INTERSECTING CULTURE, DIVERSITY AND MOTIVATION: EXPLORING THE ASSOCIATION BETWEEN UNIVERSITY INSTRUCTORS' INTERCULTURAL ORIENTATIONS, STUDENTS' EXPERIENCES IN THE CLASSROOM AND EDUCATIONAL OUTCOMES

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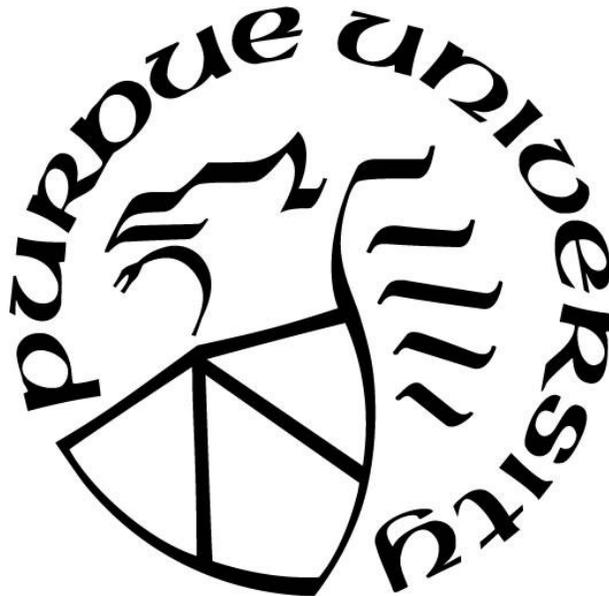
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I dedicate this thesis to the One who made it possible:

Now to him who is able to do immeasurably more than all we ask or imagine, according to His power that is at work within us, to Him be glory in the church and in Christ Jesus throughout all generations, for ever and ever! Amen. Ephesians 3:20-21

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ABSTRACT

There have been increase in calls for researchers in educational psychology to integrate methods as well as theories across motivation and multicultural education to examine the intersection of culture and diversity with motivational principles. While much work has been done in K – 12 classrooms examining the application of principles related to autonomy – supportive and culturally responsive teachers and classrooms, not much work has been done examining these constructs together in university classrooms. Global and paradigm shifts in higher education coupled with rising tensions of diversity and inclusion on college campuses have catalyzed the need for intentional approaches to cultivate inclusive classroom environments to facilitate students' development of academic as well as global competencies. This thesis employed a convergent – parallel mixed methods design integrating frameworks from multicultural education with Self – Determination Theory (SDT) to explore the extent to which instructors' degree of intercultural competence and diversity inclusivity in their courses was related to students' perceptions of the classroom environment as culturally responsive and autonomy – supportive as well as academic motivation and intercultural knowledge and competence development. A conceptual model for integrating Multicultural Education frameworks and SDT is proposed with theoretical and methodological implications. Practical implications are discussed for researchers, educators and administrators in higher education highlighting the importance of considering both cultural and motivational factors of students and instructors to facilitate enriching teaching and learning experiences in preparation for living and working in a global multicultural society.

CHAPTER 1. INTRODUCTION

Over the past decade, increasingly motivation researchers are being challenged to pursue rigorous lines of interdisciplinary research which explicitly address cultural factors (e.g. race, ethnicity, prejudice and stereotype threat) which influence students' achievement, motivation and engagement in education settings (DeCuir-Gunby & Schutz, 2014). This conversation in the literature is phrased as culturalizing motivation research (King & McInerney, 2016; Zusho & Clayton, 2011). To culturalize motivation research, scholars expressed the need for: 1) explicit conceptual and operational definitions of variables associated with culture, diversity and motivation, 2) the application of multimethod approaches (i.e. quantitative and qualitative) to examine research questions, and 3) integrating multicultural education and psychological/achievement motivation theoretical frameworks to understand how culture and diversity leads to better outcomes (Graham, 2018; Kumar, Zusho & Bondie, 2018; Zusho & Kumar, 2018). Kumar, Zusho and Bondie (2018) within the context of this call described how the four key principles of achievement motivation research (i.e. meaningfulness, competence, autonomy and relatedness) align with multicultural education research specifically with respect to culturally responsive and relevant education (CRRE). Additionally, more broadly in the area of educational psychology scholars are increasingly focused on the intentional application of mixed methods research design to address educational problems (McCrudden, Marchand & Schutz, 2019).

This call by motivation researchers is somewhat similar to the call by Sleeter (2012) to multicultural education scholars citing the need for more evidenced based research in multicultural education: a) connecting culturally responsive pedagogy (CRP) to student outcomes b) educating stakeholders involved in the teaching and learning process (parents, educators, administrators and researchers) about the meaning of CRP and 3) describing what CRP looks like in classrooms. Aronson and Laughter (2016) in their response presented a synthesis of research connecting the tenets of culturally relevant education (CRE) with positive student outcomes including: student achievement, motivation, empowerment, critical discourse and agency. Despite the difference in terminology and abbreviation among scholars – CRRE, CRE, and CRP – all the expressions are drawn from the multicultural framework with the same philosophically and epistemological underpinning. While both calls were grounded in different aims, the end goal was the same. The

call to motivation researchers was to highlight the need for more explicit considerations of culture and diversity in motivation research specifically using mixed methods, while the call to multicultural scholars was to address the marginalization of CRP in school reform rooted in what Sleeter (2012) described as the neoliberal agenda. Much like motivation researchers call to mixed methods, there is a call for scholars pursuing social justice and culturally relevant teaching research to intentionally mix data (Hales, 2016).

