of the IDI and a discussion of the methods used in this study is provided in Chapter 3.

Research Questions

The following seven research questions guided the data collection:

1. Is there a statistically significant difference in group levels of intercultural competence (as measured by the IDI) between first-year community college students and first-year students at a traditional 4-year university?
2. Is there a statistically significant difference in group levels of ICC between male and female college students, regardless of institution type?

3. Is there a statistically significant mean difference between first-year community college students’ and first-year traditional 4-year university students’ perceptions of whether cultural understanding was valued by their high school?

4. Is there a statistically significant mean difference between first-year community college students’ and first-year traditional 4-year university students’ beliefs about whether their future workplace will value ICC?

5. Is there a statistically significant mean difference between college students’ perceptions of whether cultural understanding was valued by their high school and their beliefs about whether their future workplace will value ICC?

6. What are the factors first-year college students perceived as having influenced their development of intercultural competence?

7. In what ways, if any, do participants view intercultural competence as a factor relevant to college and workplace readiness?

**Limitations**

There are four central limitations to the study design. First, this study was conducted in a U.S. Midwestern state. Other studies in other regions of the U.S. or abroad should be conducted to see if the findings presented in this study can be replicated. Second, students who were recruited to participate in the quantitative portion of the study were chosen randomly from a list of students who fit the parameters of the
study (enrolled in equivalent credit-bearing English or Math courses; ages 18 to 19; first-year college students), but ultimately the participants self-selected whether or not to participate. As this was the case, it is likely there was self-selection bias and caution should be used in generalizing the results (Whitehead, 1991). Third, as low-scoring survey takers overwhelmingly did not respond to interview requests, participants for the interviews were sampled by convenience, and as such, the findings may not be applicable to the larger college population (Patton, 1990). Fourth, the data and interviews collected from first-year students who participated in this research required respondents to recall instances from their childhood and or high school years. As this was the case, recall bias may have affected participant responses (Raphael & Cloitre, 1994).

**Delimitations**

Constraints imposed by the researcher are three-fold. First, the focus of this study was on first-year college students and on their perceptions of college readiness and intercultural competence. I asked participants about their perceptions, and to recall past events about factors that may have influenced their development of intercultural competence, as such, this study was not longitudinal and did not attempt to track student development prior to the first-year of college. Second, participants in this study were limited to first-year college students aged 18 to 19, enrolled only in college credit-bearing English or Math courses; participants were selected from only two types of large, public post-secondary institutions: a community college (CCC) and a selective, traditional 4-year institution (TSU). This study did not attempt to survey students who required remedial coursework, first-year students enrolled in non-entry-level mathematics and
English courses, or first-year students who attended other kinds of post-secondary institutions.

**Key Terms**

**Intercultural Competence (ICC)**

ICC is the ability to change one’s cultural perspective and appropriately adapt one’s behavior around cultural differences and commonalities (Hammer, 2012). Hammer’s definition of ICC recognizes that cultural diversity can be expressed in terms of race, ethnicity, gender, national origin, sexual orientation, and ability and/or disability.

**Culture**

The term culture used in this research adopts Hammer’s definition, and includes: race, ethnicity, gender, national origin, sexual orientation, and ability and/or disability, but for this research culture also includes socio-economic status or class (McGovern, Furumoto, Halpern, Kimble, & McKeachie, 1991).

**College Readiness**

College readiness lacks a common goal (Callan, et. al., 2006) but includes non-cognitive and non-academic behaviors (Kyllonen, 2013), student perception (Holles, 2016; Strayhorn, 2014a; Strayhorn, 2014b), remedial coursework needed (Roderick et al., 2009), educator perception (ACT, 2013), or numerical measures such as GPA and test scores (Conley, et. al., 2010). After significant review of the scholarly literature, David Conley’s (2010) work emerged as the most comprehensive model of college readiness, which includes four key factors: (a) key cognitive strategies; (b) key content knowledge; (c) academic behaviors; and (d) contextual knowledge.
City Community College

The Carnegie Classifications (2015) refer to the community college institution in this study as an Associate's College: mixed transfer/career & technical-high, nontraditional where the highest degree awarded is an associate’s degree. The community college in this study is further classified as a very large, public-urban-serving, public 2-year, higher part-time, mixed transfer/career & technical-high, nontraditional college (Carnegie Classifications, 2015).

Traditional State University

The Carnegie Classifications (2015) refer to the traditional 4-year institution in this study as a balanced arts & sciences/professions, high graduate coexistence, where the highest degree awarded is a Doctoral degree. TSU is further classified as a large public, high undergraduate, full-time, 4-year, more selective, higher transfer-in, primarily residential university with very high research activity

Organization of the Dissertation

Chapter 1 framed the statement of the problem around college readiness. The purpose of the study, significance of the study, an overview of the methodology, research questions, limitations and delimitations, and key terms were also presented. In Chapter 2, the Literature Review I compare intercultural competence to related constructs, and provide a description of the instrument used in this research. I discuss previous studies of college students that show levels of ICC are low, that some populations score higher on measures of ICC, and that ICC can be learned. I also review scholarly research that offers theories for why college student ICC is low to moderate is also presented. Chapter
2 concludes with a review of the literature that shows the benefits that intercultural competence has for college and workplace settings. Chapter 3, Methodology, includes the research design, background on the study context and participants, research variables, the research instrument, data collection tasks, and data analysis procedures, as well as information on bias and error, and validity and reliability. Chapter 4 presents the results of this study. Chapter 5 is the final chapter and includes summary and discussion of the study as well as implications for future research, limitations of the study, and contributions of the study.
Chapter 2: Literature Review

Introduction

In this chapter I discuss aspects of three central bodies of literature in this order: intercultural competence, previous studies of college student levels of cultural competence, and the literature linking college readiness and ICC. Chapter 2 concludes with the literature that shows the benefits that intercultural competence has for society, college life, and workplace settings. The chapter begins with a comparison of intercultural competence as it relates to other often-used constructs. Here I also provide a description of the instrument used in this research. Next I discuss previous studies of college students that suggests levels of ICC are low, that some populations score higher on measures of ICC, and cite research that shows ICC can be learned. In this section I also present scholarly research that offers theories for why college students’ ICC varies among particular groups of students. Finally, I reconnect these sections with the Chapter 1 literature that indicates that intercultural competence is a valuable skill and that it should be included in future definitions of college readiness.

Intercultural Competence and Like Constructs

The American Council on Education (ACE, 2012) reported that U.S. institutions of higher education have, as one of their duties, “to prepare students for productive and responsible citizenship. In the early 21st century, this means preparing students to live and work in a society that increasingly operates across international borders” (Center for
One way institutions of education can prepare students for an international and 21st century society is to encourage the development of ICC (CIGE, 2012). Contrary to popular assumptions, ICC does not “just happen” as individuals travel, mature, or become educated, nor is it developed by attending a workshop (Deardorff, 2009). Although many experts today agree that ICC is of utmost importance, especially for those living and working in diverse societies (Bok, 2006; Cushner & Mahon, 2009; Deardorff, 2009; Hayward, 1995, p. 1), the definition of ICC has evolved, and individuals’ levels of it can best be assessed over time with a combination of qualitative and quantitative measures (Deardorff, 2004, p. 2).

Mitchell Hammer and Milton Bennett are the most often cited, and longest running, scholar-experts on ICC. Bennett’s published work on ICC dates back to his 1986 article, “A Developmental Approach to Training.” Dr. Bennett created the Developmental Model of Intercultural Sensitivity, which established the framework for the IDI (Bennett, 1986, 1993; Hammer, 2012). In the scholarly literature and policy documents, there are several terms used in association with the construct of ICC such as: global citizenship, global competence, internationalization, multicultural education, and cultural competence. In this section these constructs are compared to ICC.

**Intercultural Competence**

ICC is “the capability to shift cultural perspective and appropriately adapt behavior to cultural differences” (Hammer, 2012, p. 133). Hammer’s (2013) definition of ICC recognizes that cultural diversity can be expressed in terms of, “different races, ethnicities, gender, national origin, sexual orientation, and ability/disability” (p. 48).
People who are highly interculturally competent understand their own cultural positioning as well as have a strong respect for the process of acculturation and diversity in all its forms, not just those related strictly to culture or nationality, but in the intersections of diversity and positioning as well (Deardorff, 2013; Hammer, 2012). ICC is not a panacea for an individual, an institution, or a nation. ICC, although popular in scholarly literature, has received criticism for its appeal to political and market interests, discipline nonspecificity, and for its lack of a coherent model (Rathje, 2007). Many scholars have also pointed out that the knowledge, skills, and attitudes a culturally competent individual possesses can be used for harm or for good—to reinforce inequalities or to exacerbate them (Demorgon, 2005a; Olds, 2012, p. 3; Pöllmann, 2013, p. 3; Rathje, 2007, p. 256). Like financial or human capital, ICC can be a form of capital (Bourdieu, 1986; Pöllmann, 2013) akin to social capital, which can be converted to wealth (Leonard, 2005). As a form of capital, ICC can be a social “cure-all” (Fulkerson & Thompson, 2008, p. 1) or it can be used to reinforce social inequality (Fulkerson & Thompson, 2008).

**Intercultural Maturity and the Model of Intercultural Maturity (ICM)**

Intercultural maturity consists of a range of behaviors and attributes including understanding, sensitivity to others, and the ability to listen to and learn (King & Baxter Magolda, 2005). Intercultural maturity is often a stated outcome for college graduates because it derives from theories of college student and adult development and its attainment indicates individuals are culturally competent and able to act upon their awareness (King & Baxter Magolda, 2005). Informed by Bennett’s (1993) model of
Intercultural sensitivity, King and Baxter Magolda (2005) proposed a model of Intercultural Maturity (ICM) that identified three dimensions: cognitive, intrapersonal, and interpersonal (Perez et al., 2015, p. 760). Because of these three dimensions this model is different from the IDI; the ICM model places an emphasis on thinking and how one makes meaning in regard to cultural differences (Perez et al., 2015). In one study using the ICM model, it has been suggested that it can most closely be compared to the IDI (Shaw et al., 2015).

Global Citizenship

Global citizenship, a “contested proposition,” in itself (Woolf, 2009, p. 15), is defined by Olds (2012) as the acquisition of knowledge, skills, and attitudes, which include “a choice and a way of thinking;” “self-awareness and awareness of others;” “a practice of cultural empathy;” “the cultivation of principled decision making [sic];” and “participation in the social and political life of one’s community” (pp. 1–2). Streitwieser and Light (2010) noted that despite all the thinking about the concept of global citizenship, there is little notion or consensus of what it entails. Another critique of global citizenship is that unless it provokes a challenge to hegemonic policies and unjust practices, the United States is in danger of repeating its historic tendency toward colonization (Shaklee & Baily, 2012).

Global Competence

James Banks, a scholar of multicultural education, viewed global competence as the final stage of his cultural identity typology (2004). According to Banks (2004), individuals who possess global competence value universal social justice and possess
solidarity with “all human beings in the world community” (p. 297). In contrast to some definitions of global competence that emphasize skills, solidarity, and social justice values, there are opposing definitions that emphasize international competition, national security, and individual gains. As with similar constructs, global competence has no uniform practices or definitions that all parties agree upon (Fantini, 2009, p. 366), and the acceptable beliefs associated with global competence range from human solidarity to American superiority.

**Internationalization**

Internationalization, another construct connected to ICC, includes “building international and ICC among students” (CIGE, 2012, p. 3), but like global competence, internationalization is complex and is often guided by contradictory commercial and ideological motives (Stier, 2004, 2006). In particular, neoliberal, or “the Right,” heavily influences internationalization policy today (Apple, 2001, p. xiv).

**Multicultural Education**

Multicultural education, another term connected to ICC, gained popularity as an educational reform in the late 1990s (Sleeter, 1996). For multicultural education to be successful, Banks’ suggested an iterative two-phase approach (2015). In the first phase teachers should identify ways to adapt their teaching around diverse abilities, learning characteristics, and motivational styles (Banks, 2015). During the second phase the teacher would focus on differentiating their teaching and on integrating the curriculum content to include cultural assumptions and perspectives in their discipline (Banks, 2015). Multicultural education began as a method to transform curriculum, but in practice and
application it has been criticized for a focus on group differences and a “juxtaposition of knowledge about particular groups” (Cushner, 2012, p. 42.). Though this focus in and of itself is not the way in which educators sanitized and depoliticized the narratives of particular groups, multicultural education has been shown to sustain inequities rather than destroy them (Díaz-Rico, 1998; Gorski, 2006).

**Cultural Competence**

As with the terms discussed previously, some schools of thought on ICC argue that the literature on cultural competence lacks consensus and a coherent theoretical foundation, and, as a result, constructs with the same and different meanings are used interchangeably (Ang, Van Dyne, & Tan, 2011; Cross, Bazron, Dennis, & Isaacs, 1989; Gelfand, Imai, & Fehr, 2008, p. 375). Similar to other “global” terminology, three prominent critiques argue that cultural competence lacks definitive clarity; is confused with other terms such as *cultural sensitivity, cultural awareness*, and *cultural proficiency*; and that it is used to promote divergent goals (Hollinsworth, 2013).

Before the discussion of the terms often associated with ICC concludes, a final critique about these constructs is that they do not lend well to measurement. Since 2001, when the AACU initiated a plan to define and measure global learning, over 100 institutions have attempted to clarify the construct, but there has been no agreement of learning goals, outcomes, or best practices (Deardorff, 2014; Streitwieser & Light, 2010). Although five definitions are discussed in this literature review, this presentation of terms around ICC does not exhaust the scope debate on which is best. Furthermore, there are several other iterations of each term, as well as many others such as *international*
mindedness (Daly, as cited in Shaklee & Baily, 2012, p. 167), cultural intelligence (Ang et al., 2011, p. 583), and international education (McKenzie, 1998; Nisbet, 2014).

The Intercultural Development Inventory

The IDI (Hammer, 2012) is the only instrument currently available to measure ICC, but there are at least 140 models that purport to measure ICC to some degree or another. The Developmental Model of Intercultural Maturity (King & Baxter Magolda, 2005; Perez et al., 2015) and the Generalized Ethnocentrism scale (Neuliep & McCroskey, 1997a) are just two examples and to date scholars have not agreed upon any single best instrument (Deardorff, 2014; Pope, Reynolds, & Mueller, 2004; Howard-Hamilton, Richardson, & Shuford, 1998). In the scholarly literature, Mitchell Hammer and Milton Bennett are the most often cited and longest serving scholar-experts on ICC. The IDI identifies where an individual falls along a continuum from a monocultural (least) to an intercultural (most) mindset (Bennett, 1986; Bennett & Hammer, 1998; Hammer, 2012). The most recent version of the IDI is Version 3. The IDI has been used by over 1,300 schools and organizations (Cushner, 2012; Hammer, 2012). At the time of this writing, more than 60 published articles or book chapters and over 66 dissertations have included use of the IDI (Hammer, 2017). The IDI is currently used by universities such as The Ohio State University, Purdue University, and Cornell University, as well as in public school districts such as the Austin Independent School District in Austin, Texas and the Denver Public Schools in Denver, Colorado (Hammer, 2017, p. 9).

Two reasons for the IDI’s success are that, first, it does not produce cultural bias (because culturally diverse interviewees contributed to the pool of statements for initial
test items), and readability analysis of the IDI indicate that it is appropriate for individuals aged 15 and higher (Hammer, 2012; 2011b). Second, the IDI is a rigorously validated, theory-based, developmental, practical, actionable, cross-cultural tool (Hammer, 2012). Version 3 of the IDI has been found to possess strong validity and reliability across diverse cultural groups and findings demonstrate the IDI has strong cross-cultural, content and construct validity as well as strong predictive validity (see Methods section; Hammer & Bennett, 2003; Hammer, 2012). Version 3 of the IDI ranks individual participants along an intercultural development continuum (see Figure 1) of mindsets or orientations: Denial, Polarization (which is characterized as either Defense or Reversal), Minimization, Acceptance, and Adaptation (Hammer, 2012).

![Intercultural Development Continuum](image)

Figure 1. The IDI Developmental Continuum

Reproduced from Hammer (2012)
As measured by the IDI, people fall into one of five orientations (Bennett & Hammer, 1998; Hammer, 2012). In the Denial orientation people miss or ignore cultural differences. In Polarization, people actively judge differences because differences make them uncomfortable, and they value assimilation but this valuing takes two antipode forms—Defense or Reversal. In Defense, one’s own cultural practices are viewed as superior to others, whereas in Reversal one views other cultures as better than one’s own (Hammer, 2012). Minimization is the center point along the continuum where people are likely to de-emphasize difference in favor of universalist ideas about human beings. Those who score at Minimization will often defer to the hegemony of the dominant culture in an effort to get along with others who are different from them. At Acceptance, people deeply comprehend differences and understand why differences exist. The final stage is Adaptation, where people have achieved an intercultural mindset and are able to bridge differences to allow others to feel valued and involved (Bennett & Hammer, 1998; Hammer, 2012). Having defined ICC, similar constructs used around ICC, and the IDI, in the next section I discuss other studies that have measured levels of cultural competence among college students.

**Research on College Students and ICC**

Previous studies on college students that show levels of ICC are low to moderate, that some populations score higher on measures of ICC, and that ICC can be learned.
ICC is Low

Previous studies have demonstrated that the levels of cultural competence among college students in general are low to moderate (Bikson & Law, 1994; Brown, 2008; Castles, 2012; Green, 2000; Perez et al., 2015; Shaw et al., 2015; Zhao, 2002). In her 2008 mixed methods dissertation using the IDI, Brown found that the overall mean score of college students \((n = 600)\) was 89.15. This score indicates that students on average were at Minimization, people tend to deemphasize difference and emphasize universalist ideas about human beings (Hammer, 2012). In his 2012 dissertation, also using the IDI, Castles found that the mean score for college freshmen \((n = 282)\) was 79.22 on average. This score indicates students were at the developmental orientation of Polarization and likely hold an *us versus them* perspective (Hammer, 2012). In Perez et al.’s 2015 study which used the Developmental Model of Intercultural Maturity, a model that can be compared to the IDI (Shaw et al. 2015), students \((n = 110)\) scored at the initial and intermediate levels of intercultural maturity. Other scholarly research that shows low to moderate levels of cultural competence achievement among college students include studies by Bikson & Law, 1994; Green, 2000; Shaw et al., 2015; and Zhao, 2002.

Research suggests there may be a number of reasons why overall college student intercultural competence is low to moderate. One suggestion is that U.S. neighborhoods and schools are increasingly segregated (Orfield, Frankenberg & Lee, 2003) and the result may be that students have had limited exposure to diversity prior to college (Perez, et al., 2015). This theory is supported by research by Costa and Kahn (2003) that suggests that “more-homogenous communities” (p. 3) have higher levels of social capital
production within the group [bonding social capital (Putnam, 2003)]. However, bonding social capital can also serve to be insulating rather than serve to bridge across diverse social groups (Putnam, 2003).

Along the same lines, research has shown that students in high school are segregated by educational practices (Kozol, 2005) where students are grouped by ability. This additional layer of segregation from the general high school student body may explain why students with higher high school GPA’s perform lower on the IDI (Brown, 2008). This may also offer clues as to why studies on college students and cultural competence, which have generally surveyed from among students at more selective, traditional universities, show students score low to moderate on assessments of cultural competence.

Concerning educators, 2006 research by Mahon found that of 155 Midwestern teachers, every participant placed on the ethnocentric side of the IDI scale (Denial, Polarization, and Minimization). Another, 2009, study by Walters, Garii and Walters found that only 20% of U.S. teachers feel confident in their ability to work with children from diverse backgrounds. This may be due to the fact that “more than 80% of America’s public school teachers are middle-class Euro-American white women from rural areas, small towns or suburbs, who grew up in largely white neighborhoods and graduated from largely white high schools” (Ference & Bell 2004 as cited in Walters, et al., 2009, p. S151). Further compounding the problem of ethnocentrism is that at the school level, parent-school relationships are generally school-centric and culturally unresponsive to parental engagement and needs (Khalifa, Arnold, & Newcomb, 2015).
Research shows that in general college students score at low to moderate levels of ICC and that factors such as social and academic segregation, educator levels of cultural competence and school-based practices may be contributing factors. The next subsection of this literature review elaborates on the research showing some college students have higher levels of ICC. Theories from the scholarly research will also be offered to explain this finding.