Despite the same end goal of educational reform to facilitate an inclusive teaching and learning process, the theories, frameworks and methods applied across these areas of educational research are fundamentally different. For example, as Kumar and colleagues (2018) point out that research in CRRE primarily involves the application of qualitative methods while motivation researchers tend to utilize more quantitative methods. Additionally, motivation researchers generally focus on learning for all students, while CRRE research focus primarily on students of color. While these points of scrutiny are somewhat justified, the historical legacy regarding school desegregation and marginalization of people of color in and from educational spaces which led to the birth of multicultural education research (Banks, 2004; Ladson – Billings, 2004) should be considered more explicitly. This historical legacy contrasts with the development of motivation research which in many ways developed in the context of those described as members of the dominant or mainstream cultural group.

Nevertheless, the proposition that culture is inseparable from motivation in educational practice draws attention to the importance of understanding cultural and motivational factors in the educational context (Ginsberg & Wlodkowski, 2009; Maehr, 1974; Maehr & Nicolls, 1980; Pintrich, 2003; Ryan & Deci, 2017). Without taking a reductionist approach to the arguments posited within both calls, the present investigation is an attempt to respond to both these calls specifically within the context of university classrooms using an integrated theoretical and mixed methods design approach. In responding to these calls, I take an expansive theoretical approach drawing from different frameworks within the domain of multicultural education research to highlight how these frameworks complement psychological motivation theory specifically Self – determination Theory (SDT: Deci & Ryan, 2002; Ryan & Deci, 2017) to inform educational research, teaching and learning in university classrooms.

The Present Investigation

The present investigation is a response to the calls in three ways. First, by providing a synthesis of the range of frameworks in Multicultural Education (ME) which can be integrated with SDT and potentially other motivational theories which can be applied in higher education contexts to explicitly examine the relationship between motivational principles, culture, diversity and student outcomes. Second, to provide clear conceptual and operational definitions of constructs related to Culturally Relevant/Responsive Pedagogy/Teaching/Education referred to as CRPTE (Aronson & Laughter, 2016; Ladson-Billings, 1995a; 1995b, 2014; Gay, 2002, 2018) to more accurately assess the relationship with motivational constructs related to SDT and potentially other motivational theories. Third, to explore relationships among key constructs associated with multicultural education research (i.e. intercultural/cultural competence, diversity inclusivity, and culturally responsive classrooms) and motivational constructs related to autonomy – support and academic motivation and student outcomes in university classrooms. The proposition that more culturally competent instructors provide more positive classroom environments and have greater impacts on student outcomes remains understudied in higher education context and has limited scholarships involving students' perspectives the majority being limited to K – 12 settings (Aronson & Laughter, 2016; Byrd, 2016; Dickinson, Chun, Fernandez, 2016).

Hence, the purpose of this thesis was to use an integrated theoretical approach applying a mixed method research design to explore the extent to which instructors' orientations and perceptions towards culture and diversity in their courses relate to students' perceptions of the classroom environment and educational outcomes in university classrooms. Instructors' orientations towards culture and diversity was conceptualized and operationalized as degree of *intercultural competence* and *diversity inclusivity* in their courses. This was informed by conceptual frameworks within ME. Classroom environment was conceptualized and operationalized in two ways *autonomy – support/autonomy – supportiveness* and *culturally responsiveness/culturally responsive.* The conceptual and operational definition of *autonomy – support* was based on the psychological/achievement motivation theory specifically Self – Determination Theory (SDT: Deci & Ryan, 2002; Ryan & Deci, 2017) while *cultural responsiveness* was based on the tenets of CRPTE. The educational outcomes examined include *academic motivation* defined based on SDT, *intercultural knowledge and competence* development defined based on models of intercultural development in ME and *academic*

achievement. These concepts are defined and discussed in the next section. This investigation was primarily exploratory and descriptive, grounded in a pragmatic epistemological worldview.

I decided to take an exploratory and pragmatic approach in order to better align the theories and methods with the overall goals of the investigation considering the specific calls discussed earlier. Taking this into account, it would be impractical to frame the study using a single theoretical or methodological approach. Furthermore, one data source or perspective would provide a partial rather than a holistic understanding of the extent to which culture and diversity relates to motivational constructs, academic, and societal outcomes in university classrooms.

The following research questions served as guiding questions:

1. To what extent does instructors' intercultural competence and degree of diversity inclusivity relate to students' perceptions of the classroom environment as culturally responsive and autonomy – supportive?

2. To what extent does instructors' intercultural competence and degree of diversity inclusivity relate to students' academic motivation, perceived academic achievement and intercultural knowledge and competence development?

3. To what extent instructors address culture and diversity in creating their course and cultivating the classroom environment?

4. To what extent is the classroom environment instructors cultivate similar or different than students' perceptions and experiences in the class?

To explore these questions, I used the convergent/concurrent mixed methods design (Creswell & Plano Clarke, 2018) integrating quantitative and qualitative methods using multiple sources of data. I chose to use a quasi-experimental correlational design for the quantitative strand to address the first two research questions which was complemented with a qualitative strand using case study methodology, specifically multiple case study.

Regarding the first two research questions, I was particularly interested in understanding whether there would be differences in students' perceptions of autonomy – support and cultural responsiveness based on the instructors' degree of intercultural competence and diversity inclusivity of the course. There are some who claim that the more culturally competent instructors are, the more inclined students are to reflect positively on the learning experiences, the nature of the cross-cultural interaction, and the instructor's teaching performance (Deardorff, 2009b).

Additionally, I wanted to examine whether there would be differences in students' academic motivation for the course they were studying, and their intercultural development based on the instructors' degree of intercultural competence and diversity inclusivity of the course. To my knowledge there was no study looking specifically at the relationship between instructors' orientations towards culture and diversity and the quality of student motivation as described in SDT. However, there is some evidence to suggest that instructors who have greater degree of intercultural competence facilitate greater gains in students' intercultural knowledge and competence development (e.g. Anderson, Lorenz, White, 2016; Cushner & Mahon, 2009). This is also espoused in the tenets of CRPTE.

For the remaining questions, I was interested in exploring the extent to which instructors considered culture and diversity in designing their course and cultivating the learning environment to achieve students' educational outcomes, and the degree to which what instructors did was having the intended effect for students or did students experience differently. Fraser (2012) discusses the importance of examining students' perspectives because there could be a potential mismatch between what teachers intend and what students experience. Additionally, I wanted to gain further insights into what an autonomy – supportive and culturally responsive classroom environment looked like or could look like in a university classroom.

Motivation and Background for Research

The impetus for undertaking this thesis using an integrated theoretical and methodological approach (i.e. mixed methods) stemmed from both the calls for research discussed earlier and several observations from a review of literature in multicultural education, motivation, and higher education research. A brief review of higher education scholarship revealed several trends and shifts across higher education institutions globally as well as in the United States over the last two decades. These trends and shifts scholars suggest have not only impacted the institutional structure of higher education socially, politically and economically but perhaps more significantly the teaching and learning process (Altbach, Reisberg & Rumbley, 2010; Barr & Tagg, 1995; Nelson Laird, 2014). Specific trends include:

a) Expansion of globalization and subsequent efforts by universities engaging in internationalization initiatives highlighting the need for graduates to develop global

competencies (Altbach et al., 2010; Carnoy, 2014; Knight, 2013; Stromquist & Monkman, 2014);

b) Demographic changes leading to increasing diversity among students and faculty (Institute of International Education, 2019; NCES, 2016; Rizvi, 2011),

c) Increase in conversations about issues related diversity, equity and inclusion (Tienda, 2013), (e.g. affordability, access and accountability (Conner & Rabovsky, 2011), and

d) Rising tensions in racial conflict and segregation on college campuses (Chang, 2000; Stotzer & Hossellman, 2012; The Journal of Blacks in Higher Education, n.d.).

Specifically related to teaching and learning, there has been a pedagogical and instructional paradigm shift. This paradigm shift became more obvious in the late 20th century as higher education institutions moved from being more "teaching" focused, to "learning" focused. This sparked changes in pedagogy, institutional structure and organization, curriculum and learning outcomes (Altbach et al., 2010; Barr & Tagg, 1995). Increasing use of cooperative, collaborative and active learning techniques in college classrooms have become the norm in 21st century higher education institutions (Davidson, Major & Michaelsen, 2014; Phipps, Phipps, Kask & Higgins, 2001; Umbach & Wawrzynski, 2005).

Considering the aforementioned trends and shifts in higher education, it stands to reason that now more than ever institutions of higher education need to demonstrate that the environment or climate on their campuses and by extension the classrooms value diversity, are inclusive and that experiences prepare graduates to live and work in a multicultural and global society (Dorchere & Landorf, 2018). It is expected that the atmosphere of the classroom values diversity and engages all students through collaborative, active and problem-solving techniques which are central to student learning and engagement (Gurin & Maxwell, 2017; Umbach & Wawrzynski, 2005). Decades of classroom environment research reveal that the structure and organization of the classroom environment plays a crucial role in how as well as what students learn (Fraser, 2012; National Research Council, 2000). This has direct and indirect impacts on students' educational outcomes related to academic engagement and performance as well as societal which has been shown generally across research related to achievement motivation (Linnenbrink - Garcia & Patall, 2016) and various aspects of multicultural education research (Aronson & Laughter, 2016; Gurin, Dey, Hurtado & Gurin, 2002).

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In ME research broadly across different domains such as intercultural development and diversity inclusivity like Sleeter (2012) other scholars highlight the need for programs and opportunities for faculty/instructors to develop their own cultural competence and culturally appropriate pedagogical practice (e.g. Deardorff, 2009a, Ferrare & Hora, 2014; Gopal, 2011; Quaye, & Harper, 2007), as well as scholarship on how the levels of faculty intercultural competence translate into culturally sensitive and interculturally appropriate teaching approaches, and by extension, how those pedagogical approaches affect student learning (Schuerholz-Lehr, 2007). There is also a great deal of scholarship that focused on the educational outcomes for students who take diversity courses and the impact of classroom diversity on student outcomes (Bowman, 2009, 2010; Hurtado, 2001) but limited focus on the overall benefits of including diversity across the overall higher education curriculum (Nelson Laird, 2011, 2014). Overall, the examination of motivational constructs is absent in the general ME scholarship.