**Populations with Elevated ICC**

Research on college student cultural competence has found that some groups of students tend to score higher on measures of cultural competence. In particular, females and students of color tend to score higher on assessments of intercultural competence and related constructs than do White males (Brown, 2008; Goldstein & Kim, 2005; Volberding, 2013). Brown’s 2008 study ($n = 600$) of undergraduate found that females scored an average of 91.75 on the IDI whereas males scored at an average of 86.54 and that this difference was statistically significant at $p < .001$ (p. 116). In another study involving study abroad outcomes, Goldstein and Kim (2005) found that, using the Generalized Ethnocentrism scale (Neuliep & McCroskey, 1997a), the difference between female and male students was statistically significant at $p < .000$, with females scoring 13.3 points lower on measures of ethnocentrism (p. 517). In another study, Volberding (2013), using the Inventory for Assessing the Process of Cultural Competence (Fitzgerald, Cronin, & Campinha-Bacote, 2009) found that among undergraduate athletic training students ($n = 421$), students of color had statistically significantly higher levels of cultural competence at $p < .01$. 
Although these studies demonstrate some consistencies there are also differences among findings. The Brown and Goldstein and Kim, as well as other studies (see Marra, Covassin, Shingles, Canaday, & Mackowiak, 2010; Nichols, 2011; Rexeisen, Anderson, Lawton & Hubbard, 2008) have found females to be less ethnocentric and/or more culturally competent, yet the Volberding (2013) study found there was no difference based on gender. A study by Castles (2012) also showed gender was not a predictor of statistically different scores on the IDI. Using the IDI among first-year students at a Christian college, the difference in scores by gender not statistically significant and that females and males both scored at the IDI orientation of Polarization.

One theory for why females score higher than males are that females arrive to campus with higher levels of cultural competence as a result of socialization patterns that emphasize empathy, listening and caring; this is comparable to the fact that females are also overrepresented in the humanities and social sciences (Bloomfield, 2004; Brown, 2008; Goldstein & Kim, 2005). Another theory that may explain higher scores for females is that they may have had more negative experiences with diversity (Marra et al., 2010). Other scholars have also noted that minorities, females, and students who had experienced marginalization and had overcome obstacles scored higher on assessments of cultural competence (Brown, 2008; King & Baxter Magolda, 2005; Volberding, 2013).

On the issue of race, although Brown’s study did find significantly higher scores on the IDI among students of color, the differences were not statistically significant. On the other hand, Volberding’s study did find a statistically significant difference with students of color scoring higher (Volberding, 2013). Research from the areas of Nursing
and athletic training have also found that students of color score higher on measures of cultural competence (Marra et al., 2010; Sargent, Sedlak, & Mart sof, 2005).

Scholars speculate that students from minority backgrounds may have had more exposure to diversity and have more opportunities to openly engage meaning-making about their own knowledge and experiences (Fitzgerald, et al., 2009; Volberding, 2013) and that this may lead to higher levels of cultural competence. Brown (2008) also offered that “experiencing an uncomfortable emotional response (such as discomfort, feeling tense, silenced, guarded, or even hurt)” (p. 210) was a significant predictor for higher IDI scores. This was coupled with the finding that in her study, 60% of college students said they had rarely or never discussed intergroup relations with someone of another race but that also reported they had often or very often made friends with someone from another race or country (p. 111). Taken in conjunction, theories for elevated levels of cultural competence among students of color suggest that minority populations regularly experience the need to reflect, particularly about their own emotional responses of feeling silenced or guarded, and that these kinds of reflective activities may contribute to higher levels of cultural competence.

It is also worth mentioning here that some of the studies already presented (Brown, 2008, and Volberding, 2013) also compared levels of cultural competence between college freshmen and upperclassmen. The findings from these studies have mixed results but are consistent in that more years in college is not a predictor for increased levels of cultural competence. Studies have shown that intercultural competence can be learned in an educational setting but it must be demonstrably and
formally taught by culturally competent educators; these skills do not “just happen” as individuals travel, mature, become educated, or attend a workshop (Bennett, 2008; Berg, Paige, & Lou, 2012; Deardorff, 2009; Lou & Bosley, 2012). If issues around diversity are left unaddressed and without formal guidance, divisiveness and stereotyping increases (Allport, 1954; Crichton & Scarino, 2007; Garcia-Perez & Rojas-Primus, 2017; Garson, 2016; Sidanius, Levin, van Larr, & Sears, 2008). Although it is outside the scope of this research, the literature from higher education, study abroad, student affairs, and service learning, as well as the research on college student development, contribute to much of what is known about the development of cultural competence for students once they arrive to college campuses.

This section has provided background on existing levels of college students’ cultural competence showing that overall it is low, generally higher for females and students of color, and that it may be learned through structured experiences that couple reflective activities with the intention to make students emotionally uncomfortable. Though many studies were presented, the research presented in this section lacks a consensus. This indicates more studies on college student levels of cultural competence should be done, ideally with a robust, reliable, and valid assessment such as the IDI.

**College Readiness and ICC**

In recent years, diversity on college campuses has dramatically increased but despite nearly 50 years of pluralism, equity, and multiculturalism on the college agenda, post-secondary institutions must be “more intentional and foresighted” (Dixon, 2001, p. 79) about the research and practices that legitimize intercultural development (Grant &
Millar, 1992; Pope, et al., 2009). Between 1976 and 2007 students of color, which includes African American, Asian American, Latino, and Native American on college campuses has increased from 13% to 27% (ACE, 2015; Drake, 2009). Additionally, other groups of students including students of different faiths, transgender, gay, and veterans, whose numbers may or may not have changed, have continued to become a presence on college campuses (Pope, et al., 2009). Since diversity on campuses continues to increase, issues around cultural diversity will also likely continue to increase. Although racial diversity positively affects the academic and social experiences of college students, research shows that when issues around cultural diversity are not addressed, divisiveness and stereotypes increase (Allport, 1954; Crichton & Scarino, 2007; Garcia-Perez & Rojas-Primus, 2017; Garson, 2016; Gurin et al., 2002; Luo & Jamieson-Drake, 2009; Pascarella & Terenzini, 2005; Sidanius et al., 2008); a handful of examples from the past years show the negative outcomes across K-16 educational settings.

Before and since the 2016 election the Black Lives Matter movement, incidents that led to the movement’s creation, as well as racially motivated incidents on high school and college campuses such as York County School of Technology in York, Pennsylvania; Royal Oak Middle School in Royal Oak, Michigan; Penn State University; and the University of Oklahoma, increasingly indicate that K–16 curriculum and policies do not do enough to foster intercultural competence (Jaschik, 2013; Levine & Cureton, 1998; “White Supremacists,” 2016). If college readiness is intended to prepare students for college campuses, there is growing evidence that ICC is needed both before and
during the college years. As discussed in a previous section of this literature review, college campuses are increasingly diverse but existing research on levels of cultural competence among college students demonstrates that that first-year college students overall score at low to moderate levels on assessments of cultural competence. If cultural visibility and diversity on campuses, is increasing, without proper guidance, students may become more divisive and more likely to address diversity in negative ways such as by using entrenches stereotypes to reaffirm an already present *us versus them* perspective in regards to cultural difference. Further, when first-year college students have had little to no exposure to diversity they may feel less comfortable in their new college setting (Strayhorn, 2014a).

The scholarly research shows that upon arrival to college campuses, students must be able to not only perform academically, but also must be able to get along with roommates, interact with diverse peers in and outside of the classroom setting, and decide what kinds of programming and classes to attend (Adams, 2012; Seifert, Goodman, King & Baxter Magolda, 2010). In turn, the large-scale effect of students who have the skills of cultural competence prior to the first-year of college may have on college completion rates, particularly for historically underserved populations, may be significant. On a more direct and proximal level, the inclusion of intercultural competence as a college readiness skill could help address divisiveness in society and across college campuses where,

“(i)n these trying times of heightened racial tensions in our country, our college administrators, faculty and student affairs professionals are searching for
productive ways to address campus unrest and prompt the kind of organizational change that addresses structural inequities.” (Watt, 2015, p. 528)

Despite several claims from the literature that ICC among college students is valuable and necessary to even the first-year of college, the next section will show that in the literature on college readiness, ICC is absent.

**Scholarly Research on College Readiness**

College readiness lacks a common goal and has been measured by several metrics including: educator perception, student perception, remedial coursework needed, or objective measures such as GPA and test scores (ACT, 2013; Byrd & MacDonald, 2005; Conley, 2010; Conley, McGaughy, Kirtner, van der Valk, & Wenzl, 2010, p. 1; Farrell, 2010; Greene & Forster, 2003; Holles, 2016; Kyllonen, 2013; Lee, 2011; NCES, 2013; Roderick et al., 2009). After significant review of the scholarly literature, David Conley’s work emerged as the most comprehensive. Conley et al. (2010) noted four key factors for college readiness: “(1) key cognitive strategies, (2) key content knowledge, (3) academic behaviors, and (4) contextual knowledge” (p. 3; see Figure 2). Conley et al. (2010) demonstrated that to be college ready, students need to understand the structure of knowledge and big ideas of core academic subjects, must develop a set of cognitive strategies as they develop their understandings of key content, must possess the academic behaviors necessary to successfully manage and engage with a college workload, and possess a contextual understanding of the navigational and cultural elements of gaining admission and being successful in college.
Factor 1, the *Key Cognitive Strategies* include “problem formulation, research, interpretation, communication, and precision/accuracy” (Conley et al., 2010, p. 6). Students who possess the key cognitive strategies are able to support arguments with evidence, engage in the give and take of ideas, think deeply, and solve problems that lack obvious answers. Students without these strategies struggle to process information in complex ways. The key content knowledge students need prior to entering college is ideally interrelated with the key cognitive strategies (Conley et al., 2010).

Factor 2, *Key Content* knowledge, includes core subject knowledge and skills including English fluency, reading and writing, math, social sciences, world languages,
the arts, and the expectation that students are able to engage in college-level writing using credible sources and a specific style manual (Conley et al., 2010).

Academic Behaviors, Factor 3, are interdisciplinary and consist of self-management and study skills, attitudes, and habits. Examples include “the ability to self-monitor, manage time, take notes, set goals, persevere in the face of obstacles, collaborate, self-evaluate, and self-advocate” (Conley et al., 2010, p. 7).

Factor 4 is Contextual Skills & Awareness, also called college knowledge (Conley et al., 2010, p. 7; Roderick et al., 2009, p. 185). These include “the privileged information necessary to navigate the college admissions and financial aid processes and to understand how college operates as a system and a culture” (Conley et al., 2010, p. 7). College and college readiness have tremendous appeal for parents and many graduating high school students as today, more than ever before, high school students aspire to attend college to obtain a 4-year degree, and most high school students will eventually participate in some kind of postsecondary education (Conley et al., 2010; Kirst, 1999; Lee, 2011; Roderick et al., 2009). According to a report from the National Center for Education Statistics (NCES), undergraduate college enrollment rose 32% between 2001 and 2011 (Aud, Wilkinson-Flicker, Nachazel, & Dziuba, 2013), and in 2012 17.7 million students were enrolled in undergraduate education (Snyder & Dillow, 2012).

The literature on college readiness, from Conley (2007a, 2010) shows an absence of intercultural competence skills despite that several colleges, universities, increasingly demand these skills. In the next section I summarize the literature that shows the value of ICC to the workplace.
ICC and Work

Aside from the benefits for society and K-16 that may be achieved by including intercultural competence as a college readiness skill, literature shows there are several organizational and interpersonal strengths related to intercultural competence and that are necessary as work becomes more complex, collaborative, and internationalized (AACC, 2012; Kivunja, 2015; Patriquin, 2016; P21, 2017). By learning the skills of cultural competence, individuals learn how to receive and respond to different ideas and values with an open mind. They also learn that their (personal or cultural) ideas are not superior to the ideas of others and that acceptance and appreciation for diversity allows for new ideas and concepts (Kivunja, 2015). Increased intellectual development, more mature interpersonal relationships (Pope, et al., 2009), being flexible, balancing diverse views to arrive at workable solutions (Kivunja, 2015), increased creativity and innovation (Köppel & Sandner, 2008), productive problem-solving, and effective verbal and non-verbal behaviors (Pavitt & Haight, 1985; Spitzberg, 1983) are just a few of the skills that are desirable across all facets of 21st Century life.

Translated into workplace success, corporations know that inclusiveness “drives revenues, motivates employees, and fosters innovation” (Bush & Peters, 2016, p. 1). To attract the best and brightest, some corporations today strive become the best workplace for diversity. Rankings for the top spots are determined based on employee surveys that ask about how their companies treat them on a daily basis (Egan, 2017). In 2017, among the top ten of People’s Companies That Care were household names such as: Veterans

This section has shown that there is a demand for cultural competence across society, K-16, and the workplace. The skills of intercultural competence are not only desirable but they are also necessary to fostering inclusion across many aspects of 21st Century and American life but these skills are not present in most notions of college readiness. This is problematic because research shows that without proper guidance and intention, the skills of ICC will not develop and that in fact, individuals may hold and strengthen stereotypes. Intercultural competence can be learned, and the research presented in this chapter has served to demonstrate that it should be a part of life before college, and thus conceptualized as an aspect of college readiness.

Summary of the Literature Review

A review of the scholarly literature on cultural competence shows that there are many associated terms and that often those terms imply values; additionally, there are several assessments that purport to measure this competence. The fact that there are so many terms and measures around this construct suggests that although there is no scholarly agreement on what cultural competence is, it is highly desirable. The scholarly literature presented shows that, however valuable or desirable intercultural competence may be, ICC is not a part of college readiness and college students score low to moderate on assessments of cultural competence. That being said, and although more research should be done, there are populations of students who may arrive to campus with higher levels of cultural competence. The literature shows cultural competence can be learned
and that is it necessary and beneficial across society, college, and professional life. Despite these benefits, college readiness lacks a precise definition and overwhelmingly does not include the skills of intercultural competence. As policy makers and institutions seek to culminate college readiness skill and address increasing societal, college, and workplace diversity, it would be wise to consider a more direct and transparent inclusion of intercultural competence as a college ready skill.

In the next chapter I present the methods that were used to select participants, design this study, and answer the seven research questions.
Chapter 3: Methodology

Introduction

The purpose of this mixed methods, explanatory sequential study was threefold: first, to investigate and compare levels of ICC among two groups of first-year college students ages 18 to 19 and enrolled in equivalent credit-bearing Math or English courses at a community college and a traditional 4-year university (Creswell, 2003; Fraenkel, Wallen, & Hyun, 2012); the second purpose of this study was to determine the factors students perceive as having influenced their development of ICC; and third, to learn the extent to which students view ICC as a factor relevant to college and workplace readiness. Additionally, I embrace a social justice approach in this research because I believe that all facets of public education should serve to meet the needs of all of its students and in so doing should also seek to achieve the highest of ethical standards. As part of my argument that intercultural competence should become a college ready skill, I intend for my research to not only foster more access, inclusion, and understanding across public education but also to make the factors for college readiness more transparent and attainable so that any student who aspires to attend college may follow their dreams in the way that I, a first generation female college students from a low income family, have been able to do.
Research Questions

The research questions for this study were:

1. Is there a statistically significant difference in group levels of intercultural competence (as measured by the IDI) between first-year community college students and first-year students at a traditional 4-year university?

2. Is there a statistically significant difference in group levels of ICC between male and female college students, regardless of institution type?

3. Is there a statistically significant mean difference between first-year community college students’ and first-year traditional 4-year university students’ perceptions of whether cultural understanding was valued by their high school?

4. Is there a statistically significant mean difference between first-year community college students’ and first-year traditional 4-year university students’ beliefs about whether their future workplace will value ICC?

5. Is there a statistically significant mean difference between college students’ perceptions of whether cultural understanding was valued by their high school and their beliefs about whether their future workplace will value ICC?

6. What are the factors first-year college students perceived as having influenced their development of intercultural competence?

7. In what ways, if any, do participants view intercultural competence as a factor relevant to college and workplace readiness?
**Institution Selection**

The first research question my study sought to answer was: Is there a statistically significant difference in group levels of intercultural competence (as measured by the IDI) between first-year community college students and first-year students at a traditional 4-year university? To answer this question first-year community college students and students attending a traditional 4-year university were selected for comparison in this study. To start, TSU is a more selective institution and CCC has open enrollment. As a result, in general, students can be expected to differ on traditional measures of college readiness (Classifications, 2015). Previous research on college students and cultural competence has shown that although overall scores are low, but that minorities, females, and students who had experienced marginalization and had overcome obstacles scored higher on assessments of cultural competence (Abes & Jones, 2004; Baxter Magolda, 2014; Bikson & Law, 1994; Brown, 2008; Goldstein & Kim, 2005; King & Baxter Magolda, 2005; King, & Baxter Magolda, 2013; King et al., 2013; Pizzolato, 2003; Shaw et al., 2015; Volberding, 2013).

Community colleges provide broader access to college than do traditional selective universities. Some populations that opt for community, over traditional universities include: women, low-income groups, first generation students, and underrepresented and minority groups (AACC, 2005; Riley et al., 2016). Nationwide, only 28% of White students begin at community colleges and 44% of low income students attend community college for their first-year. For high income students, that number decreases to 15% (CCRC, 2017). In contrast, at traditional universities, groups
are marginalized within the context of a “mythical norm” where White, male, thin, young, Christian, financially secure, and heterosexual are the center (Lorde, 1984, p. 116). Because there are demographic differences among populations of traditional and community college students a comparison of the two types of institutions was warranted.  

**Institutional Demographics**

**CCC.** Located in a U.S. Midwestern state, CCC is a very large public-urban-serving, public 2-year, higher part-time, mixed transfer/career & technical-high nontraditional, Associate’s college (Classifications, 2015). This community college is not selective. It accepts students with high school diplomas, those with GEDs, and those without either. Students can register for classes after applying and taking a placement test. In Autumn (AU) 2015, CCC had an “undergraduate head count” of 26,098; 63% of the students were White (students of color enrollment was 37%), 53% of CCC students were female and 47% of all students at CCC were first generation college students (State Board of Regents, 2016).

**TSU.** Also located in a U.S. Midwestern state, TSU is a large public, high undergraduate, full-time 4-year, more selective, higher transfer-in, primarily residential, balanced arts & sciences/professions, high graduate coexistence with very high research activity university (Classifications, 2015). At TSU’s main campus, where this research was conducted, applicants “are considered for admission on a competitive basis,” had an undergraduate enrollment of 45,982. In 2016, Traditional State University drew 63% of its undergraduate students from among the top 10% of their high schools’ graduating classes and 95% of those enrolled were from the top 25% of their high school graduating
class (TSU Data, 2017). In 2016, the average ACT score was 29.1 and the average SAT score was 1271 (TSU Enrollment, 2017). At the time of this study TSU’s undergraduate population was nearly 82% White (students of color or minority enrollment was only 18.18%), 51% were female, 22% of undergraduates were considered low income students, and 24% of main campus undergraduates were first generation college students (State Board of Regents, 2016).

**Study Context**

I collected data for this study during April and May of 2016. The data collected represented 2.45% of the total students who fit the sample ($n = 1757$) at TSU and 2.99% of the total students who fit the sample ($n = 803$) at CCC.

**Participant Selection**

Little is known about ICC development of first-year students and about how they perceive ICC as relevant to their undergraduate experience (Shaw et al., 2015). Moreover, as policies and research strive to understand and unify college readiness goals, first-year college students, as recent high school graduates, may have unique perceptions about what college readiness should entail (Darche & Stam, 2012; Strayhorn, 2014a). Thus, this study investigated first-year college students’ perceptions of intercultural competence as a factor for college readiness and to understand the influences they perceived as having contributed to their development of intercultural competence.

Since the institution types, as well as the populations, at the two institutions were different, I sought to match participants as much as possible so that more reliable comparisons could be made between the two groups.
A recent study by Garson (2016) showed that academic disciplines are statistically significant predictors for scores on the IDI. For this reason, beyond year in college and age, additional controls for this study were based upon course level the students were enrolled in. Only students enrolled in credit-bearing (non-remedial courses) ENG 1110 or 1100 and Math 1151 or Math 1116 were among those surveyed. By controlling for course-level work (only non-remedial courses) college readiness was more comparable across groups. Finally, although it was not part of my selection process, because the research on gender and levels of cultural competence has shown conflicting findings (Castles, 2012; Marra et al., 2010; Nichols, 2011; Rexeisen et al., 2008; Volberding, 2013) I also included gender as a variable in my study.