Motivation research on the other hand in higher education context is less focused on sociocultural and sociopolitical aspects of the teaching and learning process. Majority of the research in this area examines the psychosocial aspects of the classroom environment, students' and teachers' self – efficacy, motivational beliefs, expectancy – values, perceived autonomy – support and academic motivation and engagement. Additionally, motivation and ME research in higher education almost exclusively examined either the instructors' perspectives or the students' perspectives but not both. Furthermore, the research was overwhelmingly focused on quantitative methods (e.g. Bonem, Fidesco, Zissimopoulos, 2019; Church, Elliot & Gable, 2001; Deemer & Smith, 2018; Fraser, 2012; Lazowski & Hulleman, 2016).

 Considering the aforementioned we can consider the following propositions:

1) Developing knowledge, skills and competencies for college graduates to live and work in a multicultural society is an outcome of university education;

2) The instructor plays a crucial role in cultivating the classroom environment and

3) The structure and organization of the classroom environment plays a crucial role in how as well as what students learn which has implications for students' motivation, academic performance, and development of global competencies.

Assuming the aforementioned propositions are granted, we can reason that those who are charged with the task of cultivating the classroom environment as well as designing and implementing the courses that allow students to develop the necessary competencies need to have

some degree of intercultural competence and are working to increase their development in that area (Deardorff, 2006, 2009; Weinstein, Tomlinson-Clarke & Curran, 2004). Additionally, it is important that the classroom environment is organized in ways that affirm the value of cultural diversity in ways that are consistent with students' inherent motivational capacities for learning (Ginsberg & Wlodkowski, 2009). To this end, there is a need for research examining instructors' perspective on the process of cultivating their courses and the classroom environment with respect to culture and diversity as well as how students perceive those environments for advancing transformative change in educational practice which is a goal of motivation and multicultural education researchers alike (Banks & Banks, 2004; Kaplan, Katz & Flum, 2012).

Conceptual and Operational Definitions

Diversity, culture and motivation are the overarching concepts of the present inquiry. Diversity is defined simply as the mix differences that exist in the given context. This represents "who" is in the space with respect to different demographic dimensions. For example, we would say that the diversity of a classroom refers to: age, race, sex, gender, socio – economic status, ethnicity, nationality, educational background, and personality of the individuals in the classroom. Essentially, how are they different or similar. This work does not examine all aspects of diversity explicitly. The construct diversity inclusivity is meant to encompass the construct generally with respect to how instructors go about designing and teaching their course based on different elements of course design (see definition for diversity inclusivity).

Defining culture is somewhat more difficult since there are myriad definitions historically to present across disciplines (Condon & Labrack, 2015). However, it is generally accepted that culture is a social construct and therefore does not exist as part of our natural objective reality but exist because of human interaction and consensus. Additionally, it must be noted that the concept of culture also spans to include organizational, institutional and disciplinary that reflect systemic structures (Umbach, 2007). Fundamentally however, culture is characterized and defined based on a consensus of shared norms, values and beliefs which a group accepts as part of how they identify themselves and relate with others. In the present investigation, I conceptualize culture in the domain of intercultural and cross – cultural communication which specifically focuses on how people who are different or similar from each other view themselves and others and how they relate across differences.

The working definition of culture is the way of life of a distinct group of people including the physical manifestations (e.g. food, dress, music, architecture, language) as well as abstractions (e.g. ethnic, racial, norms, values and beliefs) developed overtime across geographic boundaries and experiences as shared practices, ways of thinking and behaving transmitted across generations. It is generally accepted that there are visible or objective aspects of culture and invisible or subjective aspects of culture. Visible or objective aspects of culture refers to the artifacts and institutions created by a group of people, reflected in art, architecture, literature, dance, holidays and collective history. Invisible or subjective aspects of culture refers to patterns of interpretations (e.g. values, beliefs, perceptions) and behavior learned from one's group that guide individual and group activity. Expanding on this conceptualization, I also draw from the conceptual models of culture which depict culture as an ice – berg (Hall, 1976). The iceberg model of culture proposes that much like an iceberg where only the top 10% is visible and observable (i.e. discernable based on our senses), while the remaining 90% is below the surface which in relation to culture cannot be easily observed or is invisible (subjective and varied interpretations). The model also distinguishes degree of emotion that is experienced at different levels with the top 10% requiring less emotional engagement with increasing depth of emotional involvement the deeper one goes. Conceptualizing culture in this way provided the means to be able to identify and describe instructors' orientations and perceptions towards cultural differences, but also distinguish level at which culture is being considered in the teaching and learning process in university classrooms.

Motivation as a construct at the most basic level is used to describe the "why" or "reasons" of human behavior. It is used to explain the processes involved in initiating and sustaining behavior; for example why we choose to engage in or avoid a particular task, and whether we persist or give up in our pursuits (Kumar, et al., 2018; Schunk, Meece & Pintrich, 2014). All human beings are naturally oriented towards pursuing goals. Therefore, we possess the capacity to direct our energy towards specific outcomes through persistence, focus and imagination (Ginsberg, 2005). Motivation is conceptualized and operationalized based on SDT which posits differentiated qualities of motivation based individual feelings of volition in an environment which either supports or thwarts their basic psychological needs (Deci & Ryan, 2002; Ryan & Deci, 2017).

Intercultural competence (IC) was defined as "the appropriate and effective management of interaction between people who, to some degree or another, represent different or divergent affective, cognitive and behavioral orientations to the world" (Spitzberg & Chagnon, 2009 p.7). I

chose this definition because it incorporates the constructs used to conceptualize and operationalize intercultural development in multicultural education research broadly as a prerequisite for cultivating positive classroom environments and as an outcome for students. Intercultural competence as prerequisite for cultivating the classroom environment in the present investigation was conceptualized and operationalized based on the model for intercultural development proposed by Hammer, Bennett M. and Wiseman (2003). They define intercultural competence as the capacity to appropriately understand and effectively adapt one's behavior to cultural differences and commonalities based on one's depth of understanding of their own and others culturally learned differences and commonalities (Hammer, 2011). As a student outcome the term intercultural knowledge and competence (IKC) is used. This refers to "a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts" (Bennett J.M., 2008 p. 97). The distinctions are discussed in chapters 2.

Diversity inclusivity refers to amount or degree to which different elements of course design and implementation are inclusive of diversity. This construct was conceptualized based on the Diversity Inclusivity Framework (*DIF*: Nelson Laird, 2011, 2014) which identifies nine elements of course design and implementation namely: purpose/goals, content, foundations/perspectives, learners, instructor(s), pedagogy, environment, assessment/evaluation and adjustment. Each element is described on an inclusivity continuum with respective characteristics ranging from noninclusive to more inclusive. Each element is described in greater detail in Chapter 2.

Classroom environment also referred to as classroom climate or learning climate, refers to the psychological and social characteristics of the learning environment including the organizational structure, instructional practices, physical attributes, and interpersonal relationships (Moos, 1979). Classroom environment was defined in terms of *cultural responsiveness* and *autonomy – supportiveness*. A *culturally responsive* classroom environment is defined as an atmosphere or climate that explicitly acknowledges and affirms the cultural identities of all students through appropriate integration of diverse perspectives and experiences to understand and explain academic principles and social problems. This definition was coined by reviewing different conceptualizations across the CRPTE frameworks. These frameworks conceptualize cultural responsiveness as affirming students' cultural and linguistic backgrounds and using students'

cultural backgrounds and lived experiences as a reference point to facilitate learning as well as critiquing structures of power and inequality in society (Aronson & Laughter, 2016; Ladson-Billings, 1995a; 1995b, 2014; Gay, 2000, 2002). *Autonomy – support or autonomy – supportive* classroom environment or climate is characterized by providing choice and opportunities for self – regulation, positive informational feedback and structures to support competence, and relatedness supports by caring involvement of others (Ryan & Deci, 2017).

Educational Outcomes were conceptualized broadly as the expected and observed products directly and indirectly related to the teaching and learning experiences of instructors and students respectively in the classroom context. Stated differently, educational outcomes refer to the psychosocial, academic, and societal capacities and knowledge students develop. Three *educational outcomes* were examined: *academic motivation, academic achievement* and *intercultural knowledge and competence*. *Academic motivation* refers to different types and forms of internal and external regulatory practices, affect, socioemotional and psychosocial responses and motives towards engaging in academic works or tasks. The SDT perspective differentiates the forms of human motivation on a continuum as being exclusively volitional i.e. reflecting the individuals interests and values or external, i.e. reflecting other values and interests through coercion or pressure. The former is described as autonomous motivation and the latter as controlled motivation (Ryan & Deci, 2017). Based on SDT, *academic motivation* was defined with respect to students' performance or engagement in academic tasks based on their perceived degree of internalization of the tasks as being enjoyable and personally valuable (autonomous motivation) or obligatory and coerced (controlled motivation). The differentiation of the types of motivation and associated regulations are discussed further in chapter 2.

In defining *academic achievement* I attempt to reconcile tensions between individual definitions of achievement and success being culturally variable and the established institutional norms that guarantee matriculation from one level to the next such as grade point average (GPA) and the traditional grading system (A, B, C, D). In reconciling this tension academic achievement was defined in terms of students' perceptions of their learning determined by the anticipated grade in the course and personal reflections of what they learned.

Significance of Research

The present investigation has theoretical, methodological, and practical implications for educational researchers, educators and administrators in higher education. First, this investigation addresses the gaps in the literature related to specific calls integrating multicultural and motivation frameworks as well as providing evidence of the relationships among specific constructs. Second, the findings will provide evidence for the applications of CRPTE in higher education contexts including students' perspectives. Third, this thesis describes a conceptual approach to integrating a motivation theory and multicultural education frameworks to gain a more holistic understanding of the teaching and learning process in university settings to more explicitly align teaching and learning with educational outcomes. This has implications for theory as educational researchers can begin to focus not only on psychosocial or sociocultural and sociopolitical aspects of the teaching and learning process but be more explicit in their considerations of both. Additionally, this investigation includes different tools that researchers can adopt to further operationalize constructs across achievement motivation and multicultural education research with respect to classroom environment. Finally, practically, this investigation provides insights into teaching and learning process from both instructors and students' perspectives. These insights can be used by higher education educators broadly speaking (i.e. faculty/instructors and administrators) in their decisions about prioritizing diversity, equity and inclusion in conjunction with motivational principles of teaching and learning as part of higher education curriculum and instructional development.