Pryor, Hurtado, Saenz, Santos, and Korn (2007) showed that 68.5% of students who are in their first-year of college are age 18 and that 29.6% of entering college students were 19 or older. For this reason, the sampled population was limited to students aged 18 or 19. By controlling for courses students were enrolled in, general subject-area (Math and English only) students of all academic disciplines were equally likely to be selected.

I obtained Institutional Review Board (IRB) approval from each institution, but because recruitment of respondents was difficult, each institution was asked to provide a list of all students who fit the parameters for this study. After data from the surveys was reported and analyzed, I scheduled interviews. Originally, the goal was to selectively recruit an equal number of participants from each institution based on extremely high or extremely low IDI scores. However, even after I offered an incentive for interview
participation, participants who scored lowest on the IDI, though unaware of their scores, did not respond to requests for an interview. As mortality was high, participants were chosen incrementally from lowest to next highest scores (Fraenkel et al., 2012) and convenience sampling was used (Patton, 1990). Details on the selection process and participant IDI scores are presented in the Interview Data Collection section and in Appendix E.

**Research Design**

This study used a nonexperimental, two-phase, explanatory sequential, mixed methods design (Creswell, 2012). Similar research on cultural competence has used mixed methods (Brown, 2008; Garson, 2016; Seifert et al., 2010). Mixed methods were appropriate for this study because the addition of the qualitative design allows for going beyond metrics to provide a deeper understanding of the practices and perceptions of participants (Pope et al, 2009; Seifert et al, 2010). A sample of 67 participants completed the IDI survey. Eight participants participated in interviews.

In the first, quantitative, portion of the study I used the IDI (Hammer, 2012) as the instrument to assess intercultural competence. After quantitative data from the IDI were collected and reported to me by IDI, LLC., the data were further analyzed with independent sample *t-tests* in Statistical Package for the Social Sciences (SPSS) to see if there were statistically significant differences between the two groups. The information captured by the IDI surveys also informed the selection of interviewees who could offer in-depth perspectives on ICC’s relevance to college readiness and factors that may have led to their ICC (Fraenkel et al., 2012).
For the second and qualitative portion of the study, I conducted semi-structured, individual interviews (Fraenkel et al., 2012) and subsequently analyzed them using NVivo software, grounded theory methods and a constructivist approach supported by, open, axial coding, and constant comparative design (Charmaz, 2014; Glaser & Strauss, 2009; Strauss & Corbin, 1994). These methods were useful for allowing categories and themes to emerge from the data and generate innovative ideas from the voices of the participants themselves (Charmaz, 2014; Glaser, 1978).

**Research Variables**

For the first five research questions, I selectively collected data that allowed me to compare levels of ICC of 18 to 19 year-old, first-year college students at two different college types. The college institution type, either a community college or a 4-year institution, was the independent, categorical variable; and the level of ICC as measured by the IDI (Conley et al., 2010; Creswell, 2012; Hammer, 2012) was the dependent, continuous variable (Fraenkel et al., 2012). These variables were reflected in Research Question 1 as follows: Is there a statistical difference in group levels of ICC (*dependent variable* as measured by the IDI) between first-year community college students (*independent variable group 1*) and first-year students at a traditional 4-year university (*independent variable group 2*)?

**Research Instrument**

The Intercultural Development Inventory

I selected the IDI for use in this study because it is the most widely used, valid and reliable instrument to date and it does so, “while being respectful of cultural
diversity” (Harris, Moran, & Moran, 2004, p. 25). The IDI contains neither cultural bias nor social desirability effects, and readability analysis of the IDI shows it is appropriate for individuals aged 15 and higher (Hammer, 2012, 2011b). The IDI is a rigorously validated, theory-based, developmental, practical, actionable, cross-cultural tool (Hammer, 2012). Version 3 of the IDI possesses strong validity and reliability across diverse cultural groups (Hammer, 2011a, pp. 474–487; Hammer, 2013, p. 32; Hammer & Bennett, 2003) and the IDI has strong content and construct validity, as well as strong predictive validity (Hammer, 2011; Hammer, Bennett, & Wiseman, 2003; Paige, Jacobs-Cassuto, Yershova, & DeJaeghere, 2003).

The instrument, first developed as the Developmental Model of Intercultural Sensitivity by Milton J. Bennett in 1986 (Bennett, 1986; Hammer et al., 2003), is one of only two tools recommended by the American Council on Education to assess complex intercultural learning (Hammer, 2017). The IDI is to date the most widely used and accepted assessment that not only measures organizational and educational, group as well as individual, ICC but also provides strategies for building ICC (Cushner, 2012; Hammer, 2012). The IDI has been used as a measurement instrument in 60 published articles or book chapters, and in over 66 dissertations. Further, the IDI has been used by tens of for-profit, governmental, and educational institutions (Hammer, 2017).

The IDI is a proprietary instrument and can only be used by qualified administrators (QA). To become a QA, I attended a 3-day training (Philadelphia, PA in the fall of 2013) and was awarded certification. Dr. Hammer and IDI, LLC approved the
Customized questions written by the researcher and the use of the IDI in this study on March 11, 2016.

This study employed Version 3 of the educational version of the IDI (Hammer, 2012). This version contains two parts: 50 Likert-type items which were calculated by IDI, LLC to assess the participants’ level of ICC; the second part, not used to calculate an IDI score, contains demographic and optional contexting and Customized questions (see Appendix C). The survey takes between 15 and 30 minutes to complete.

The IDI identifies where a participant scores along a developmental continuum from an ethnocentric to an ethnorelative mindset (Bennett, 1986; Bennett & Hammer, 1998; Hammer, 2012). Participants score (see Figure 1) on a continuum between one and five developmental orientations, from Denial to Polarization (which is characterized as either Defense or Reversal), Minimization, Acceptance, and Adaptation (Hammer, 2012). In addition, the IDI identifies a perceived orientation, which indicates where, along the continuum, participants estimate their own level of ICC.

Validity evidence shows the IDI has strong content and construct validity as well as strong predictive validity (Hammer, 2011; Hammer, Bennett, & Wiseman, 2003; Paige, et al., 2003). The Cronbach alpha, or the alpha coefficients for the seven scales on the IDI are .66 for Denial, .72 for Defense, .78 for Reversal (the Developmental Orientation of Polarization includes both of these scales), .74 for Minimization, .69 for Acceptance, and .71 for Adaptation (Hammer, 2011, p. 8). Because there are three types of optional questions that can be modified by the user, further discussion of the question types used in the unique version administered in this study is necessary.
**IDI objective questions.** The 2016 Educational version (Version 3) of the IDI survey includes 50 five-point Likert-scale questions. This is the first set of questions answered by respondents. These questions are written by IDI, and only these questions are calculated to generate a respondent’s score along the Intercultural Development Continuum. Two examples of the objective questions and the response options are:

1. Human behavior worldwide should be governed by natural and universal ideas of right and wrong.
   - disagree
   - disagree somewhat more than agree
   - disagree some and agree some
   - agree somewhat more than disagree
   - agree

2. I evaluate situations in my own culture based on my experiences and knowledge of other cultures.
   - disagree
   - disagree somewhat more than agree
   - disagree some and agree some
   - agree somewhat more than disagree
   - agree
**IDI subjective questions.** On the version of the IDI used in this study, following the 50 objective questions there were 22 subjective questions of three types: demographic, contexting, and Customized (IDI, LLC, 2016). The 11 demographic questions, written by IDI, asked participants to indicate their name, age, education level, country of citizenship, and kind of educational institution. The second type of open-ended questions were the contexting questions. These questions, also written by IDI, were optional, but all were included in this study. The five contexting questions included questions such as, *What are your experiences across cultures?* and *What is most challenging for you in working with people from other cultures?* These questions are not calculated in the IDI score but were helpful for understanding respondents’ intercultural experiences in more depth as well as for encouraging respondents to reflect on “cross cultural goals and challenges” (Hammer, 2017, p. 1). The six Customized questions were approved for use by the IDI, LLC for use in this study. The Customized questions, and their possible responses are found in Appendix C.

**Data Collection**

**Survey Data Collection**

This study was intended to first quantitatively assess and compare group levels of ICC to see if a difference exists among first-year City Community College students and Traditional State University students, ages 18 to 19 (see Table 1, below, for demographics of survey participants).
Demographics of Survey Participants

<table>
<thead>
<tr>
<th></th>
<th>CCC</th>
<th>TSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Participants</td>
<td>24</td>
<td>43</td>
</tr>
<tr>
<td>Gender</td>
<td>Male: 7</td>
<td>Male: 19</td>
</tr>
<tr>
<td></td>
<td>Female: 17</td>
<td>Female: 23</td>
</tr>
<tr>
<td>Male-to-Female:</td>
<td>N/A</td>
<td>Male-to-Female: 1</td>
</tr>
<tr>
<td>Race</td>
<td>White: 13</td>
<td>White: 31</td>
</tr>
<tr>
<td></td>
<td>Students of color: 10</td>
<td>Students of color: 10</td>
</tr>
<tr>
<td></td>
<td>No Answer: 1</td>
<td>No Answer: 2</td>
</tr>
</tbody>
</table>

Table 1. Student Demographics for IDI Survey

Note. (n = 67)

In total, three rounds of recruitment occurred and, after IRB approval, I obtained a list of students fitting the study parameters. At the community college 802 students (n = 802) fit the parameters of the study; at the TSU 1756 (n = 1756). Students were emailed (using BCC) in groups of 20 to 45 at a time and an electronic link to the surveys were sent only to recruits who indicated assent for the study. To ensure data remained separate by type of institution, the usernames assigned to participants contained a code to identify institution type. The emails included a copy of the consent form as well as a link to take the IDI (see Appendix F).

Interview Data Collection

I conducted eight interviews in April and May of 2016 (see Table 2 below for demographics of interview participants). Originally, interview candidates were selected
for maximum variation as indicated first by extreme (high and low) IDI scores (Patton, 1990) and second, based upon cultural diversity and gender; however, this was not possible as recruitment efforts returned only one low-scoring respondent. Therefore, participants were selected by incrementally moving from low to middle scorers (see Appendix H). Further impediments arose once interview dates and times were established, resulting in interviews being conducted online, over the phone, and in person.

Demographics of Interview Participants

<table>
<thead>
<tr>
<th>Institution</th>
<th>Participant Pseudonym</th>
<th>IDI Score</th>
<th>IDI Developmental Orientation</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC</td>
<td>Bobby</td>
<td>114.03</td>
<td>Cusp Acceptance</td>
<td>Male</td>
<td>Black/African American &amp; White</td>
</tr>
<tr>
<td></td>
<td>Mace</td>
<td>109.80</td>
<td>Cusp Acceptance</td>
<td>Male</td>
<td>Indian American</td>
</tr>
<tr>
<td></td>
<td>Mya</td>
<td>103.70</td>
<td>Minimization</td>
<td>Female</td>
<td>Indian American</td>
</tr>
<tr>
<td></td>
<td>Willie</td>
<td>91.38</td>
<td>Minimization</td>
<td>Female</td>
<td>White, European American</td>
</tr>
<tr>
<td>TSU</td>
<td>Sophie</td>
<td>113.50</td>
<td>Cusp Acceptance</td>
<td>Female</td>
<td>White, European American</td>
</tr>
<tr>
<td></td>
<td>Rand</td>
<td>109.22</td>
<td>Cusp Acceptance</td>
<td>Female</td>
<td>Indian</td>
</tr>
<tr>
<td></td>
<td>Sam</td>
<td>105.60</td>
<td>Minimization</td>
<td>Male</td>
<td>Middle Eastern American</td>
</tr>
<tr>
<td></td>
<td>Dylan</td>
<td>66.31</td>
<td>Denial</td>
<td>Male</td>
<td>White, Jewish</td>
</tr>
</tbody>
</table>

Table 2. Student Demographics for Interviews

*Note.* \((n = 8)\)
The initial sampling method was intended for maximum variation among IDI scores, and those with extremely high and extremely low scores were selected for interviews (Patton, 1990). Maximum variation was best suited for the interviews because “(a)ny common patterns that emerge from great variation are of particular interest and value in capturing the core experiences and central, shared aspects or impacts of a program” (Patton, 1990, p. 172). High scorers were identified as those who had scores closest to the *Adaptation* and *Cusp of Acceptance* range (CCC, *n* = 3; TCU, *n* = 3). Low scorers were those who had scored closest to the *Denial* and *Polarization* end of the spectrum (CC, *n* = 12; TC, *n* = 25; see Appendix D). Although participants were unaware of their individual scores, and although there were a higher percentage of survey-takers at both institutions with low scores, low scoring participants overwhelmingly did not respond to emails requesting an interview (see Appendix H).

As those with low IDI scores (Denial and Polarization) overwhelmingly did not respond to interview requests, convenience sampling was also used and I moved from low scores incrementally to higher scores (Patton, 1990, p. 180–181). Among the high scorers I first emailed the highest scorers to request an interview. If there was no reply I moved incrementally to the next score. Appendix H shows IDI orientations and attempts at recruitment from among the highest and lowest scoring participants (not all students were emailed; participants who replied and who were interviewed appear in bold).

Due to participant requests, individual semi-structured interviews took place in one of three locations: at the college campus, on Skype, or over the phone. Interviews
lasted between 29 minutes and 61 minutes. I used the same basic questions at each of the eight interviews, but allowed space for fluidity and elaboration and to differentiate pacing to allow participants to express their ideas using “their own language” while also returning data comparable for analysis (Charmaz, 2014, p. 63; Cohen & Crabtree, 2006). Interview questions, derived from answers students had provided in the demographic, contexting, and Customized questions on the IDI are included in Appendix G.

**Data Analysis**

**Survey Data**

Once IDI survey data were collected, data were analyzed using SPSS to determine whether a statistically significant difference existed between the mean IDI scores of the CCC and TSU groups. For the surveys there were two types of data collected: IDI scores (from the 50 items on the IDI) and data from my customized questions. These questions were not included in the IDI score as I wrote them in light of the focus of this study. One of the customized questions was: “The term culture includes: nationality, ethnicity, gender, abilities and socioeconomic class differences. On a scale of 1 to 10 (one being not at all valued and ten being highly valued), how much did your high school value understanding other cultures?” For the Customized questions, participants were asked to respond by selecting options on a 10-point Likert scale. One (1) represented that culture was not at all valued and ten (10) represented that culture was highly valued. T-tests were initially used to determine if there were differences between the two independent groups, however, when the data failed to meet the assumptions for the t-test the Mann-Whitney U test was used as an alternative.
For the IDI scores, I began survey data analysis by confirming that the data met assumptions for an independent samples \( t \)-test. Though the data did meet the assumptions for the \( t \)-test the boxplots indicated there were two significant outliers in the two groups of independent variables in terms of IDI scores (see Table 1, below). To determine whether to remove or retain the outliers, I ran the independent-samples \( t \)-test with and without the outliers. If the \( t \)-tests yielded similar results I retained the outliers. I also retained the outliers because the outliers were genuinely unusual values in that they were not due to data entry or measurement errors. IDI scores for community college students and traditional college students were normally distributed, as assessed by Shapiro-Wilk Test \( (p > .05) \). There was homogeneity of variances, as assessed by Levene’s Test For Equality Of Variances \( (p > .05) \).
Boxplots of CCC and TSU IDI Scores Showing Two Marginal Outliers

Figure 3. Box Plot Showing Marginal Outliers

More discussion of the survey question types and the findings is provided in Chapter 4, Survey Results.

**Interview Analysis**

As described in the Interview Data Collection section, the goal of the qualitative interviews was to more deeply understand how and why participants scored (high or low) on the IDI, the factors that may have contributed to participant development of ICC, and to understand how participants view ICC as a factor relevant to college and workplace
readiness (Fraenkel et al., 2012; Patton, 2002). The research questions the interviews sought to answer were:

6. What are the factors first-year college students perceived as having influenced their development of intercultural competence?

7. In what ways, if any, do participants view intercultural competence as a factor relevant to college and workplace readiness?

Grounded theory (GT) informed analysis of the interviews for three reasons. First, GT methods allows for a deeper understanding of the practices and perceptions of participants as well as allows for categories and themes to emerge from the data. Second, GT methods are also useful to generate innovative ideas from the voices of the participants themselves (Charmaz, 2014; Glaser, 1978). Third, GT methods were appropriate for use in this study because GT methods encourage attention to issues of social justice, issues such as equity, variation and difference, and power and privilege (Charmaz, 2014).

NVivo was used to analyze the transcripts. The first step for the GT analysis was to import all eight transcripts into NVivo. In NVivo as I moved through each line of transcript I made an initial code. Using the constant comparative method during initial coding I attempted to suspend my prior knowledge and judgments about college readiness and intercultural competence (Glaser & Strauss, 1967). I conducted the first round of open coding by moving quickly through each line of transcript, and by constantly reminding myself to stay close to the data (Charmaz, 2014). During this initial coding process as my inner thoughts began to obfuscate my ability to code quickly and
without preconceived ideas, I took several breaks, wrote memos about my thoughts, and reviewed my field notes. In addition to moving quickly through each line of data, I used gerunds (ie: recalling, appreciating, positing) to reflect participant actions. Gerunds forced me to refrain from making “conceptual leaps,” and from adopting, “extant theories” (Charmaz, 2014, p. 117). The example, below, shows a line of transcript and the initial code:

Transcript: “…obstacle, definitely. I’m facing that right now, I’m trying to convince my dad that one school is better than the other for me.”

Initial Code: differentiating personal from family goals

From the first round of coding, 263 initial codes emerged from the eight transcripts. Several of the initial codes were similar but had been coded differently to ensure I moved quickly and stayed close to the data (Charmaz, 2014). Some initial codes had only one reference and some codes had as many as 67 references. In my coding journal I kept track of the number of new codes each transcript added. Figure 4, below, shows a snapshot of the initial codes and the references.
During the second round of coding, the axial coding, I sorted, synthesized and organized the initial codes to link categories and subcategories (Charmaz, 2014; Strauss & Corbin, 1994). Three examples of initial codes that were synthesized during round two of my coding are: “explaining why ICC requires empathy and not everyone can do it” and “positing cultural majority lacks empathy.” I condensed these two statements in the second round of coding to thinking about others’ ICC acquisition. The second example where two initial codes were condensed is: “differentiating personal from family goals” and “differentiating personal or family from school values.” I collapsed these into differentiating among competing values systems. Finally, “describing college as lacking formal cultural integration” and “cultural understanding as an option in college” was condensed into, “in college learning culture is optional”. After synthesizing the codes there were 123 axial codes.
The third and fourth rounds of coding involved focused coding. During this phase I closely examined the frequent (as indicated by number of “References,” see above) and more significant codes and sorted these codes into categories that were most relevant to my research questions (Charmaz, 2014). In other words, I coded my axial codes. After the first round of focused coding I had My notes from this round of coding appear below:

**1A - comparing self to others.** Resulted in collapsing 60 into major 5 codes:

1A Recognizing Culturally different others; 1A Recognizing self as different; 1A Viewing PPL as disliking cult difference; 1AAvoid Disrespect; 1AEmpathy.