Summary of Chapters

In the subsequent chapters I describe the process of framing and conducting the investigation based on the goals and guiding research questions. Chapter 2 is a synthesis of the theoretical framing of the research as well as a review of literature across multicultural education and achievement motivation research in the context higher education. I synthesize and review literature focused on integrating multicultural education and motivation theory specifically, SDT. In Chapter 3 I describe the procedures and materials used in the investigation based on a mixed methods design. The specific quantitative and qualitative procedures and materials are described as well as the process of integrating the data from the different sources across both methods. In

Chapter 4, first, I present and describe generally the results from instructors' and students' perspectives demonstrating the relationships among the variables related to the research questions 1 and 2. Second, I describe quantitative and qualitative results from three specific cases (i.e. courses/classrooms) which address research questions 3 and 4. Finally, I summarize and discuss the integrated data from quantitative and qualitative sources in relation to overall research aim. In the final chapter, (i.e. Chapter 5) I discuss the main findings and interpretation of the integrated results with substantive conclusions. The findings are discussed with respect to theoretical, methodological and practical implications and recommendations for educational researchers and educators. Finally, I conclude with a discussion on the goals of the investigation in relation to the specific calls discussed earlier in this chapter.

CHAPTER 2. LITERATURE REVIEW

This chapter is divided into two sections where I synthesize and discuss literature related to the constructs which were examined as well as the theoretical and conceptual framing of this investigation. In the first section, I review and synthesize the extant literature over the past two decades across multicultural education, motivation and higher education research describing the relationship among the variables of interest: *intercultural competence*, *diversity inclusivity*, *classroom environment* and *educational outcomes* as defined in Chapter 1. In the second section, I review and discuss the specific theoretical and conceptual frameworks which were used and why each was selected. Finally, I describe the integrated theoretical approach developed from this synthesis and analysis of the multicultural frameworks and SDT as well as the specific aspects which are explored in this thesis.

Section 1: Review of Literature

The variables of interest in the present investigation are investigated within the domains of Multicultural Education (Banks, 2004, 2013; Grant, Elsbree & Fondrie, 2004; Ladson – Billings, 2004) and Psychological/Achievement Motivation Theory (Kumar, Zusho & Bondie, 2018; Linnenbrink – Garcia & Patall, 2016; Pintrich, 2003) specifically Self – Determination Theory (Deci & Ryan, 2002; Ryan & Deci, 2000, 2017) for reasons already stated in the introduction. Each approach is grounded in specific assumptions about the teaching and learning process. Consequently, researchers across these approaches tend to be more or less explicit in what constructs they examine and how they conduct their investigation.

Multicultural Education (ME) researchers aim to explicitly address cultural and structural factors which affect the teaching and learning process across academic levels. These cultural and structural factors include but are not limited to race, ethnicity, social and systemic inequality, prejudice, discrimination, cultural competence, intercultural/cross – cultural communication, as well as education affordability and accessibility and so on. Their investigation of these factors spans several sub-disciplines with many theoretical and conceptual models explicitly addressing a range of issues in educational settings in relation to culture and diversity (Banks & Banks 2004; Grant & Sleeter, 1985; Ladson – Billings, 2004). The cultural responsiveness of the classroom

environment as well as the instructors' degree of cultural knowledge and competence tends to be the explicit focus of ME researchers applying different conceptual frames and models (Aronson & Laughter, 2016; Deardorff, 2006, 2009; Montgomery, 2001; Weinstein, Tomlinson-Clarke & Curran, 2004). An overall review of the multicultural education research revealed that there is an overwhelming focus on K – 12 education settings with limited focus on the applications of the principles in higher education classrooms except within the area of teacher education programs, study abroad and faculty who teach courses in multicultural education or diversity.

On the other hand, psychological/achievement motivation (PMT) researchers broadly speaking, focus more explicitly on psychosocial and motivational factors that relate to students' engagement and academic performance across academic levels. The research also spans myriad theories and models developed overtime beginning with a behavioral approach and evolving to include social cognitive and sociocultural approaches to examining the role and impact of motivational processes in teaching and learning (Ames, 1992; Linnenbrink & Garcia, 2016; Pintrich, 2003; Weiner, 1990). The role of culture and context is also considered in different motivational approaches (Pintrich, 2003). However, there is less emphasis when compared to ME approaches as some suggest that traditionally motivation researchers tend to adopt "shallow" approaches to examining structural and cultural factors that impact the teaching and learning process (Zusho & Kumar, 2018)

For example, ME researchers are more explicit in their examination of constructs related to culture, diversity, power, privilege, stereotypes, discrimination and disenfranchised groups of people. Educational inquiry is framed through the lens of sociopolitical, sociocultural and systemic factors which influence the teaching and learning process. However, achievement motivation researchers tend to be more explicit in their focus of psychosocial factors for example: personality, motivational beliefs, social support and motivational processes and mechanisms as well as psychological and emotional well – being that influence the teaching and learning process.

Each perspective is limited in some respects since both primarily assume different underlying factors that primarily contribute to the same outcomes. This is revealed for example in how motivation researchers conceptualize the classroom environment based on social factors related to motivational orientations, goals and autonomy – support (Ames, 1992; Linnenbrink – Garcia & Patall, 2016; Reeve, 2006; Urdan & Shoenfelder, 2006). However, ME researchers conceptualize the classroom environment based on sociocultural and sociopolitical factors related

to cultural competence, cultural responsiveness, and discourses power, equity and social inequality (Aronson & Laughter, 2016; Gay, 2002; Ladson – Billings, 1995).

These approaches range on a continuum of explicitness based on the role of culture and diversity in education from one end focusing on underrepresented or marginalized populations in US education and resistance to institutionalized oppression to the other end focusing on motivational psychosocial needs and interests of humans across cultures. In this section, I begin by discussing ME and PMT broadly to provide the broader context in which the variables are examined and the epistemological assumptions. Afterwards I discuss the research associated with the constructs examined in the higher education context highlighting the contributions and gaps which further underscores my reasons for doing this thesis. Finally, I summarize some important conceptual and theoretical work by scholars integrating motivational frameworks and concepts associated with culture and diversity in educational research.

Multicultural Education

Multicultural Education (ME) is a philosophical concept and a process. Freedom, justice, equality, equity, and human dignity are ideals that represent the cornerstone of ME as a philosophical concept. The primary aims are to: 1) prepare and empower students with the attitudes and values to take on the responsibilities as citizens in an interdependent world, and 2) build a democratic society. As a process, ME is integrates all aspects of education to facilitate high levels of academic achievement for all students, as well as opportunities for developing positive self – concept through knowledge about history, culture and contributions of diverse groups (The National Association for Multicultural Education, 2019). Because ME covers a broad scope, there are myriad interpretations and means of fulfilling the different goals. However, the primary principles of ME include: 1) starting with students' life histories and experiences as the basis for teaching and learning, 2) using pedagogies that incorporate and addresses several ways of thinking, and 3) engaging in critical analysis of oppression and power relations in communities, society and the world (Banks, 2004; The National Association for Multicultural Education, 2019). Despite the early beginnings as almost exclusively an approach to teaching and learning for ethnically diverse or traditionally underrepresented groups, overtime ME has evolved to incorporate not just an ethnic perspective but a global perspective (Banks, 2004, 2013).

Multicultural Education in Higher Education

In reviewing ME research I realized that majority of the research was primarily focused on K – 12 settings, and those conducted in higher education settings were primarily in relation to K – 12 teacher education and preparation or in relation to study abroad or instructors involved in teaching diversity courses. Additionally, most of the research exclusively examined either the instructor perspectives or the students' perspectives but not both. For example, applications of CRPTE which relates to instructional practices and ways to make classroom environments inclusive were primarily developed in K – 12 settings, (Gay, 2002, 2010; Ladson – Billings, 1995a, 2014; Aronson & Laughter, 2016). In higher education contexts researchers focused mostly on undergraduate preservice teacher education programs or in-service teacher training (Kumar & Hamer, 2012; Natesan, Webb- Hasan, Carter & Walter, 2011; Sharma, Phillion & Malewski, 2011; Wang, Castro & Cunningham, 2014). This research is framed in terms of shaping teachers' beliefs about cultural diversity and the instructional practices they will apply in their K- 12 classrooms. Civitillo, Juang and Schachner (2018) in their review of research on trainings to shape pre-service teachers beliefs about cultural diversity identify five ways in which the research is framed: 1) teachers beliefs about their own cultural self – efficacy, 2) beliefs about cultural context and environment, 3) beliefs about cultural content or knowledge, 4) beliefs about culturally sensitive teaching practices and approaches and 5) beliefs about culturally diverse students and families. This research on teacher beliefs also falls within the domain of examining teachers' degree of cultural sensitivity, awareness or competence in the teaching and learning process.

There is limited scholarship on applying CRPTE in higher education contexts. The applications are often limited to faculty who teach multicultural courses (Han, Vomvoridi-Ivanović, Jacobs, Karanxha, Lypka, Topdemir & Feldman, 2014; Reynolds, 2011). Mayo and Larke (2013) in their edited volume *Integrating Multiculturalism into the Curriculum*, provide one of the most comprehensive applications of multicultural education principles and frameworks in higher education contexts across different academic domains including: liberal and communication arts, science and engineering, business and education. The book provides exemplars of faculty across different academic domains who transform their courses including the syllabus, course content and instructional strategies that reflect culturally responsive and relevant teaching. These examples though useful overwhelmingly highlight the instructors voice and perspectives but to a lesser extent students' experiences in the different courses. Examining

students' perspectives on the cultural responsiveness or the degree to which undergraduate students find their classroom environments culturally responsive remains an unexplored area in ME research in the higher education. At the time of this investigation there was only one measure of cultural responsiveness from the students' perspective which was developed for use in K – 12 setting (Byrd, 2016; Dickinson & Chun, 2016). This thesis attempts to address this gap in the literature specifically related to CRPTE because fundamental principles of CRPTE I maintain not only hold true for students of color or underrepresented students but for all students and present a case for CRPTE across higher education classrooms outside of teacher education. I discuss this further in the next section on applying CRPTE.