*Should I combine Avoiding Disrespect with Empathy? No, because avoiding disrespect is not always out of empathy. It’s also about self-preservation.*

During the fourth and final round of coding I returned to my research questions and began to align the codes with the questions. Research question eight was, “What are the factors first-year college students perceived as having influenced their development of intercultural competence?” so I identified the focused codes that answered this question (not every category had data to support a focused code). An example appears below in Table 3.
### Focused Codes from Round 4 of Coding

<table>
<thead>
<tr>
<th>CCC RQ 8</th>
<th>TSU RQ 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the factors each group of first-year college students perceive as having influenced their development of intercultural competence?</td>
<td>What are the factors each group of first-year college students perceive as having influenced their development of intercultural competence?</td>
</tr>
</tbody>
</table>

| 1A – Comparing Self To Others | 1A – Comparing Self To Others |
| 1A1 Recognizing Culturally different others | 1A1 recognizing culturally different others |
| 1A2 Viewing PPL as disliking cult difference | ---------- |
| 1A3 Recognizing self as different | 1A3 recognizing self as different |
| 1A4 Avoid Disrespect | 1A4 Avoid Disrespect |
| 1A5 Empathy | 1A5 Empathy |
| 1A6 Initial Conversations You're Different | 1A6 Initial Conversations You're Different |

| 1B Personal Views thought on developing ICC | 1B Personal Views thought on developing ICC |
| 1B1 Acceptance for social harmony | 1B1 Acceptance or Adaptation for social harmony |
| 1B2 Adaptation for social harmony | -----------collapsed into 1B1 |
| 1B3 ICC as bettering self | 1B3 ICC as bettering self |
| 1B4 ICC is EFFORT | 1B4 ICC is EFFORT |
| 1B5 Minimization as safest* | 1B5 Minimization as safest* |

Table 3. Focused Coding from Round 4 of Coding

*Note. *1B5 Minimization as safest–Several participants state that minimization is safest. For several, they lack vocabulary or appropriate terminology, for others they may not understand that minimization still implies a dominant cultural viewpoint and accepts the dominant as normal.*
Although I used grounded theory methods as part of the mixed-methods study I did not intend to generate theories of how ICC is developed and did not engage in theoretical coding. However, after reviewing the focused codes and my memos there was one category that emerged from the data that I felt represented objective facts about the world (Charmaz, 2014). I labeled this category Empathic Recall it is not a theory more of a description about the development of intercultural competence. More about Empathic Recall is found in Chapter 5.

The strengths of using grounded theory methods in this study were that the method allowed participants’ voices and realities to be known, and it and allowed me, the researcher to learn directly from my participants without the need to interject theories or other research I have studied. In sum, this method allowed me to answer two of my research questions with accuracy, and from the point of view of the first-year college student.

**Bias/Error**

The researcher conducting this study has lived and taught in the geographical area in which study was situated for six years and the study location was chosen out of convenience. The researcher has taught at both CCC and TSU and was teaching at CCC during the time of data collection. No participants who had taken, or were taking, courses taught by the researcher were included in this study.

Philosophically and paradigmatically, the researcher acknowledges bias that may be inherently present due to three factors. First, prior to pursuing a doctoral degree I
lived and taught abroad for six years. The intercultural experiences gained during this
time serve to increase my valuation of ICC as a necessary college and workplace skill.
Second, I taught social studies at the middle and high school levels for 10 years and
developed a reconstructivist social justice approach influenced by authors such as
Howard Zinn and James Loewen. Finally, as a first-generation female college student
from a low-income, single-parent household, upon attending college I found there were
several significant disadvantages for me as compared to many of my peers. The
disadvantages I faced were a strong factor for my pursuit of a career in public education
as well as for my pursuit of a doctoral degree. Though I am not alone in this, my goal,
throughout my professional life has been to encourage students who are willing, to attend
and graduate from college and to earn a better quality of life. This study, I feel, reflects
my personal and social interests and values on the deepest of levels.

**Validity and Reliability**

Throughout this study, threats to internal validity were moderate. Participants
were selected for homogenous traits such as age and course enrollment, and all data
collection took place within a two-month period during the Spring 2016 semester.
Subjects within each group varied in terms of several factors, including parents’ level of
education, amount of time spent traveling with family, religious beliefs, attitude,
ethnicity, gender, maturity, and intelligence (Fraenkel et al., 2012). Furthermore, as
some survey takers were recruited in person and others via email, or via email with an
incentive, there is an additional threat to subject characteristics based upon self-
selectivity (Fraenkel et al., 2012).
The IDI instrument used to collect the quantitative data has strong content and construct validity as well as strong predictive validity (Hammer, 2011; Hammer, Bennett & Wiseman, 2003; Paige, et al., 2003). Reliability is also strong across diverse cultural groups (Hammer, 2011a, pp. 474–487; Hammer, 2013, p. 32; Hammer & Bennett, 2003). Furthermore, the educational version of the IDI was appropriate for the population surveyed (Hammer, 2012).

During the interview portion of data collection there was a high level of mortality from the low scorers on the IDI. In addition, location threat existed in that interviews were conducted in three domains: in person (at either of the two campuses), via Skype, or over the phone (Fraenkel et al., 2012). In one case, due to interviewee availability and technology issues, the interview took place in all three locations over a period of two days. Because I used semi-structured questions and grounded theory methods, I invited participants to share their stories in their own words (Charmaz, 2014) so generalizability to a broader population should be limited and theoretical rather than probabilistic (Popay, Rogers, & Williams, 1998, p. 348). The next chapter discusses the results of the research.
Chapter 4: Results

Introduction

Because this study used mixed-methods, this chapter is presented in two main parts: quantitative data analysis and qualitative data analysis. The result of the study comparing levels of intercultural competence (ICC) between first-year CCC and TSU students is presented first in this chapter followed by findings from the Customized questions that were written by the researcher and included on the IDI ($n = 67$), but that were not part of the calculation used in the IDI score. The second section includes grounded theory analysis of the eight ($n = 8$) semi-structured individual interviews with four students from each institution. The findings in this section are presented to answer the seven research questions.

Survey Results

All data in this section was collected using the Intercultural Development Inventory (IDI) as the survey for 67 first-year college students enrolled in (non-remedial) equivalent college credit-bearing English or Math courses. These data were calculated and reported to the researcher by IDI, LLC and SPSS was used to analyze the results. This study included IDI surveys from TSU ($n = 43$) and from CCC ($n = 24$). I used a $p$-value of .05 to determine whether group differences were statistically significant. Descriptive and inferential statistics are presented to answer the first five research questions:
1. Is there a statistically significant difference in group levels of intercultural competence (as measured by the IDI) between first-year community college students and first-year students at a traditional 4-year university?

2. Is there a statistically significant difference in group levels of ICC between male and female college students, regardless of institution type?

3. Is there a statistically significant mean difference between first-year community college students’ and first-year traditional 4-year university students’ perceptions of whether cultural understanding was valued by their high school?

4. Is there a statistically significant mean difference between first-year community college students’ and first-year traditional 4-year university students’ beliefs about whether their future workplace will value ICC?

5. Is there a statistically significant mean difference between college students’ perceptions of whether cultural understanding was valued by their high school and their beliefs about whether their future workplace will value ICC?
The findings from the quantitative data are presented in two sections. The first section used the data gathered from the 50 Likert-type items and which was calculated by IDI, LLC to assess the participants’ level of intercultural competence (ICC) or Developmental Orientation (DO) (See Chapter 3, Research Instrument for definitions of Developmental Orientations). The second quantitative results section used data from the three customized questions included on the IDI. These questions were not included in the IDI score as I wrote them in light of the focus of this study.

**IDI developmental orientation findings.** IDI Developmental Orientation scores indicate a participants’ score along the Developmental Continuum from an ethnocentric to an ethnorelative (intercultural) mindset (Bennett, 1986; Bennett & Hammer, 1998; Hammer, 2012). In total, there are five Developmental Orientations and participants’ scores at an orientation (see Figure 1) reflect their level of intercultural competence along a continuum from Denial, to Polarization, to Minimization, Acceptance, and finally Adaptation. At Adaptation participants are most ethnorelative and are able to shift their thinking and behavior to adapt to difference (Hammer, 2012; Bennett, 1993).

**Overall average mean scores.** Table 4, below, shows that the mean score across both institutions was 83.48 on a scale ranging from 40–145. This scores indicates both groups of college students scored at the orientation of Polarization (see Table 5, below). At the Developmental Orientation of Polarization, individuals actively judge differences because differences make them uncomfortable. This finding is consistent with previous research which shows college students, in general, score low on assessments of cultural
competence (Bikson & Law, 1994; Brown, 2008; Green, 2000; Perez et al., 2015; Shaw et al., 2015; Zhao, 2002).

Mean IDI Scores For CCC and TSU

<table>
<thead>
<tr>
<th>IDIDOSCORE</th>
<th>Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>83.4830</td>
<td>1.82236</td>
</tr>
<tr>
<td>95% Confidence Interval for Mean</td>
<td>79.8445</td>
<td>87.1215</td>
</tr>
<tr>
<td>5% Trimmed Mean</td>
<td>83.2348</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>80.5550</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>222.508</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>14.9169</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>46.75</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>115.06</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>68.31</td>
<td></td>
</tr>
<tr>
<td>Interquartile Range</td>
<td>19.93</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>.417</td>
<td>.293</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-.234</td>
<td>.578</td>
</tr>
</tbody>
</table>

Table 4. Mean IDI Score for First-Year College Students

Note. Mean IDI score for first-year college students (n = 67) is 83.48.

The Q-Q Plot in Figure 5, below, shows the distribution of all first-year college students. There was a normal linear distribution of IDI scores for all CCC and TSU students.
Normal Distribution of IDI Scores for CCC and TSU Students

Figure 5. Scatter Plot of IDI Scores for CCC and TSU Students Combined Showing a Normal Distribution

*Note. (n = 67)*

Tables 5 and 6, below, show the frequencies of IDI scores by college type and the IDI scale and corresponding orientations.
IDI Score Frequencies: CCC and TSU

Table 5. Frequencies of IDI Orientations by College Type

<table>
<thead>
<tr>
<th>IDI Orientation</th>
<th>Community College</th>
<th>Traditional 4-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Cusp of Polarization</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Polarization</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Cusp of Minimization</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Minimization</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Cusp of Acceptance</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Acceptance</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Cusp of Adaptation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Adaptation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High Adaptation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>

Note. (n = 67)

IDI Developmental Orientation Scale and Scores

<table>
<thead>
<tr>
<th>Developmental Orientation</th>
<th>IDI Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial</td>
<td>&lt; 55 to 69.99</td>
</tr>
<tr>
<td>Polarization</td>
<td>70 to 84.99</td>
</tr>
<tr>
<td>Minimization</td>
<td>85 to 114.99</td>
</tr>
<tr>
<td>Acceptance</td>
<td>115 to 129.99</td>
</tr>
<tr>
<td>Adaptation</td>
<td>130 to 145</td>
</tr>
</tbody>
</table>

Table 6. IDI Scoring Scale and Orientations

Figure 6, below, shows the range for the IDI scores. The scores on the histogram represent the Developmental Orientations of all college students surveyed. The histogram and Table 7 show that of 67 students surveyed, only six students scored at the
*Cusp of Acceptance* or higher (For a discussion of each Orientation please see Chapter 2, Figure 1 and The Intercultural Development Inventory).

**Range of IDI Scores for CCC and TSU**

![Histogram](image)

**Figure 6.** Range and Frequency of IDI Scores for All First-Year College Students

*Note. (n = 67)*

Overall, the IDI scores are low among first-year college students. When the scores are broken down into two groups: CCC and TSU students, the findings are not statistically, significantly different across institutions. Table 7, below, shows the mean for TSU college students was 82.84 on a scale ranging from 40–145 and the mean score
for first-year CCC students was higher at 84.64. These scores indicate both groups of college students scored at the orientation of Polarization (see Table 6, above). Because TSU students averaged 82.84 and CCC students averaged 84.64, the Developmental Orientation of Polarization is the same for each group. At this orientation, individuals actively judge differences because differences make them uncomfortable. Individuals at Polarization value assimilation over Acceptance or Adaptation to Difference (Bennett & Hammer, 1998; Hammer, 2012).
Mean Scores for CCC vs. TSU

<table>
<thead>
<tr>
<th>IDIDOSCORE</th>
<th>CCC</th>
<th>Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>84.6434</td>
<td>2.97410</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>82.0025</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>14.57005</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>61.18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>114.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skewness</td>
<td>.588</td>
<td>.472</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>-.093</td>
<td>.918</td>
</tr>
<tr>
<td></td>
<td>TSU Mean</td>
<td>82.8353</td>
<td>2.32381</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>80.1180</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>15.23823</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>46.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>115.06</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skewness</td>
<td>.368</td>
<td>.361</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>-.221</td>
<td>.709</td>
</tr>
</tbody>
</table>

Table 7. Descriptives for IDI Developmental Orientations, CCC vs. TSU

Table 8, below, shows the Shapiro-Wilk test ($p > .05$) for normality (Shapiro & Wilk, 1965). The $p$ values of $>.05$ signifies the population sampled from among each group of first-year college students was normally distributed.
Test of Normality for IDI Scores

<table>
<thead>
<tr>
<th>IDI DEVELOPMENTAL ORIENTATIONS</th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC</td>
<td>.944</td>
<td>24</td>
<td>.205</td>
</tr>
<tr>
<td>TSU</td>
<td>.951</td>
<td>43</td>
<td>.068</td>
</tr>
</tbody>
</table>

Table 8. Test of Normality for IDI Developmental Orientations

The Q-Q plots in Figures 7 and 8, below, show the distribution of CCC and TSU students. Figure 7 shows there was a normal linear distribution of IDI scores for CCC students. Figure 8 shows there was also a normal linear distribution of IDI scores for TSU students.
Figure 7. Q-Q Plot of CCC Developmental Orientation Scores

Note. (n = 24)
Although Table 8 and Figures 7 and 8 (above) show normal distributions of IDI Developmental Orientations, the CCC dataset showed two marginal outliers in the data, as assessed by the boxplot in Figure 9, below. The \textit{t-tests} run both with and without the outliers did not yield statistically significant results; the outliers were genuinely unusual values and were not due to data entry or measurement errors. As such, the outliers were retained for maximum variation sampling among the participants interviewed (outlier number 66 in Figure 9 was among those interviewed).
Marginal Outliers for IDI Scores at CCC

Figure 9. Boxplot of CCC and TSU Students Showing Two Marginal Outliers at CCC

Note.  (n = 67)

The $t$-test in Table 9, below, shows that the mean score for CCC students was 1.81 points, ($SE = 3.82$) higher than TSU students; however, the difference was not statistically significant, $t(65) = .473, p = .638$. 
Mean IDI Scores CCC vs. TSU

<table>
<thead>
<tr>
<th>IDIDOSCORE</th>
<th>CCC</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>84.6434</td>
<td>24</td>
<td>14.57005</td>
<td>2.97410</td>
<td></td>
</tr>
<tr>
<td></td>
<td>82.8353</td>
<td>43</td>
<td>15.23823</td>
<td>2.32381</td>
<td></td>
</tr>
</tbody>
</table>

Table 9. Group Means for Developmental Orientation Scores

Note. (n = 67)

Table 10, below, shows I ran an independent samples t-test to determine if there were differences in IDI developmental orientation scores between CCC students (n = 24) and TSU students (n = 43).
### Independent Samples T-Test Results: IDI Scores CCC vs. TSU

<table>
<thead>
<tr>
<th>F</th>
<th>Sig.</th>
<th>F</th>
<th>Sig.</th>
<th>Equal variances assumed</th>
<th>Sig.</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mean Difference</td>
</tr>
<tr>
<td>IDIDOS</td>
<td>CORE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mean Difference</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mean Difference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.588</td>
<td>.473</td>
<td>65</td>
<td>.638</td>
<td>1.80811</td>
</tr>
</tbody>
</table>

Table 10. Levene's Test for Equality of Variances for IDI Scores
As displayed in Table 10, there was homogeneity of variances, as assessed by Levene’s Test for Equality of Variances for IDI Scores ($p = .588$). The CCC students’ mean IDI score was 1.808 ($SE = 3.823$) higher than TSU students’ mean IDI score; however, there was not a statistically significant difference in IDI score between CCC and TSU $t(65) = .473$, $p = .64$

**IDI developmental orientation scores females vs. males.** The data from this research, Table 11, below, show female participants ($n = 40$) significantly scored higher at 87.05 (*Minimization*), than male participants ($n = 26$) who scored 78.12 (*Polarization*) (see Table 4 for scale and corresponding scores). *Minimization* is the center point along the continuum where individuals are likely to de-emphasize difference in favor of universalist ideas about all humans. Individuals who score at *Minimization* will often defer to the hegemony of the dominant culture in an effort to get along with diverse others. These findings are consistent with findings from previous research which showed that females score higher on measures of intercultural competence and similar constructs, than do males (Brown, 2008; Goldstein & Kim 2005).
IDI Score Male vs. Female

<table>
<thead>
<tr>
<th>Other=3</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDIDOSCORE Male</td>
<td>26</td>
<td>78.1243</td>
<td>14.72359</td>
<td>2.88753</td>
</tr>
<tr>
<td>Female</td>
<td>40</td>
<td>87.0543</td>
<td>14.31934</td>
<td>2.26409</td>
</tr>
</tbody>
</table>

Table 11. IDI Scores for Males and Females

The scatter plots in Figures 10 and 11, below, as well as the Shapiro-Wilk test in Table 12 (below) show the distribution of IDI scores was normal for both males and females.

QQ Plot of IDI Scores: Females

Figure 10. Normal Distribution of IDI Scores for Females
Table 12, below, shows the Shapiro-Wilk test ($p > .05$) for normality (Shapiro & Wilk, 1965). The $p$ values of $>.05$ signifies the male and female population sampled from among each group of first-year college students was normally distributed.
Table 12. Shapiro-Wilk Test for Normality for IDI Scores for Gender are Normal

Table 13, below, shows I ran an independent samples \( t \)-test to determine if there were differences in IDI developmental orientation scores between females (\( n = 40 \)) and males (\( n = 26 \)).
**IDI Scores Females v. Males Statistically Significant**

<table>
<thead>
<tr>
<th>ID</th>
<th>I Did Score</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE</td>
<td>Equal variances not assumed</td>
<td>.620</td>
<td>-2.448</td>
<td>64</td>
<td>.017</td>
<td>-8.9301</td>
<td>3.64739</td>
<td>-16.21650 -1.64352</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13. Mean IDI Developmental Orientation Scores for Males vs. Females is Statistically Significant
As displayed in Table 13, there was homogeneity of variances, as assessed by Levene’s Test for Equality of Variances ($p = .620$). The male mean IDI score was -8.93 (SE = 3.647) lower than the female mean IDI score. This a statistically significant difference $t(64) = -2.448, p = .017$. This finding difference will be interpreted and discussed, in relation to the scholarly literature, in Chapter 5.

**Conclusion of IDI score data analysis.** The data presented in this section was calculated by the IDI, LLC and answered the first five research questions. Results show: overall first-year college students in the study scored low on the IDI; there is no statistical difference in levels of intercultural competence between first-year CCC and TSU students who were enrolled in equivalent, credit-bearing, English and Math courses; and females scored significantly higher than males on the IDI. These findings will be discussed further in Chapter 5.

The next subsection of this chapter explores additional quantitative data gathered from the IDI surveys. Though these questions were included on the IDI, this data was not calculated by IDI, nor were these data included in the IDI scores. The data provided in the next section were gathered by participant answers to the customized questions written by the researcher and approved for use on the IDI by Dr. Hammer.

**IDI Customized questions.** This section presents findings from the three Customized questions that were written by the researcher and included on the IDI, but that were not part of the calculation used in the IDI score. These data sought to answer the following research questions:
The Customized questions asked survey takers about the value of culture by their high schools and the value participants perceived their future workplace would have. The six Customized questions (see Appendix C) used in this research were written entirely by the researcher. The two Customized questions addressed in this subsection asked first-year college students about the value placed on cultural understanding by high school and future workplace. The questions, as they appeared on the IDI were:

1. The term culture includes: nationality, ethnicity, gender, abilities and socioeconomic class differences. On a scale of 1 to 10 (one being not at all valued and ten being highly valued), how much did your high school value understanding other cultures? (Scale 1 to 10)

2. The term culture includes: nationality, ethnicity, gender, abilities and socioeconomic class differences. On a scale of 1 to 10, how much do you think your future, professional, workplace will value understanding other cultures? (Scale 1 to 10)

Like the data above, the data from these questions were analyzed by the researcher using independent t-tests and Mann-Whitney U tests in SPSS. A statistically significant difference was only found among the value of cultural understanding at the high school level.

**Value of cultural understanding by high school.** The data from the participants’ (n = 67) answers to question 1, above, shows that CCC students felt their high schools valued cultural understanding at 1.31 points higher than did TSU students. The overall mean for all students surveyed is 6.43 on a scale from 1 to 10 while the mean for TSU
students is comparatively even lower. Table 14, below, shows this difference is statistically significant at $p = .037$.

Table 14. Mean Scores for CCC and TSU, Culture Valued by High School

<table>
<thead>
<tr>
<th>Group</th>
<th>CCC or TSU</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVHS</td>
<td>CCC</td>
<td>24</td>
<td>7.0833</td>
<td>2.63615</td>
<td>.53810</td>
</tr>
<tr>
<td></td>
<td>TSU</td>
<td>43</td>
<td>5.7674</td>
<td>2.45761</td>
<td>.37478</td>
</tr>
</tbody>
</table>

Table 15, below, shows the Shapiro-Wilk test ($p > .05$) for normality (Shapiro & Wilk, 1965). For TSU students, the $p$ value of $>.05$ signifies the population sampled was normally distributed but for CCC students the $p$ value of $<.05$ indicates a non-normal distribution.
Normality Not Met for CVHS

<table>
<thead>
<tr>
<th></th>
<th>CCC</th>
<th>TSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVHS</td>
<td>.889</td>
<td>.954</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>.013</td>
<td>.082</td>
</tr>
</tbody>
</table>

Table 15. Test of Normality for Culture Valued by High School

Note. a. Lilliefors Significance Correction

As the test for normality did not meet assumptions I ran a Mann-Whitney U Test to determine if there were differences in median scores for Culture Valued by High School scores between CCC students ($n = 24$) and TSU students ($n = 43$) and the difference in median scores was statistically significant at $p = .041$.

Culture Valued by High School had a median score for Value of Cultural Understanding at High School that was statistically significantly different between CCC and TSU students, $U = 360.5, z = -2.048, p = .041$, using an exact sampling distribution for $U$ (Dineen & Blakesley, 1973). The next subsection reports findings on how first-year college students perceive cultural understanding will be valued by their future workplace.

Future workplace. The data from the participants’ answers to question 3, above, shows that first-year CCC ($n = 24$) and TSU ($n = 43$) students believe their future workplace will value “understanding culture” at an overall average of 7.91 out of 10 but there were three outliers (see Figure 12, below). With the three outliers included ($n = 67$), the
significance was \( p = .570 \); after running the data with the outliers removed \((n = 64)\) the
significance was .562. Since the outliers only minimally affected the significance they were retained to show the full range of scores.

Table 16, below, shows the mean scores for Culture Valued by future workplace.

| Culture Valued by Future Workplace: \( CCC \) vs. \( TSU \) |
|---------------------------------|-------|-------|-----------------|
| CCC vs. TSU | N | Mean | Std. Deviation | Std. Error Mean |
| CVFW | CCC | 24 | 7.9583 | 2.15647 | .44019 |
| TSU | 43 | 7.8605 | 1.84625 | .28155 |

Table 16. Distributions for Culture Valued by Future Workplace with Outliers

The boxplot in Figure 12, below, shows there were three outliers for Culture Valued by Future Workplace
Since the outliers did not affect the overall statistical significance of group differences ($p = .570$ vs. $p = .562$), they were retained to show the full range of scores. After deciding to keep the outliers, a Shapiro-Wilk test (see Table 17, below) which returned a $p$ value of $< .05$, normality assumptions for both groups were not met and the Mann-Whitney U Test was run.
Test of Normality for Culture Valued by Future Workplace

<table>
<thead>
<tr>
<th>CCCorTSU</th>
<th>Shapiro-Wilk Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVFW</td>
<td>CCC</td>
<td>.852</td>
<td>24</td>
</tr>
<tr>
<td>TSU</td>
<td></td>
<td>.881</td>
<td>43</td>
</tr>
</tbody>
</table>

Table 17. Normality Not Met for Culture Valued by Future Workplace

Note. a. Lilliefors Significance Correction

As the test for normality did not meet assumptions, I ran a Mann-Whitney U Test to determine if there were differences in median scores for Culture Valued by High School scores between CCC students \((n = 24)\) and TSU students \((n = 43)\). The difference in median scores between CCC and TSU students on Culture Valued by Future Workplace was not statistically significant at \(p = .570\).

Even after including the three outliers, Culture Valued by Future Workplace as displayed in Figure 12, above, had a median score that was not statistically significantly different between CCC and TSU students, \(U = 467.5, z = -.647, p = .517\), using an exact sampling distribution for U (Dineen & Blakesley, 1973). The next subsection of the descriptive statistics section analyzes data comparing Culture Valued by High School to Culture Valued by Future Workplace.

In conclusion of the findings for the three Customized questions, it is noteworthy to point out that the data from the three preceding sections show a consistent increase in
scores from culture valued in high school to how culture is perceived to be valued in the future workplace.

**Comparing value of culture from high school (CVHS) to future workplace (CVFW).** As discussed in the previous two sections, the data for CVHS and CVFW were not normal. As this was the case, data for this test comparing Culture Valued by High School (CVHS) to Culture Valued at the Future Workplace (CVFW) were calculated using the Wilcoxon signed rank test (Table 18, below; n = 67). As noted earlier, three outliers were detected for the variable Culture Valued by Future Workplace but this only minimally affected the significance and after running a Mann-Whitney U test both with and without the outliers I decided to retain the outliers. A Wilcoxon signed-rank test (see Table 18, below) determined that for TSU students there was a statistically significant median increase in Culture Valued by Future Workplace when compared to Culture Valued by High School $z = -3.808$, $p < .0005$. However, for CCC students the median difference was not statistically significant at $z = -1.277$; $p = .202$ (CVFW–CVHS).
Wilcoxon signed rank test, CVHS and CVFW: CCC and TSU

<table>
<thead>
<tr>
<th></th>
<th>CultureValued Workplace - CultureValuedH</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>S</td>
</tr>
<tr>
<td>Z</td>
<td>-1.277&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.202</td>
</tr>
<tr>
<td>Traditional</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>-3.808&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Wilcoxon Signed Ranks Test  
b. Based on negative ranks.

Table 18. Comparison of Medians for CCC and TSU students on CVHS and CVFW

Summary of Quantitative Findings

The data from the IDI results, and the data calculated in SPSS, show there are some significant differences between first-year college students:

1. Community college students \((n = 24)\) scored higher on the IDI than traditional college students \((n = 43)\), but the difference was not statistically significant \((p > .05)\).

2. Females \((n = 40)\) score higher than males \((n = 26)\) on the IDI overall and this is statistically significant at \((n = 66; p = .017)\).

3. Community college students’ \((n = 24)\) high schools valued cultural understanding statistically significantly higher than did traditional university students’ \((n = 43)\) high schools \((n = 67; p = .041)\).
4. Student perception of the level that culture will be valued by their future Workplace is not statistically significantly different between CCC and TSU students at $p = .517$.

5. When level of Cultural Understanding Valued by High Schools (CVHS) and level of Cultural Understanding Valued by the Future Workplace (CVFW), was compared, there was a statistically significant difference between CVFW–CVHS for TSU students ($p = <.0005$). By contrast, for CCC students ($n = 24$) the CVFW–CVHS difference was not statistically significant ($n = 24; p = .202$). (This finding is likely due to summary item # 3 above, where CCC students perceived that their high schools placed a higher value on cultural understanding than that of TSU students.)

In the next section, analysis of the data from the eight ($n = 8$) interviews, and the findings, are presented.

**Qualitative Findings**

This section includes data and findings from the qualitative analysis of the eight ($n = 8$) semi-structured individual interviews. These findings emerged through initial open coding that were grounded in the interview data (Charmaz, 2014). This was followed by a second round of axial coding to identify themes and compare incidents with incidents (Strauss & Corbin, 1994). The results in this section were derived from eight individual interviews as well as from the interview participants’ answers to the
Demographic, Contexting, and Customized questions on the IDI. The data collected and provided in this section has attempted to answer the last two research questions:

6. What are the factors first-year college students perceived as having influenced their development of intercultural competence?

7. In what ways, if any, do participants view intercultural competence as a factor relevant to college and workplace readiness?

The presentation of findings has five main parts. The first begins with a demographic overview of interview participants followed by a brief introduction to their backgrounds and experiences across cultures. Second, themes that arose from the grounded theory analysis and NVivo coding are presented. Themes that emerged include: ICC exists as an optional practice in high school and in college; ICC should begin to be taught in public schools at around first grade or before; ICC may be in part developed through empathic recall; and that all first-year college students should have ICC at a level of Acceptance or higher prior to their first-year of college on a U.S. college campus. These findings are supported with rich quotes gathered from interviews. The third section will provide evidence of how interviewees believe ICC will be relevant to their future workplace, a score interviewees gave an average of 8.75 out of 10 (as compared to the mean; $n = 67$, of 7.9 out of 10) on the IDI. The fourth section will show contradictions and that how, despite relatively high scores, one participant struggled to find appropriate terms to discuss cultural difference, and how participants negotiate competing and sometimes conflicting thoughts around appropriate behavior in
educational settings where cultural differences exist. The final section presents a summary of the findings from the collection.

**Interview Participants—Overview**

I conducted eight interviews with four participants from the community college (CCC) and four participants from the traditional 4-year university (TSU). All students selected for participation had also taken the IDI and so were enrolled either English or Math at CCC or TSU. All names have been changed to pseudonyms to ensure anonymity. Table 19, below, shows an overview of interview participants IDI scores, race, gender, and interview location.
# Interview Participant Overview

<table>
<thead>
<tr>
<th>Institution</th>
<th>Participant Pseudonym</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
<th>IDI Developmental Orientation</th>
<th>Interview Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC</td>
<td>Bobby</td>
<td>Male</td>
<td>Black/African American &amp; White</td>
<td>Cusp Acceptance</td>
<td>In person, CCC meeting room</td>
</tr>
<tr>
<td></td>
<td>Mace</td>
<td>Male</td>
<td>Indian American</td>
<td>Cusp Acceptance</td>
<td>Phone, skype, in person - CCC classroom</td>
</tr>
<tr>
<td></td>
<td>Mya</td>
<td>Female</td>
<td>Indian American</td>
<td>Minimization</td>
<td>In person, CCC Library</td>
</tr>
<tr>
<td></td>
<td>Willie</td>
<td>Female</td>
<td>White, European American</td>
<td>Minimization</td>
<td>Phone</td>
</tr>
<tr>
<td>TSU</td>
<td>Sophie</td>
<td>Female</td>
<td>White, European American</td>
<td>Cusp Acceptance</td>
<td>In person, TSU study area</td>
</tr>
<tr>
<td></td>
<td>Rand</td>
<td>Female</td>
<td>Indian</td>
<td>Cusp Acceptance</td>
<td>In person, TSU study area</td>
</tr>
<tr>
<td></td>
<td>Sam</td>
<td>Male</td>
<td>Middle Eastern American</td>
<td>Minimization</td>
<td>In person, TSU study area</td>
</tr>
<tr>
<td></td>
<td>Dylan</td>
<td>Male</td>
<td>White, Jewish</td>
<td>Denial</td>
<td>Skype</td>
</tr>
</tbody>
</table>

Table 19. Overview of Interview Participants and Interview Locations
Figures 13 and 14, below, show the scale for IDI scores and the responding Developmental Orientations. Interview questions elaborated on the answers participants had provided in the Demographic, Contexting, and Customized questions on the IDI (see Appendix C).

**IDI Developmental Orientation Scores**

<table>
<thead>
<tr>
<th>Orientation</th>
<th>IDI Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial</td>
<td>&lt; 55 to 69</td>
</tr>
<tr>
<td>Polarization</td>
<td>70 to 84</td>
</tr>
<tr>
<td>Minimization</td>
<td>85 to 114</td>
</tr>
<tr>
<td>Acceptance</td>
<td>115 to 129</td>
</tr>
<tr>
<td>Adaptation</td>
<td>130 to 145</td>
</tr>
</tbody>
</table>

Figure 13. IDI Developmental Orientation Scores

**IDI Developmental Orientation Scale**

Figure 14. IDI Developmental Orientation Scale

Reproduced from Hammer, 2013
**City community college students.** During the interview, the first question asked each participant to tell me a little bit more about their experiences across cultures up to that point. This question served not only as an orienting question but also to illustrate some of the factors that may have formally or informally influenced interviewees’ development of ICC.

Bobby describes himself as biracial, “half Black, half White” and “probably a mix of other stuff.” He has lived in Ohio about 99% of his life but has traveled to Tennessee. He speaks English. Bobby describes himself as “your average Joe” who puts in “the work, do(es) the time and effort.”

Mace, whose parents were Indian, was born in Bahrain and moved to the U.S. at around the age of three. As a teenager he estimates he spent roughly a year traveling. He speaks English, Hindi, and some French. He described himself as a “culturally confused child” but says his lack of “cultural connection” did not create a “lack of companionship in high school.” As a college student he describes himself as “disinterested” and has been “waiting for the struggle” in college.

Mya, is the daughter of immigrant parents who moved to the U.S. from India. In her youth she traveled to India and has gone back for a month two times between eighth grade and her first-year of college. While in high school she also traveled in Western Europe for two weeks. Mya speaks English, Hindi, and Punjabi. She describes herself as a first-year college student as “stressed because I want to live up to my parents, because they worked really, really hard.”
Willie says she is from “a very weird family kind of.” Born a Hungarian, she was adopted by German, “and a mixture of other things,” parents when she was three days old. She has never traveled abroad but speaks a little Spanish and American Sign Language. When asked how she would describe herself as a first-year college student she answered, “I’m not really sure.”

**Traditional state university students.** As with the CCC interviews, the interviews with participants at the TSU followed a similar script and the first questions asked participants to tell me a little bit more about their experiences across cultures up to that point.

Sophie, a Caucasian female, who graduated with a 4.0 and speaks only English describes her experiences across cultures as limited. Her high school was public and “in the middle of a corn field” where “a lot of the kids that came could have been described as hicks or rednecks, or whatever you want to call it” and she estimates only .5% of about 600 students were considered minority or underserved.

Rand is a female first-year international student from India. She speaks Hindi and English and lived 14 years in the same town in India. During high school she began to travel for months at a time as an intern. Rand reported that her travels in high school “changed me a lot, so it doesn’t make me necessarily be able to relate to the people when I came back home.”

Sam, a Caucasian Jewish male student from near New York City speaks English and Spanish fluently and is conversational in Mandarin. He reported that “travel’s a big part of my family” and since he was two to three years old his family traveled once or
twice per year. In addition to spending a month in Costa Rica and Hawaii each, he was, at the time of the interview, planning to leave for Spain for a summer internship.

Dylan is a first generation American whose parents and family are from Dubai and Lebanon. He speaks “broken Arabic” and continues to work on reading and writing Arabic. He recalls three times when he travelled to Lebanon and Dubai for a month each time to visit family. He describes himself as an average college student “trying to really get the hang of things before he starts to really excel.”

In the big picture, although each interview participant was a first-year college student between the ages of 18 to 19, as a group, their ethnicities and backgrounds are very diverse. Additionally, as a measure of SES, the range of parental education (Aarø, Flisher, Kaaya, Onya, Namisi, & Wubs, 2009) as indicated on the IDI spanned from parents who have no high school diploma to parents who hold a professional degree (Pharm.D; J.D; M.D.; D.V.M.). As the brief description of each participant shows, participants have had varying degrees of experiences across cultures and have a range of development orientations on the IDI continuum. Despite many differences, there were some commonalities among them.

Findings from Interviews

All eight interview participants believed their future professional workplace would strongly value ICC. This was indicated by an average of 8.75 on a scale from 1 to 10 (1 being not at all valued and 10 being highly valued). On their answers to other interview questions there was agreement, though not consensus, among interviewers on the questions:
1. “Do you feel students at your high school received explicit, or formal, support or modeling of culturally appropriate practices from teachers, counselors, general school culture and climate, school groups? If so, what did this look like?” (factor influencing development of ICC)

2. “At what grade or age level, if ever, should students in public school begin to formally learn how to understand and navigate cultural differences?” (ICC as relevant to college and future workplace)

3. “Which of the following statements best aligns with the level of cultural understanding you believe all first-year college students should have prior to their first-year of college on a U.S. college campus?” (ICC as relevant to college readiness)?

Finding 1. Cultural understanding at high school is an add-on

On the IDI survey, one of the Customized questions asked to all participants was, “The term culture includes: nationality, ethnicity, gender, abilities and socioeconomic class differences. On a scale of 1 to 10 (1 being not at all valued and 10 being highly valued), how much did your high school value understanding other cultures?” Of those interviewed, scores on this item ranged from 2 to 10 with the average being 6.5. One reason for such a relatively low score may be that although it was not a direct question, five participants reported that the majority of their high school teachers were White. Bobby stated,
Nine out of 10–9.5 out of 10, the teachers in there were all White. They don’t have the ability to relate to students that maybe aren’t White. They just don’t have the ability to understand those students and how their cultural background works.

With the exception of Rand, the international student from India, every participant had attended a public school in the U.S. and reported that understanding other cultures (which includes nationality, ethnicity, gender, abilities, and socioeconomic class differences) was an add-on, taught via foreign language courses, or taught by individuals who made it a priority at their public high schools. Bobby reported, “Some teachers, some guidance counselors, they wanna understand that stuff. Now a teacher doesn’t really have to do that. They don’t have to. They choose to.” Dylan reported that on global awareness day, which was once a year at his school, “a lot of students would skip that day.”

Willie shared similar memories and recalled,

With that we had a day when we would do a talent show kind of thing but it was showcasing things from your culture…Yeah. We did stuff like that. We did that once a year. Other than we didn’t really do that much outside of that.

Dylan also stated that a lot of the courses that offered a curriculum geared towards understanding other cultures were the “upper level coursework” like his AP Human Geography classes. Although scores for cultural understanding being taught in high school were low, the responses to the next question were very different.

**Finding 2.** First graders should be taught culturally appropriate practices.

To the interview question, “When, if ever, should public school students formally learn to appreciate and navigate cultural difference?” all participants agreed that
understanding and navigating cultural differences should be taught formally in the public school curriculum. Two of the eight participants, Sophie and Dylan, believed it should be introduced at between third and eighth grades. Sophie believes students should formally learn to understand and navigate cultural differences,

As soon as possible. As soon as they’re old enough to understand… maybe third, fourth grade, pushing fifth grade depending on the school… You can’t really expect them to learn about this stuff at home. If you want the world to be a better place, you might wanna start, you have to put in places where you teach how to act in the world. Maybe in the curriculum and teach classes in school, and make that a mandatory thing, just like Math and Science.

Six of the eight interviewees also stated culturally appropriate practices should formally be taught as early as possible, but they believed this should occur by first grade or before. An example from Mya illustrates her reasoning,

I think from a very young age because that’s where we want to learn and it’s easier to accept everyone because you’re not familiarized with the prejudices of it. Because if you just leave a bunch of kids in a room together with a bunch of toys, they’re not gonna be, they’re all gonna wanna play together. They don’t care about the race, they don’t care about if you’re gay or anything from a young age.

In sum, interview participants all believed that ICC should be formally taught in public school. Chapter 5 will provide more suggestions from interviewees on how this could be accomplished. The next section will show all interviewees also perceived ICC as important to college readiness.
**Finding 3.** Empathic recall helped participants recognize culturally appropriate behavior.

*Empathic recall* is a term that emerged as a theme from the interviews when participants not only reflected on their own past experiences but also recalled a situation where they witnessed someone else being discriminated against on the basis of cultural differences, either in person or through the media. *Empathic recall* helped participants recognize and appreciate culturally appropriate behavior as they recalled others being treated with bias or discriminatory behavior. One example of *empathic recall* is from Mya who remembers being an interpreter for her mother at a very young age,

My parents, they didn’t speak English well when they came and they’ve gotten better, but I see my mom try to explain to someone what she wants and when they don’t understand, they can react in two ways. Some just don’t care and some are actually like nice, they’re patient with her. Me, as a child, I never really, I try to be the translator, but, so when I can patiently understand someone else with a language barrier, it makes me happy cuz I don’t, sometimes people were mean to my mom and it made me feel horrible.

When I was little I just hid behind my mom and I felt bad because she’s a woman who just came to America and is trying to get stuff done and she can’t, so when I help someone with a language barrier, it brings me joy. I’m just like, I don’t want them to feel how my mom did.

Bobby gives another (theoretical) example,
You can try and tell somebody about who you are, what you do, how you live. They’ll never really understand it unless they live through it. It’s really hard to–for somebody who is privileged, and this isn’t White privilege, this is all types of privilege, you don’t understand somebody who’s maybe struggling, somebody who hasn’t had a bed for a year, and you begin to ask them questions that maybe are just a little bit too personal, disrespectful. You know what I mean? You’re always complainin’ about your back. What’s the reason? Cuz you haven’t had a bed in a year. “Oh, how haven’t you had a bed in a year?” There it is, right there, cuz I’m socially not–economically, not financially stable.

Sophie uses empathic recall to illustrate not her own experience, but that of others when she recalls bias in the media and how it affected her mother,

My mom said that, she’s like, ‘I’m scared to see those people in public. I’m scared to walk past those people in public because they’re people like them overseas are killing our soldiers, our people,’ that kind of thing. When they come here, we don’t know if they’re–there’s the thing, the discrepancy, we don’t know if they’re safe. People aren’t doing their research, and understanding that there’s some parts of that religion, and those kind of people that are good people. It’s not just the entire nationality, race, or religion that’s bad.

So I think that’s a very sensitive issue. I don’t know how well it’s addressed at TSU cuz I have not seen any clubs. I have not seen any extra-curricular groups that are singular towards, maybe, Muslims, or something like that. Or women in
that area, or anything like that. That’s something that I think is very important, especially now, what’s happening in the media and overseas.

Dylan gave a similar example of how he noted non-personal cultural bias in the media and recalled the social efforts other college student engaged in to counter the bias,

This one I’m pretty sure wasn’t a student organization connection. It was more students in general. They had a vigil for Beirut, Paris, and there was also another country during that time. What was nice was to see that it was for all the countries, not just Paris. In Beirut, the bombing happened about three miles away from my grandma’s house. I understand it didn’t affect as many as Paris, but it still was something pretty serious, especially that Beirut’s usually not involved with all this stuff . . . It was really nice to see that at least they were looking out, unlike Facebook, they only had the whole Paris thing goin’ around and not a lot of the other cultures.

*Empathic Recall*, as a new term identified and used in this study, may add to the body of scholarly literature on how college students can and do acquire the skills of ICC (Perez et al., 2015).

**Finding 4.** Acceptance or Adaptation is necessary for college readiness.

The final interview question was a multiple choice response that asked, “Which of the following statements best aligns with the level of cultural understanding you believe all first-year college students should have prior to their first-year of college on a U.S. college campus?” For this question, cultural understanding included: race, ethnicity, gender, national origin, sexual orientation, and ability and/or disability and the categories
for “level” of understanding were statement that represented the mind-set for each of the five Developmental Orientations on the IDI. Below, the six possible answers (beside each answer choice, in italics, is the IDI orientation that corresponds with each statement. The orientation was not included in the actual question; Hammer, 2012):

1. Cultural differences are not important and should not be discussed. (Denial)

2. Cultural differences are not as important as universal ideas of right and wrong; we should focus not on differences, but on how we are all the same. (Minimization)

3. It is important to understand cultural differences because it helps people understand how others make decisions that may seem immoral or unethical to them. (Acceptance)

4. When attending college in the U.S., it is important for all students to understand and adapt to the American ways of doing things. (Polarization)

5. Understanding cultural differences will help all students to feel valued and involved. (Adaptation)

6. I don’t know.

As noted previously, four of the eight interview participants earned an IDI Developmental Orientation score of at the Cusp of Acceptance, three at Minimization and one at Denial. Despite their actual developmental orientations, six of the eight participants answered, “It is important to understand cultural differences because it helps people understand how others make decisions that may seem immoral or unethical to them” (Acceptance). Two participants answered, “Understanding cultural differences
will help all students to feel valued and involved” \( (\text{Adaptation}) \). These answers indicate that although interview participants themselves may not have the level of ICC they perceive as necessary; they do believe that ICC at a level of \textit{Acceptance} or \textit{Adaptation} is important to the first-year of college. Table 20, below, shows an overview of each participant and their reply to the question.

\textit{Interview Participants and Estimated Necessary levels of ICC for First Year of College}

<table>
<thead>
<tr>
<th>Institution</th>
<th>Participant Pseudonym</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
<th>IDI Developmental Orientation</th>
<th>Level of cultural understanding all first-year college students \textit{should} have prior to their first-year of college on a U.S. college campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC</td>
<td>Bobby</td>
<td>Male</td>
<td>Black/African American &amp; White</td>
<td>Cusp Acceptance</td>
<td>Acceptance</td>
</tr>
<tr>
<td></td>
<td>Mace</td>
<td>Male</td>
<td>Indian American</td>
<td>Cusp Acceptance</td>
<td>Acceptance</td>
</tr>
<tr>
<td></td>
<td>Mya</td>
<td>Female</td>
<td>Indian American</td>
<td>Minimization</td>
<td>Adaptation</td>
</tr>
<tr>
<td></td>
<td>Willie</td>
<td>Female</td>
<td>White, European American</td>
<td>Minimization</td>
<td>Acceptance</td>
</tr>
<tr>
<td>TSU</td>
<td>Sophie</td>
<td>Female</td>
<td>White, European American</td>
<td>Cusp Acceptance</td>
<td>Acceptance</td>
</tr>
<tr>
<td></td>
<td>Rand</td>
<td>Female</td>
<td>Indian</td>
<td>Cusp Acceptance</td>
<td>Adaptation</td>
</tr>
<tr>
<td></td>
<td>Sam</td>
<td>Male</td>
<td>White, Jewish</td>
<td>Minimization</td>
<td>Acceptance</td>
</tr>
<tr>
<td></td>
<td>Dylan</td>
<td>Male</td>
<td>Middle Eastern American</td>
<td>Denial</td>
<td>Acceptance</td>
</tr>
</tbody>
</table>

Table 20. Participant Overview and ICC needed for First Year of College
**Finding 5.** Colleges should do more to formally teach ICC.

Despite the expectation for a high level of ICC prior to the first-year of college, when asked, “On a scale of 1 to 10, one being not very much and ten being a lot, how much do you feel understanding other cultures is a skill that’s valued by your college?” six interview participants gave their colleges an average of 7.6 of 10 (this question was not asked on the IDI survey). CCC earned an 8.5, and the TSU earned a 6.8 (two interviewees, one from each institution, could not provide a numerical score). Across all eight interviews, all eight students reported that ICC is treated as optional in college, they are not aware of anything the college does to promote cultural understanding and/or that the colleges should do more. When ICC does occur, participants say it happens through their own initiative by engaging in clubs or events, by being assigned to a dorm room (TSU only) with individuals who are culturally different than them, or through classes usually not required by their major. Students from the TSU, like Sam, report,

> Personally, for me, I can take—I have the option to take as many classes accepting and learning about other cultures as possible. Definitely the options are there . . .

Also there’s a lot of clubs, too, that continue the culture diversity.

Since at TSU, unless required by the major, there is no formal curricular training in ICC, Sam shares his disbelief: “I know as a business student you’re not required to take a language class, which is crazy. I have to take like ten sciences, and I don’t have to take a language class, which is mind-boggling.” Sophie reported that for her, TSU treats ICC similar to how it is treated in high school. Although she estimates her university has a
30–40% minority population, learning about other cultures is not a formal part of the curriculum. She says, “Even if kids aren’t made to get out there, and to experience those clubs and events, they are there, and I think that’s good.” When asked about classes she has taken that may formally address diversity and cultural understanding she reported,

The only classes I’ve taken that would even remotely touch base with any minorities, or culturally diverse is, I’m in a women in film class, through Women’s Gender and Sexuality Studies. They talk about transgender, lesbian, bisexual, African-Americans, Latinos, all of them in film, White women in film, any issues like that. I really value that class. I enjoy listening to and talking about how that has worked through history, and how it works in society today. I think there should be a couple more classes that talk about those kind of people, and different cultures, and how they work.

Overall, on the question of, “Is ICC important to college readiness?” Dylan, the middle-eastern/American student said,

I’d say it’s very important because–coming up here and being from (CITY), it’s interesting but it’s rewarding to see how many different cultures that are even represented in a classroom with 30 people. I have a psychology class, we have a lot of different—that’s actually where I met one of my friends. I think it’s important to understand other cultures and stuff, but also in terms of college readiness, because you don’t want to offend someone. You don’t wanna come in and do something that would be offensive to anyone in particular, especially how diverse college gets. I feel like a lot of people don’t see that in high school, at
least from mine it was 95% White. People don’t see that and sometimes it comes
to them like a brick wall, in a way. They just don’t understand it. They don’t
expect it. Then it actually happens. Yeah, I would say very important.

At CCC, students who were interviewed express similar views. Willie, the White, female
CCC student who gave her high school a 10/10 for how “her high school valued
understanding other cultures,” gave CCC “between a seven and an eight.” She says that
although she sees scholarship and tutoring programs specifically aimed towards minority
students and “(t)hat’s really nice but on the other hand it’s not really talked about as
much as it was at my high school.” She continues, “Whereas at my (high) school it may
have only been one time a year that we really, really had the culture and diversity club do
something in front of everyone. At least it was really shown.” Bobby, the biracial student
who also attends the community college said,

In most of the clubs that I’m in, the scholarships that I’m in, the racial background
in them is, as we go back to the high school, 90% White. It’s crazy. Right? Now
maybe I’m not in all the other clubs, but these clubs I’m in, they offer
scholarships. It brings us to question. Man, where are y’all outreaching to.

Mace found it difficult to give a numerical score to the question of how much CCC
values understanding other cultures. He says, “By the college. I feel it’s a very difficult
answer to give, because, so far, high school to me felt like one entity, whereas college
tends to feel more like individual students on rotation.” Though there may be things the
college does that he is “not aware of,” he says he feels like the community college, “It’s
kinda like the you do you, I do me, I feel like, you stick to yourself, and I stick to
myself.” Mya, who also gave her high school a 10/10 reports that CCC should earn a 9/10 and says, “I haven’t really looked into the clubs and stuff, but I’m sure there are. There’s, I should have done my research for this.”

As the data from the surveys and the interviews (see Table 21, below) show, there is a disparity between the values placed on understanding other cultures across high school, college, and the future workplace. On average, interviewees believe culture will be valued by their future professions/workplace at 8.75 out of 10 and that cultural understanding prior to college should be at the level of Acceptance or Adaptation. However, interviewees (n = 8) report that their high schools only prepared them at a level of 6.5/10, on average. Interestingly, interviewees at CCC rated their own institution (8.5) higher than did those at the TSU (6.8) by 1.7 points (this will be discussed in Chapter 5). Overall, all eight students interviewed believe their colleges should be doing more to formally address, require, or facilitate a higher level of ICC development to prepare them for life and their future workplace. The next section will show how interviewees believe ICC will be useful to their future professions and workplace.
Means for values across HS, college and future workplace across survey and interviews

<table>
<thead>
<tr>
<th>Groupings</th>
<th>Mean Culture Valued HS</th>
<th>Mean Culture valued by college** (n = 6)</th>
<th>Mean Culture Valued future workplace</th>
<th>Level of cultural understanding all first-year college students should have.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewees (n = 8)</td>
<td>6.5</td>
<td>7.6 (CC = 8.5; TU = 6.8)</td>
<td>8.75</td>
<td>Acceptance/Adaptation</td>
</tr>
<tr>
<td>CCC (n = 24)</td>
<td>7.08*</td>
<td>n/a</td>
<td>7.96</td>
<td>Not Asked</td>
</tr>
<tr>
<td>TSU (n = 43)</td>
<td>5.77*</td>
<td>n/a</td>
<td>7.86</td>
<td>Not Asked</td>
</tr>
<tr>
<td>ALL (n = 67)</td>
<td>6.24</td>
<td>n/a</td>
<td>7.90</td>
<td>Not Asked</td>
</tr>
</tbody>
</table>

Table 21. Comparison of Means for Value of Culture by High School, College, and Future Workplace

Note. * Gap between level culture was valued at High School is significantly different between CC and TU students  
** not asked on IDI. Only asked in interviews. Of eight interviewees only six could give a numerical score.

Finding 6. How ICC is valuable to the future workplace

As indicated by a score of 8.75/10, the eight interview participants reported they believed ICC would be very important to their future workplace and discussed particular and general ways that this would be the case. In particular, it will help them understand human behavior and motivations, solve problems using a “different side of the story,” engage and accept colleagues with diverse backgrounds, to be emotionally gratified and to grow in the workplace, and “represent America in a good way.” In general, it is a skill that is useful so as to not offend others. The next few paragraphs illustrate why three participants gave “value of ICC in the future workplace” a 10/10.
All of the three interviewees that gave “value of ICC in the future workplace” a 10/10 were female. Mya, Rand, and Willie perceived the value of ICC in the future workplace would be a 10/10. Mya explains that in her future career as a Psychologist ICC will be important to making her more accepting. She states,

…I want to be a psychologist, I can’t be choose (sic) to who I see. What if he’s gay, what if he’s Muslim? That shouldn’t matter, so I think that’s very important to be accepting of everyone, no matter of their gender or their ethnicity or where they’re from, you can’t, you’re not gonna, you’re never gonna go anywhere if you can’t accept. Especially now in our society.

Rand, the female international student from India who had had a recent internship in Singapore explains that in her future career in Business, ICC will be important to positively affect growth, emotional well-being, and work production. She explains:

Because I’m the one who’s affected here, like it directly impacts me. If I’m not being understood in the workplace, I’m not getting anywhere at all and I’ve actually experienced this… I guess understanding the emotional aspect has a huge, huge impact on the way you produce your work, which took me a long time to understand, but it hit me eventually. I think it’s probably paramount, especially me being the one who will probably have to bear the consequences the most of that assuming that I would be working here. There’s gonna be a majority, and I naturally just fall into the minority anyway.
I think it is extremely important—to not just the emotional well-being as an employee, but for the out—the work produced . . . because if I’m not happy, then what am I doing really?

Willie, believes that as a future forensic scientist ICC will help her understand why people committed a crime. She explains,

…. like trying to understand why people committed a crime. A lot of that goes into their beliefs and how they grew up. A lot of that has to do with our cultures. Understanding more about specific cultures could help because it would help me realize they did this instead of doing this so a lot of people from this specific culture do that. Maybe they’re from this specific culture. It helps narrow down who the criminal could have been by knowing more about their specific paths.

The quotes from the interviews, above, demonstrate that personal gratification, workplace success, job success, and the expectation that they may be a minority in their work environment are all factors for why they believed ICC would be very highly valued in their future workplace. Table 22, below, summarizes all eight interviewees’ IDI scores, their anticipated future career, and the ways in which ICC will be valuable to their future workplace.
Value of ICC to Future Workplace

Finding 7. Minimization is a safer approach

Despite relatively high IDI scores and a consensus that a high level of ICC is important to college readiness and the future workplace, some interviewees had conflicting thoughts about how or if ICC was teachable or necessary—instead choosing Minimization as a safer approach to dealing with culture. In one example, Sophie, the female Caucasian student who scored second highest on the IDI among all eight

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>IDI Developmental Orientation</th>
<th>Value of Culture in Future Workplace</th>
<th>Anticipated Future Career and Value of ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mya</td>
<td>Minimization</td>
<td>10</td>
<td>Psychologist – To be accepting</td>
</tr>
<tr>
<td>Rand</td>
<td>Cusp Acceptance</td>
<td>10</td>
<td>Business – Inclusivity in workplace positively affects growth, emotional well-being and work production.</td>
</tr>
<tr>
<td>Willie</td>
<td>Minimization</td>
<td>10</td>
<td>Forensic Science – Understanding why people committed a crime.</td>
</tr>
<tr>
<td>Bobby</td>
<td>Cusp Acceptance</td>
<td>9</td>
<td>Engineer – To hear different solutions</td>
</tr>
<tr>
<td>Mace</td>
<td>Cusp Acceptance</td>
<td>8</td>
<td>Business – To get the job done without negative emotions.</td>
</tr>
<tr>
<td>Sam</td>
<td>Minimization</td>
<td>8</td>
<td>Business – To be accepting and aware of different experiences.</td>
</tr>
<tr>
<td>Sophie</td>
<td>Cusp Acceptance</td>
<td>8</td>
<td>Naval Officer – Interact with different cultures properly and represent American in a good way.</td>
</tr>
<tr>
<td>Dylan</td>
<td>Denial</td>
<td>7</td>
<td>Radiation Therapy and Technology – To make patients of different backgrounds feel comfortable.</td>
</tr>
</tbody>
</table>

Table 22. ICC as Valuable to Future Workplace
interviewees, struggled to find appropriate terms to discuss cultural difference, often using “those people” as a substitute for precise, and less offensive terms to identify culturally different others.

In the interview with Mace, when I asked him about the relevance of ICC to college, which he indicated should be at a level of Acceptance, Mace reported,

The fact that there is no real major ethnicity here, kind of attest to the fact that the understanding level isn’t as much existing. I think that continues on and go forward that you don’t typically see the different ethnicities mingle, which I think you could attest to that as well. I wouldn’t say that there is or there isn’t a ethnicity or cultural understanding at Columbus State.

When asked, “How much, if at all, and you kind of already alluded to this, do you believe cultural differences, either yours or others, affect your interactions with people?” Mace states,

It highly does. I think it highly does. Not on a negative basis, but I think it’s important to understand formalities and different cultures and if you are aware of the, stick true to them. Where I believe I try to be as specific as I can, and if I know that a certain culture acts one way I try and mimic it without coming off in a mocking sense I would have to say.

The answer given by Mace indicates his own preference for engaging with cultural difference is for Adaptation, a kind of “Behavioral Code-Shifting” that serves to bridge across diversity (Hammer, 2012). His answer to the above question indicates that although his Developmental Orientation is at the Cusp of Acceptance, his preferred
orientation is *Adaptation* but he recognizes that in diverse academic situations *Minimization* or deference to hegemony is the expectation.

Examples of internally contradictory thoughts on the importance of ICC in the educational setting also came from Bobby, the male biracial student at the community college, who scored the highest among the eight interviewees; Mace, the male, first generation Indian-American who scored fourth highest among interviewees; and Rand, the female international student from India who scored third highest among all interviewees.

When asked, “How much, if at all, do you believe cultural differences, yours or others, affect your interactions with people?” Bobby answered, “Oh, they affect it 100 percent.” Then, when talking about whether understanding different cultures was necessary to be successful in college he stated, “I don’t think cultural diversity—understanding different cultures is necessary for college success. Will you have to work with other people? Yeah, but doesn’t mean you have to understand them.” In another part of the interview Bobby says, “In my future work force, it’s just like—you need that (diversity). You need somebody else to give a different side of the story. Give maybe a different answer, a different solution.” Bobby’s conflicting answers indicate that he is torn between *Minimization*, a mindset that highlights commonalities which are largely determined by the dominant culture (Hammer, 2012) and breaking from the *status quo* by asserting his own beliefs; that cultural differences are in fact important and understanding cultural differences can facilitate interactions across those differences (*Acceptance*; Hammer, 2012).
Mace provides another example of contradiction as he discusses cultural difference. On one hand, he advocates for behaviors that are safer, more like Minimization, and on the other hand, he reports that Acceptance or Adaptation is the correct approach.

When asked about formal support or modeling of culturally appropriate practices at his high school, Mace reports,

I think that people—or at least in high school, I obviously can’t speak for a lot of areas, but in high school in particular, the lack of misunderstanding was in part created by a lack of speaking in the sense that you didn’t talk about people’s cultures and things like that.

The finding that, despite relatively high scores on the IDI, Minimization is perceived as the safer approach is important and will be future discussed in Chapter 5.

Summary of Findings

In 2012 The American Council on Education reported that U.S. institutions of higher education have a duty “to prepare students for productive and responsible citizenship. In the early 21st century, this means preparing students to live and work in a society that increasingly operates across international borders” (CIGE, 2012, p. 3). Given that the workplace and colleges increasingly demand the skills of cultural competence, this research argues that ICC should be a factor for college readiness.

Grounded in the data, this study supports the argument that ICC should be formally taught in high school and college curriculums and it should be considered a fifth factor for college readiness (Conley, 2010); for institutions of education to do otherwise
Minimizes or Polarizes rather than Accepts or Adapts to the demands of their own student bodies and an increasingly diverse American workplace. The main findings from this chapter, as they relate to the scholarly literature, are further discussed in the Chapter 5.
Chapter 5: Conclusion

Introduction

The purpose of this mixed methods research was to assess and compare first-year college students’ levels of ICC to see if there was a mean difference in IDI scores between community college students attending a nonselective college, and traditional 4-year students attending a selective university. In addition to comparing college institution type with ICC, this study sought to hear student voices to better understand the factors leading to their development of ICC and how they view ICC as a skill in their future workplace.

College readiness lacks a unified and comprehensive definition and in the rationale for this study I have argued for the inclusion of intercultural competence as part of a new and more complete notion of college readiness. Traditional measures for college readiness have relied upon academic outcomes but the research has shown that academic skills account for only a quarter of the variance in college educational outcomes with nearly 70% of the variance in outcomes attributable to non-academic skills such as grit (Strayhorn, 2014a). Other research has found non-academic factors including, resilience (Luthar et al., 2000; Luthar et al., 2015) and intercultural maturity to be critical for college success (King & Baxter Magolda, 2005, 2015; Perez et al., 2015). In addition to the non-academic factors, students in this study perceived ICC should be a
factor for college readiness and will also be necessary for success in their future workplace.

Given that cultural competence is a non-academic skill and that it has been linked to increased intellectual development, more mature interpersonal relationships (Pope, et al., 2009), productive problem-solving, effective verbal and non-verbal behaviors (Dinges, 1983; Pavitt & Haight, 1985; Spitzberg, 1983), increased creativity and innovation (Koppel & Sandner, 2008), self-authorship (Baxter Magolda & King, 2012), and to being flexible and balancing diverse views to arrive at workable solutions that allows for new ideas and concepts (Kivunja, 2015), it may also be an important factor for college readiness. The existing data and literature shows that cultural visibility and diversity on campuses, is increasing (ACE, 2014; Drake, 2009; Pope, et al., 2009) and that racial diversity positively affects the academic and social experiences of college students. But research also shows that when issues around cultural diversity are not addressed, divisiveness and stereotypes increase (Allport, 1954; Crichton & Scarino, 2007; Garcia-Perez & Rojas-Primus, 2017; Garson, 2016; Gurin et al., 2002; Luo & Jamieson-Drake, 2009; Pascarella & Terenzini, 2005; Sidanius et al., 2008). Upon arrival to college campuses, students must be able to not only perform academically, but also must be able to get along with roommates, interact with diverse peers in and outside of the classroom setting, and decide what kinds of programming and classes to attend (Adams, 2012; Seifert et al., 2010). If students are taught the skills of cultural competence prior to college they may feel more satisfied and comfortable in the increasingly diverse college context (Strayhorn, 2014).
In this study, although traditional first-year students may have been more “college-ready,” as indicated by a selective college admissions process at TSU, these students report significantly lesser value for cultural understanding by their high schools. Interview findings show the majority of students believe ICC should begin to be formally taught in public schools at around first grade or before, and that ICC may be in part developed through empathic recall.

Summary of Findings

This mixed methods study resulted in five main findings that may add to the literatures on college readiness, on first-year college students’ perceptions and development of intercultural competence, as well as to the body of literature that will help educators better understand how students’ experiences and identities shape their intercultural competence development (as suggested by Perez et al., 2015). The five main findings from this study are, first, although the literature shows there are general differences between community college and traditional university students, there is not a statistically significant difference in IDI scores between CCC and TSU students. Second, among interviewees, Acceptance or Adaptation is perceived necessary for the first-year of college. Third, there is a statistically significant difference in the value of culture at high schools as compared what students perceive will be needed in their professional future workplace. Fourth, among interviewees, Minimization was perceived as a safer approach to diversity, even if that is not how they themselves would prefer to be treated. Finally, empathic recall helped participants recognize culturally appropriate behavior.
Findings 1: No significant difference in IDI scores for Community College and Traditional University students

CCC and TSU students had a mean score of 83.48 ($n = 67$) but CCC students did score 1.8 points higher on the IDI. This indicates that overall, first-year college students in this study are at the orientation of *Polarization*. At this orientation, individuals actively judge differences because differences make them uncomfortable; differences are also viewed with an “us versus them” perspective, that values one culture more than another (Hammer, 2012).

In this study the data from the surveys and interviews suggest two reasons first year college students may have scored low on the IDI. First, because particularly for TSU students, who had an average of 5.77/10, culture was not valued by the high schools students had attended. Second, interviews revealed that at high school learning about culture and the skills of cultural competence was treated as optional or as an add-on. Implications of this finding will be addressed in the section on Implications for Practice.

Other studies on cultural competence and college students have found similar results: college students score at low to moderate levels of achievement (Bikson & Law, 1994; Brown, 2008; Castles, 2012; Green, 2000; Shaw et al., 2015; Zhao, 2002). This literature has suggested that some reasons for this are: increasingly segregated neighborhoods in the U.S. (Orfield et al., 2003); students have limited exposure to diversity prior to college (Perez et al., 2015); educational practices that group students by ability (Brown, 2008; Kozol, 2005); teachers who lack the skills of intercultural competence (Mahon, 2006); teachers who lack exposure to diversity (Ference & Bell...
2004 as cited in Walters, et al., 2009, p. S151); and school level practices that are unresponsive to parent engagement and needs (Khalifa, Arnold, & Newcomb, 2015).

**Finding 2: Acceptance or higher is needed for first-year college students**

All eight interviewees, who were unaware of their IDI scores at the time of the interviews, indicated that ICC at a rate of *Acceptance* or *Adaptation* was needed for first-year college students. At *Acceptance* people deeply comprehend differences and understand why differences exist. At the stage of *Adaptation* people have achieved an intercultural mindset and are able to bridge differences to allow others to feel valued and involved (Bennett & Hammer, 1998; Hammer, 2012).

This study has found that overall, first-year college students scored low on the IDI. If students in the U.S. are going to arrive to college with an ethnorelative, rather than an ethnocentric mindset, it will be necessary for college readiness to include the skills of ICC, and for the skills of ICC to be intentionally taught by competent educators. The literature suggests that one-way cultural competence may develop is through empathy and through experiences of marginalization. In the next subsection, I discuss *empathic recall*, a finding from the interview data, as another strategy for teaching students about ICC.

Several existing studies have shown that female college students score significantly higher on assessments of cultural competence than males (Brown, 2008; Goldstein & Kim, 2005; Marra et al., 2010; Neuliep & McCroskey, 1997a), and a few studies have shown that students of color also score higher (Brown, 2008; King & Baxter Magolda, 2005; Volberding, 2013). The research has suggested that, for females,
socialization patterns that emphasize empathy, listening and caring may contribute to higher levels of ICC. The literature suggests that female students and students of color may score higher because they may have experienced “an uncomfortable emotional response such as discomfort, feeling tense, silenced, guarded, or even hurt” (Brown, 2008, p. 210). Students who had experienced marginalization and had overcome obstacles scored higher on assessments of cultural competence (Brown, 2008; King & Baxter Magolda, 2005; Volberding, 2013) and that students from minority backgrounds may have had more exposure to diversity and have more opportunities to openly engage meaning-making about their own knowledge and experiences (Fitzgerald, et al., 2009; Volberding, 2013).

The research on cultural competence and college students shows that intercultural competence can be learned in an educational setting but that it must be demonstrably and formally taught by culturally competent educators; these skills do not “just happen” as individuals travel, mature, become educated, or attend a workshop (Bennett, 2008; Berg, Paige, & Lou, 2012; Deardorff, 2009; Lou & Bosley, 2012). However, if issues around diversity are left unaddressed and without formal guidance, divisiveness and stereotyping increases (Allport, 1954; Crichton & Scarino, 2007; Garcia-Perez & Rojas-Primus, 2017; Garson, 2016; Sidanius et al., 2008).

**Finding 3: Empathic recall aids in recognizing culturally appropriate behavior**

*Empathic recall* emerged as a theme from the interviews when participants reflected on their own past experiences and experiences where they witnessed someone else being discriminated against on the basis of cultural differences, either in person or
through the experiences of others. Colloquially often called, “putting yourself in someone else’s shoes,” empathic recall helped participants recognize and appreciate culturally appropriate behavior as they recalled others being treated with bias or discriminatory behavior. One example of empathic recall is from Mya when she indicated that helping someone with a language barrier brings her joy because she remembers what it was like for her mother when she first came to the U.S. and she doesn’t want anyone else to feel that way. Another example of empathic recall was from Sophie, when she stated, “It’s not just the entire nationality, race, or religion that’s bad,” in response to recalling her mothers’ fear of Muslims which had been influenced by the media. In both of these cases participants drew on things they had experienced, or the experiences of others, to help them reach an ethnorelative stage of cultural competence.

The term global citizenship, which is akin to ICC, includes as part of the definition, “self-awareness and awareness of others;” and “a practice of cultural empathy;” (Olds, 2012, pp. 1-2). Additionally, the literature showing that females score higher on assessment of cultural competence suggests that this may be in part due to female socialization in the U.S., whereby females are expected to emphasize empathy and show listening and caring (Bloomfield, 2004; Brown, 2008; Goldstein & Kim, 2005). Empathic Recall, as a new term identified and used in this study, may add to the body of scholarly literature on how college students can and do acquire the skills of ICC (Perez et al., 2015).
Finding 4: Culture valued by HS is significantly different from future workplace

The data from the survey show that the first-year TSU students’ perception of Culture Valued by High School (CVHS) was lower than CCC students’ perception of CVHS. This difference was statistically significant (TSU mean = 5.77; CCC mean = 7.08; $n = 67$; $p = .037$); however, there was not a statistically significant difference in how each group of students perceived that culture would be valued by their future workplace ($n = 67$; $p = .570$). Interview data from the eight first-year students demonstrates that not only do they perceive ICC will be highly valuable in their future careers ($n = 8$, $x = 8.75/10$) but they are also aware of how it will be useful (see Chapter 4).

The scholarly literature shows that college freshmen must “eventually be prepared to enter an increasingly diverse workforce and society,” (Pryor et al., 2007, p. 11) and that both colleges and the workforce increasingly desire individuals who possess the soft skills of global citizenship and cultural competence (Hammer, 2012; Hayward, 1995, 2000, p. 28; National Governors, 2010; Olds, 2012). This finding is supported by the literature which shows that corporations know inclusiveness “drives revenues, motivates employees, and fosters innovation” (Bush & Peters, 2016, p. 1). Despite these goals, however, the data and the interviews from this study show first-year college students perceive that neither their high schools nor their colleges are doing enough to prepare them for the levels of ICC they need for college, or that they will need for the world of work. In addition, they seem to already be aware of the personal, interpersonal, and professional benefits to be had for those who have high levels of cultural competence.
Despite that some first-year students are aware of the value of ICC in the future workplace, the literature shows that without formal instruction it is unlikely ICC will develop (Bennett, 2008; Berg, Paige, & Lou, 2012; Deardorff, 2009; Lou & Bosley, 2012).

**Finding 5: Minimization is a safe approach to diversity**

Although many of the first-year college students interviewed had relatively high IDI scores, a lack of formal support for cultural understanding at the high school and college levels may have resulted in an appeal for *Minimization* as the safest approach. Sophie, who scored at the Cusp of Acceptance, and indicated an appreciation for understanding diversity, provides an example of how a limited vocabulary on understanding cultural difference can betray even the best of intentions when she commonly referred to people who were different from her as “those people,” “those kind of people,” or stated, “they’re people too”. These polarizing phrases, which may be offensive, or may be interpreted negatively, belie her relatively high level of cultural competence and suggest a strong argument for the explicit teaching of culturally competent skills. In another interview, Bobby, the highest scoring of all interviewees, stated that at college he would have to work with people of different cultures but that he wouldn’t need to understand them. On the other hand, when asked how much he believed cultural difference affected his interaction with people, Bobby stated, “Oh, they affect it 100 percent.”

Even with relatively high scores on the IDI, interview participants were torn between *Minimization*, a mindset that highlights commonalities which are largely
determined by the dominant culture (Hammer, 2012), and breaking from the status quo by asserting their own beliefs that cultural differences are in fact important and understanding cultural differences can facilitate interactions across those differences (Acceptance; Hammer, 2012). As discussed in Chapter 4, Minimization was part of interview respondent, Bobby’s hidden high school curriculum (Parkay, 2010), where, he reported, 9.5 out of 10 teachers were White and didn’t have the ability to relate to students that weren’t White. Though he himself is a biracial student he suggested that Minimization is the preferred and safest method for behaving in an academic setting, even in college. Despite Bobby’s recognition that Minimization is safe, he does not believe it is the best approach for him personally and contradiction between what he said ought to be done and what he actually prefers arose.

Discussion of Research Findings

From the IDI surveys and the interviews, a theme of contradictions emerged. The first contradiction was between student IDI scores, which were at Polarization overall, yet in the interviews students stated first year college students should have a level of ICC at Acceptance or Adaptation. The second contradiction was that some of the interview participants scored high on the IDI, and stated they valued cultural acceptance, but used Minimization or Polarization as a strategy. Third empathic recall was common across the interviews but participants also recalled that there was a limited emphasis on intentional ICC experiences across both high school or college.
College Students’ ICC Scores vs. ICC Beliefs

The first major contradiction that arose during this study is that the average score for first-year college students places them at Polarization where cultural differences are viewed with an “us versus them” perspective, that values one culture more than another (Hammer, 2012). This score indicates that, as a group, first year college students are at Polarization which can be expressed as, “when attending college in the U.S., it is important for all students to understand and adapt to the American ways of doing things.”

In contrast, however, the eight interviews show students believe all first-year college students should have ICC at a level of Acceptance or higher prior to their first-year of college on a U.S. college campus. This disparity between what is among first-year college students in this study, versus what they think should be for all first-year college students, as well as what they indicate will be needed in the future workplace, suggests K-16 has a lot of work to do to raise levels of ICC.

Students’ valued acceptance, but used minimization as a strategy

The second contradiction that emerged through this study suggests what the future may be if ICC is not a more formal aspect of the K-16 curriculum: even students who score at relatively high levels on the IDI may be reluctant to speak up, or to speak precisely, using culturally appropriate language, if these skills are not taught. Without formal support for developing the skills of ICC, students are uncomfortable discussing difference and accepting and adapting to them. If unchanged, the Minimization mindset will serve to reinforce dominant cultural values at both college campuses and the workplace. According to Arthur (2005) when things “get out of synch between our
feelings, thoughts, intentions, the world in which they’re set, and the words we use to bridge the space between them” it is the responsibility of education to “police” that correspondence (p. 83). If scholars and policy makers of college readiness begin to include the skills of ICC, and if ICC is intentional across K-12, college students may become more fluent in the vocabulary and attitudes that reflect their cultural competence. For now, this research shows that even with high scores, a lack of formal training for the skills of ICC, can result in potentially offensive language and behavior that ignores, rather than accepts and adapts to cultural difference.

**Empathic recall vs. limited ICC emphasis in K-16 curriculum**

Finally, through the interviews empathic recall emerged as a consistent finding despite that participants also reported the skills of ICC were not highly valued or formally taught at their high schools. Because it was so common among the interviews it may be common among other young adults as well even though it is not formally taught as a cultural competence-building skill across K-16. For high school and college students, drawing upon one’s own past experiences or experiences where they witnessed someone else being discriminated against on the basis of cultural differences may be a useful and inexpensive way to encourage intercultural competence development.

To summarize, there is disconnect between workplace demands for ICC and the K–16 curriculum. This gap has been noted in the literature but this study provides a new understanding of the factors contributing to the development of ICC skills and finds that CCC students arrived to campus with slightly higher levels of ICC as compared to TSU students. Because intercultural competence is not presently considered an aspect of
college readiness, it is often treated as optional in high schools and college. It may be that, due to limited exposure to the skills across the K-12 curriculum, the first-year college students who participated in this study scored at the ICC level of Polarization.

**Implications for Future Research**

This study was the first to correlate ICC with college readiness. If the workplace and K–16 desire graduates with the skills of ICC, more studies that demonstrate and advance ICC as a skill for college and workplace readiness should be done. Five suggestions for future research are discussed below.

First, “Hearing student voices is essential to understanding their pathways to and through postsecondary education” (Solórzano, Datnow, Park, & Watford, 2013, p. 5). With that in mind, future studies should investigate how first-year perceive ICC as a factor necessary for college readiness. Furthermore, using student voices to understand how they perceive culture may aid in developing curriculums for K–16 that better promote cultural understanding.

Second, survey and interview data shows ICC is low and that students perceive that because it is treated as optional, or an add-on, high schools and colleges do not do enough to foster the skills of ICC. Interview participants suggest that the teaching of ICC should begin at first grade or before. Many suggested that the add-on approach to understanding cultural difference is not working and offered suggestions on how ICC could be taught to young children in a way that was more inclusive and integrated. The data from the interview portion of this study coupled with theories of early childhood development would be a good place to begin mapping this curriculum.
Third, empathic recall was a theory that emerged from the interviews. This theory should be tested more broadly because it may offer low-risk strategies for developing the skills of ICC in the K–16 classroom.

Fourth, community college students indicated cultural understanding was more highly valued at their high schools than did traditional university students. To improve curriculum, high schools that are widely perceived as promoting cultural understanding should be studied to learn how this can be achieved at other high schools.

Fifth, this was the first study to investigate first-year students’ levels and perceptions of ICC within the context of college readiness. If K–16 is to prepare students for the 21st century workplace, research, and program planners will need to continue to find ways to formally teach the skills of ICC in the classroom.

**Implications for Practice**

The findings from this study demonstrate that first-year students score low and that there is a disconnect between high school and college preparation for ICC and future workplace demands. The findings also show that students believe ICC will be highly valued in their future workplace. Findings suggest this disconnect can be remedied through the integration of ICC as a factor for college readiness and by formally teaching ICC skills across K–16.

At the time of this study the Common Core State Standards Initiative, adopted by the governors in each of 42 states, does not show any likelihood of increasing curricular attention to the skills of ICC. To the contrary, as of January 2017, the nation and 31 of the 50 states will be led and legislated by a party that embraces a “commitment to
American values” and supports the English First approach (Republican Party, 2016, p. 25; 34). Furthermore, the republican platform rejects federal control over education and condemns what they perceive unconstitutional expansion on issues such as “forced education curricula to school restroom policies” (Republican Party, 2016, p. 16). At the same time, the Republican party states the nation’s system of higher education, is undermined by an ideological bias deeply entrenched within the current university system. Whatever the solution may be in private institutions, in state schools the trustees have a responsibility to the taxpayers to ensure that their enormous investment is not abused for political indoctrination. (Republican Party 2016, p. 28)

With values such as these it is unlikely that, for the duration of this political leadership, skills of ICC will be viewed positively by those who hold the purse-strings to education. In actuality, it seems far more likely there will more segregation among public school students due to incentives and moral suasion that support charter schools and privatization of K–12. The “fiction” of school choice as a form of, “freedom from racial equality” (Apple, 2001, p. xxii; Horsford, 2016, p. 1) harms rather than hurts efforts to foster ICC across K-12.

For institutions of education that will continue to promote social justice and ICC as a means of preparing students for the 21st century, and for the common good, this study suggests dedicating more formal curricular attention to these skills, hiring educators who embrace these skills, and engaging in action and scholarly research that demonstrates how the skills of ICC are best acquired and taught. Today, college
knowledge is “distributed inequitably in society” (Conley, 2008, p. 10) but if college readiness were to more ostensibly include the “soft skill” of ICC, traditionally underserved and underrepresented students who often attend community colleges immediately after high school may benefit with the finding that they are not “less,” but in this case, are “more” college and workplace ready. If ICC is integrated with college readiness, this may create more equity and opportunity in two ways: first by formally asserting that cultural awareness and acceptance on college campuses is a part of a college-ready and college-going curriculum; and second, through emphasis and appreciation of the higher levels of ICC which some minority, female, and underserved students may already have.

Limitations of the Study

There are four central limitations to the study. First, this study was conducted in a Midwestern city of the United States. Other studies in other regions of the U.S. and abroad should be conducted to see if the findings presented in this study can be replicated. Second, this study sought to compare first-year students ages 18 to 19 at a community college and a traditional university to see if differences in scores on the IDI existed. Students who participated in the survey were 18-19 years old and taking English or Math for college credit. Students of the same age, but who are enrolled in remedial courses at the community college, may have had more negative experiences with diversity (Marra et. al., 2010) or may have experienced “an uncomfortable emotional response such as discomfort, feeling tense, silenced, guarded, or even hurt” (Brown, 2008, p. 210) and may score higher than the students in the college credit-
bearing classes at the community college. Research should be done to further the findings from this study.

Third, the IDI Customized questions used in this study did not ask participants to rank the value their colleges had for “understanding other cultures.” This question could have provided data to understand how colleges convey the value of understanding other cultures to their students.

Fourth, on the IDI there were three kinds of questions that did not contribute to the IDI scores: Demographic, Contexting, and Customized. On the Customized questions 12, 13, and 14 (see Appendix C), the scale was relatively arbitrary and only asked respondents to indicate a number between 1 and 10, 1 being not at all valued and 10 being highly valued. As this was the case, there was no central reference point for participants to indicate a precise definition of “value of understanding other cultures”.

Contributions to the Literature

There are three significant contributions this study has made to the scholarly literature. First, this research comparing community college and traditional university students was based in part on a suggestion that future studies on “how students’ privileged or marginalized identities influence their growth toward intercultural maturity” would help educators create more effective educational environments (Perez et al., 2015, p. 774). It also relied on Luthar et al.’s (2000, 2015) work on resilience that demonstrates positive outcomes for individuals who have experienced factors that put them at-risk.

Second, the research that has found that neither high schools nor colleges are effectively preparing students for work in a global America, was based on publications
from Roderick (2006; Roderick et al., 2009), Conley (2007b, 2010), and others who have demonstrated the gap between aspirations and achievement and in the overall factors for college readiness. This study was also based on several scholarly research, policy documents, and popular press articles, such as Dickerson and Saul (2016); Jaschik (2013); Levine and Cureton (1998); “White Supremacists,” (2016); and ACE (2012, 2015) that demonstrate there is a consistent need for increasing ICC in society, on college campuses, and among the American workforce.

Finally, this study found there was a significant disconnect in the value of cultural understanding students receive in high school as opposed to the value they perceive will be needed in their future workplace. Literature and research that supports the implementation of ICC in the K–16 curriculum can use the findings from this study to inform steps to begin addressing this gap.

**Conclusion**

The gap, which Roderick et al. (2009) termed an *aspirations–attainment* gap (p. 5), which exists particularly for first-generation, low-income, and minority students across K–16 education in the U.S., has been identified in literature from scholars, government data, and the popular press and was particularly demonstrated through the works of Roderick et al., 2009; Conley, 2008, 2010; Greene & Forster, 2003; Long et al., 2009; Roderick, 2006; Sommerfield, 2011; & U.S. News, 2015. This study has demonstrated that first-year college students, regardless of type of institution or background, perceive there is another kind of gap, a “soft skills” gap, between future workplace demands for ICC and the K–16 preparations for those demands. The scholarly
literature on ICC (Hammer, 2012) resilience (Luthar et al., 2000), and intercultural maturity (King & Baxter Magolda, 2005; Perez et al. 2015), as well as similar studies on college students and college readiness, offered theories as to the strengths that underserved and underrepresented students might bring to filling this “soft skills” gap. It is important to understand how to mend this gap because with a common goal for college readiness, the rate of college completion after high school will increase, as will the educational achievement of millions of Americans (Callan et al., 2006).

Finally, because the university is a public sphere which should embody and bear exemplary character (Habermas & Blazek, 1987), this work aspires to contribute to a more accepting, and enlightened society, beginning with K-12 as the place for such readiness. This research shows that when institutions of education do not formally teach the skills of ICC high school graduates overall Polarize rather than Accept or Adapt to the demands of their own student bodies and an increasingly diverse U.S. society and workplace.
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Appendix A: IRB Approval City Community College (CCC)
Appendix A: IRB Approval City Community College (CCC)

City Community College

Request for Modification of Previously Approved or Exempt Protocol

Use this form for procedural and/or personnel changes or time extensions.

<table>
<thead>
<tr>
<th>Project Coordinator/Principal Investigator</th>
<th>Leona Houston</th>
<th>IRB Log #</th>
<th>299</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Title</td>
<td>Intercultural Competence and College Readiness: A Comparative Study of...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Procedural Changes

Itemize and summarize each requested change and write a brief justification for each.

<table>
<thead>
<tr>
<th>Requested Change</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Add incentive of $10 for students who complete. Response rates continue to be low. 0% for site.</td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
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<tr>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>

Respond to these questions as appropriate:

1. Does any change require a REVISED CONSENT statement or procedure? If so, attach a revised form and procedures.
   
   Yes, attached.

2. Does any change require revision to the assessment of risk of harm to the subjects? If so, attach revisions.
   
   No.

3. Does any change require revision to the methods of ensuring anonymity or confidentiality? If so, attach an explanation.
   
   No.
Procedural Changes

1. List each person added to or removed from the study. Provide name, contact information, and indicate added or removed.

2. For each person added, address each of the following:
   a. Identify role in the project; is this person responsible for the design or conduct of the study?
   b. Does this person have access to human participants; have access to identifying or confidential information? Clearly state the activity s/he performs with human subjects.
   c. What level of skill and experience does this person have to perform this activity? Where was s/he trained? Who supervised the training?
   d. Has this person completed IRB training; if not, when?
   e. How will skills be periodically reviewed?

3. Do any of the personnel changes require a REVISED consent statement or procedure? If so, attach revised form and procedures.

Leona Houston
Project Coordinator/Principal Investigator 4/7/2016

Anika Anthony (at CSU)
Advisor (if student) Date

FOR IRB ONLY

Type of Approval

☑ Administrative
☐ Expedited
☐ Full Board Date of Meeting: 4/2/16

Signature of IRB Chair
Appendix B: IRB Approval TSU 4-Year University
Appendix B: IRB Approval TSU 4-Year University

04/11/2016

Study Number: 2016E0243
Study Title: Intercultural Competence and College Readiness: A Comparative Investigation among First Year Students at Community and Traditional Colleges
Principal Investigator: Anika Anthony
Date of determination: 04/11/2016
Qualifying exempt category: #2

Dear Anika Anthony,

The Office of Responsible Research Practices has determined the above referenced project exempt from IRB review.

Please note the following about this determination:

- Retain a copy of this correspondence for your records.
- Only the persons named on the application are approved as Ohio State investigators and/or key personnel for this study.
- Simple changes to personnel that do not require changes to materials can be submitted for review and approval through Buck-IRB.
- No other changes may be made to exempt research (e.g., to recruitment procedures, advertisements, instruments, protocol, etc.). If changes are needed, a new application for exemption must be submitted for review and approval prior to implementing the changes.
- Records relating to the research (including signed consent forms) must be retained and available for audit for at least 5 years after the study is closed. For more information, see university policies, Institutional Data and Research Data.
- It is the responsibility of the investigators to promptly report events that may represent unanticipated problems involving risks to subjects or others.

This determination is issued under HRP Federalwide Assurance #00006378. Human research protection program policies, procedures, and guidance can be found on the ORSP website.

Please feel free to contact the Office of Responsible Research Practices with any questions or concerns.

https://orps.tsu.edu/researchbackoffice/ViewCorrespondenceItem/6419454
Appendix C: Customized Questions on the IDI
Appendix C: Customized Questions on the IDI

12. The term culture includes: nationality, ethnicity, gender, abilities and socioeconomic class differences. On a scale of 1 to 10 (one being not at all valued and ten being highly valued), how much did your high school value understanding other cultures? (Scale 1 to 10)

13. The term culture includes: nationality, ethnicity, gender, abilities and socioeconomic class differences. On a scale of 1 to 10 how much is understanding other cultures valued by your social networks including family, friends, and acquaintances? (Scale 1 to 10)

14. The term culture includes: nationality, ethnicity, gender, abilities and socioeconomic class differences. On a scale of 1 to 10, how much do you think your future, professional, workplace will value understanding other cultures? (Scale 1 to 10)

15. Please indicate the race/ethnicity you most identify with:
   a. American Indian or Alaska Native
   b. Asian
   c. Black or African American
   d. Hispanic or Latino
   e. Middle East/North African
   f. Native Hawaiian or Other Pacific Islander
   g. White/Caucasian
   h. Other
   i. Prefer to not answer

16. Please indicate the gender identity you most identify with:
   a. Female
   b. Genderqueer/Androgynous
   c. Intersex
   d. Male
   e. Transgender
   f. Transsexual
   g. Cross-dresser
   h. FTM (female-to-male)
   i. MTF (male-to-female)
   j. Other
   k. Prefer to not answer
17. Which best represents your parent’s level of educational attainment?
   a. Doctoral Degree
   b. Professional Degree (Pharm.D; J.D; M.D.; D.V.M.)
   c. Master’s Degree
   d. Bachelor’s Degree
   e. Associate’s Degree
   f. Some college, no degree
   g. High school diploma
   h. Less than a high school diploma
   i. I don’t know
   j. Prefer to not answer
Appendix D: Distribution of IDI Scores by Institution
### Appendix D: Distribution of IDI Scores by Institution

<table>
<thead>
<tr>
<th>IDI Orientation</th>
<th>Community College</th>
<th>Traditional 4-Year</th>
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<tr>
<td>Denial</td>
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<td>4</td>
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<tr>
<td>Cusp of Polarization</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Polarization</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Cusp of Minimization</td>
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<td>2</td>
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<td>Minimization</td>
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<td>Cusp of Acceptance</td>
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</tr>
<tr>
<td>Acceptance</td>
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<td>1</td>
</tr>
<tr>
<td>Cusp of Adaptation</td>
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<tr>
<td>Adaptation</td>
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<td>0</td>
</tr>
<tr>
<td>High Adaptation</td>
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<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>43</strong></td>
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</table>
Appendix E: Recruitment Email for IDI Survey
Appendix E: Recruitment Email for IDI Survey

Dear [Participant Name],

Thank you for your interest in taking the online Intercultural Development Inventory (IDI) to support my dissertation research at [Name Of Institution]! To thank you for your participation, you will receive a $10 electronic gift card to iTunes or CVS Pharmacy within 24 hours of your participation. After you have participated please email me to indicate your preference of gift cards. If I do not hear from you within one week, I will make the choice of either iTunes or CVS.

Please note that if you participate in this survey I may contact you in the coming week to ask you to participate in a follow up, one time, 75-90 minute audio and video-recorded focus group interview during the week of April 25th to April 30th. These interviews will take place on [Institution name] main campus. All participants of the focus group interviews will receive an additional $10 gift card for their time, travel, and efforts.

If you have read and agree to the information in the previously emailed consent form, please complete the online survey, the Intercultural Development Inventory by April 16th, 2016 at 7pm, by following these steps:

1. Go to http://v3.idiassessment.com
2. Enter your Username {Full Username goes here} and Password {Full Password goes here}

Be aware that the password is case-sensitive.
3. After reading the directions carefully, complete the survey.
4. When filling out the survey, DO NOT use any special characters (this includes: “ , . / > & * \ )
5. Be sure to click SUBMIT ASSESSMENT at the end of the survey.

- The IDI is a 50-item questionnaire but there are additional demographic and open-ended questions at the end of the survey.
- Typically, the assessment takes anywhere between 15-30 minutes to complete.
- The open-ended questions include the following 3 questions:
  a. What is your experience across cultures?
  b. What are key goals, responsibilities, or tasks you and/or your team have, if any, in which cultural differences need to be successfully navigated?
  c. Please give examples of situations you were personally involved with or observed where cultural differences needed to be addressed within your organization, and:
     i. The situation ended negatively
     ii. The situation ended positively

You may want to give these questions some thought prior to completing the IDI. The answers to these questions DO NOT impact your scores. While they are not included in
the calculation of your IDI profile scores, these questions are an important aspect of this research.

If you have any questions, please contact me by email or by phone.

Best regards,

Leona Houston
Appendix F: Participant Consent Form
Appendix F: Participant Consent Form

[Int Name Of Institution]
Consent to Participate in Research

Intercultural Competence and College Readiness: A

Study Title: Comparative Study of First-Year Students at a Community
College and a 4-year University

Researcher: Leona Houston, PhD Candidate, Ohio State University

This is a consent form for research participation. It contains important information about this study and what to expect if you decide to participate.

Your participation is voluntary. Please consider the information carefully. Feel free to ask questions before making your decision whether or not to participate. If you decide to participate, you will be asked to sign this form and will receive a copy of the form.

Purpose: The purpose of this study is to examine first-year college students’ levels of intercultural competence and to understand how intercultural competence developed up to participants’ first-year of college.

Procedures/Tasks: As a participant in this study, researchers may request your completion of the following: a) a 15 to 30 minute survey to be taken online from the computer of your choice, b) to conduct an audio and video record of a focus group interview with you.

Incentives: As an incentive to participate in the focus group portion of the study, participants will receive a $10 gift card to Target, Starbucks, etc. to compensate them for their time, travel, and efforts.

Duration: You will be asked to participate March 2016 – May 2016. You may leave the study at any time. If you decide to stop participating in the study, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled. Your decision will not affect your future relationship with [Name Of Institution] or [Name Of Institution].

Risks and Benefits: There are no known risks to you as a result of your participation in this study. Study findings will contribute to understandings about how first-year college students developed intercultural competence.

Confidentiality: We will work to make sure that no one sees your survey responses without approval. Survey responses will be stored on a password-protected server. After the surveys have been completed, researchers will destroy any personal information, such as email addresses, that can be used to link individuals to survey responses. Because we
are using the Internet, there is a chance that someone could access your online responses without permission. In some cases, this information could be used to identify you. Every effort will be made to ensure confidentiality of study-related information. When not being analyzed, all research materials will be stored in a locked cabinet in the researcher’s private office.

**Participant Rights:** You may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. If you are a student or employee at [Name Of Institution], your decision will not affect your grades or employment status. If you choose to participate in the study, you may discontinue participation at any time without penalty or loss of benefits. By signing this form, you do not give up any personal legal rights you may have as a participant in this study. The Institutional Review Boards responsible for human subjects research at [Name Of Institution] and [Name Of Institution] reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

**Contacts and Questions:** For questions, concerns, or complaints about the study, or if you feel you have been harmed as a result of study participation, you may contact Leona Houston (houston.85@osu.edu). For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact [Name] at the Institutional Review Board office at [Name Of Institution], [Phone Number] or [Name] in the Office of Responsible Research Practices at [Name Of Institution], [Phone Number].

**Signing the consent form**
I have read (or someone has read to me) this form and I am aware that I am being asked to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I voluntarily agree to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

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<th>Printed Name of subject</th>
<th>Signature of subject</th>
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<tbody>
<tr>
<td>Email Contact Information</td>
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**Investigator/Research Staff**
I have explained the research to the participant or his/her representative before requesting the signature(s) above. There are no blanks in this document. A copy of this form has been given to the participant or his/her representative.
Leona A. Houston

Printed name of person obtaining consent

Signature of person obtaining consent

_________________________ AM/PM

Date and time
Appendix G: Interview Script
Appendix G: Interview Script

Interview Session Script: Thank you for your time and for agreeing to participate in this 45 minute interview. Your participation in this interview is voluntary. You can ask to stop this interview at any time. If you are not comfortable answering a question, you may skip it, or ‘pass’ without penalty. This interview will be audio recorded and transcribed for subsequent analysis. At this time I will ask you to write down a preferred pseudonym that in no way represents you, or that anyone can use to identify you, or your responses. Though I will not use this pseudonym during the interview session today, this pseudonym may appear in my research so please keep this pseudonym confidential.

Orienting Questions
1. Could you tell me about your experiences across cultures during, or prior to, your first-year of college?
   a. Have you ever traveled or lived abroad?
   b. For what amount of time?
   c. What is your primary country of citizenship?
   d. What languages do you speak fluently besides English?
   e. How do you describe yourself as a first-year college student?
2. Could you tell me about your high school?
   a. Approximately what percentage of your college teachers/classmates do you feel were culturally similar to you, or your family background?
   b. How would you classify your high school? (Private, Public, Urban, Rural, Suburban)
   c. What percentage of your high school student body do you think could be classified as minority or underserved?
   d. How well do you feel your high school prepared you for the academic aspects of college? Can you explain?
   e. On the IDI, you indicated you feel that understanding other cultures (including nationality, ethnicity, gender, abilities, and socio-economic class differences) was a skill that was valued in your high school at ____/10. Why or why not? Can you provide me any positive or negative examples?
   f. Do you feel students at your high school received explicit, or formal, support or modeling of culturally appropriate practices from teachers, counselors, general school culture and climate, school groups? If so, what did this look like?
3. Could you tell me about your college?
   a. What percentage of your first-year coursework involved taking credit-bearing coursework towards your Bachelor’s degree?
   b. What obstacles, if any, have you overcome in order to attend college immediately after high school?
c. What do you think, aside from academics, has been the largest obstacle in your transition from high school to college?

d. Approximately what percentage of your college teachers/classmates do you feel are culturally similar to you, your family background (e.g., nationality, ethnicity, gender, abilities, and socio-economic class differences)?

e. What percentage of your college student body do you think could be classified as minority or underserved?

f. On a scale of 1 to 10 (ten being extremely important) how much do you feel that understanding other cultures (including nationality, ethnicity, gender, abilities, and socio-economic class differences) is a skill that is valued by your college? Why? Can you provide me any examples formal or informal?

Cultural Challenges

4. On the IDI you indicated __________________________ was a challenge in working with people from other cultures. How much, if at all, do you believe cultural differences (yours or others) affect your interactions with other people?

5. What are the major challenges, if any, for you in working, or attending college, with people from other cultures (e.g., nationality, ethnicity, gender, abilities, and socio-economic class differences)?

6. What are the major rewards for you in working/studying/socializing with people from other cultures (e.g., nationality, ethnicity, gender, abilities, and socio-economic class differences)?

7. Please give examples of situations you were personally involved with or observed where cultural differences needed to be addressed and:

   a. The situation ended negatively—that is, was not successfully resolved. Please describe where and when the situation took place, who was involved (please do not use actual names), what happened and the final result.

   b. The situation ended positively—that is, was successfully resolved. Please describe where and when the situation took place, who was involved (please do not use actual names), what happened and the final result.

Intercultural Training and Support

8. What areas can you identify, if any, in which you feel cultural differences (including nationality, ethnicity, gender, abilities, and socio-economic class differences) need to be successfully navigated?

9. In what ways, if any, do you informally engage in an attempt to understand other cultures in terms of nationality, ethnicity, gender, abilities, and socio-economic class differences?

10. On a scale of 1 to 10 (ten being very important) on the IDI, you indicated understanding other cultures (e.g., nationality, ethnicity, gender, abilities, and socio-economic class differences) is a skill that is, or will be
valued in your professional workplace after college, at about a
________/10? Why? How do you think it will be important/unimportant?

How Students View Intercultural Competence as a factor for College Readiness

11. College readiness includes academic content knowledge; cognitive strategies such as critical thinking, academic behaviors such as time mgmt., and college knowledge or how colleges operate as a system (Conley, 2010). K-12 Schools and policies are increasingly trying to prepare high school graduates for college and/or career readiness. After attending college for a full year already, (on a scale of 1-10) how important do you think understanding other cultures is to the notion of college readiness (ie: based on your high school experiences, and your first-year of college) Why? Why not?

12. In your opinion, at what grade/age level, if ever, should high school students begin to formally learn how to understand and navigate cultural differences (including nationality, ethnicity, gender, abilities, and socio-economic class)? If yes, do you have any suggestions on how this should be done?

13. Which of the following statements best aligns with the level of cultural understanding you believe all first-year college students should have prior to their first-year of college on a U.S. college campus:

a. Cultural differences are not important and should not be discussed.

b. Cultural differences are not as important as universal ideas of right and wrong; we should focus not on differences, but on how we are all the same.

c. It is important to understand cultural differences because it helps people understand how others make decisions that may seem immoral or unethical to them.

d. When attending college in the U.S., it is important for all students to understand and adapt to the American ways of doing things.

e. Understanding cultural differences will help all students to feel valued and involved.

f. I don’t know.
Appendix H: Interview Recruitment Efforts For Low and High Scorers
## Appendix H: Interview Recruitment Efforts For Low and High Scorers

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