Another area of ME research somewhat related to CRPTE but separate is research on intercultural development. ME research on intercultural development involves various domains such as: study abroad (Vande Berg, Paige & Lou, 2012), evaluating programs related intercultural development of students on campus (e.g. Soria & Trosi, 2013) and intercultural teacher education (Cushner & Mohan, 2009; Mohan, 2006). Not only is intercultural/cultural competence and outcome for university graduates, it is also considered a prerequisite for faculty and instructors in creating inclusive classroom environments which also refers to culturally responsive classrooms (Deardorff, 2006, 2009; Weinstein, Tomlinson-Clarke & Curran, 2004). Some scholars have mentioned the fact that most research on intercultural competence as an outcome for students tend to focus on the content of educational programs (i.e. what the educators offer) rather than how students experience intercultural learning (King, Perez & Shim, 2013).

Scholars also highlighted need for programs and opportunities for faculty/instructors to develop their own cultural competence and culturally appropriate pedagogical practice (e.g. Deardorff, 2009a, Ferrare & Hora, 2014; Gopal, 2011; Quaye, & Harper, 2007), as well as scholarship on how the levels of faculty intercultural competence translate into culturally sensitive and interculturally appropriate teaching approaches, and by extension, how those pedagogical approaches affect student learning (Schuerholz-Lehr, 2007). The assumption being that more culturally competent instructors are likely to use more culturally responsive and relevant teaching practices and would likely be more intentional about integrating diversity in their course. Some scholars argue that the more culturally competent instructors are, the more inclined students are to reflect positively on the learning experiences, the nature of the cross-cultural interaction and the instructor's teaching performance (Bhawuk & Brislin, 1992; Deardorff, 2009b).

There was also a great deal of scholarship that focused on the educational outcomes of diversity courses specifically and the impact of classroom diversity on student outcomes (Bowman, 2009; Hurtado, 2001). Consistently scholars argue and I agree, that not because diversity exists on the campus, it automatically guarantees that there will be inclusion or that students will achieve the expected outcomes that will allow them to engage in the increasingly global and multicultural workforce and society. Intentional efforts are required that align outcomes and appropriate pedagogies that facilitate the process of integrating different perspectives to meet educational outcomes and goals (Gurin, Dey, Hurtado & Gurin, 2002; Tienda, 2013).

Research on including diversity not just in specific courses but across the overall higher education curriculum particularly outside of multicultural courses although few provides some meaningful insights (Nelson Laird, 2011, 2014). Nelson Laird (2011) examined responses from 7101 faculty about the extent to which they included diversity in their courses. Nelson Laird (2011) found that while most faculty were including diversity in their courses to some extent, including diversity in the course was more common among women and faculty of color than other faculty. The results also revealed that majority of faculty who included diversity in their course focused on being inclusive towards their students, using different pedagogical strategies, assessments and making adjustments in the course to meet students' needs. However, Nelson Laird (2011) reports that only about 50% of faculty considered including diversity in their course in relation to the purpose/goals of the course, the content and perspectives examined in their course and examining their own biases within the context of the course.

In general ME research provides insights into the role of culture and diversity in the teaching and learning process by focusing on: 1) Developing instructors positive efficacy, competence, knowledge and skills about cultural diversity, 2) The societal outcomes and benefits to students developing intercultural knowledge and skills, and 3) How to intentionally organize and structure environments and experiences for students to develop global competencies. However, the extent to which psychosocial or motivational factors relate to different aspects of ME such as creating culturally responsive environments or the influence of instructors' cultural competence on college students' academic motivation remains unexplored. It is also not explicitly discussed the extent to which including diversity in the university influences student motivation and other educational outcomes.

Psychological/Achievement Motivation Theory

Psychological motivation theory spans the range of achievement motivation frameworks and theories that attempt to explain the factors that influence different motivational processes (i.e. initiating, sustaining, and regulating the quality of students' and teachers' behaviors across educational contexts and cultures (Ames, 1992; Linnenbrink – Garcia & Patall, 2016, Kumar et al., 2018). This resembles what Pintrich (2003) describe as a motivational science which aims to address the following questions: 1) What do students want? 2) What motivates students in the classroom? 3) How do students get what they want? 4) Do students know what they want or what motivates them? 5) How does motivation lead to cognition and cognition to motivation? 6) How does motivation change and develop? And 7) What is the role of context and culture? Kaplan and colleagues (2012) further explicate that motivational theories aim to answer questions such as "Why do some students engage deeply, cooperate with others, enjoy learning, perform well, and thrive in school, whereas others procrastinate, avoid or fail to learn, disrupt the lesson, and dropout?" (pp. 166). There are several theoretical frameworks across the vast landscape that spans psychological motivation theory which examine these questions in different ways. These frameworks are grounded in different assumptions about human action which presents points of tensions (Kaplan et al., 2012).

To ground the present investigation in the psychological motivational approach, it is important to summarize some the major overlaps across motivation theories and the empirical evidence which justifies not exclusively taking a multicultural approach. Urdan and Schoenfelder (2005) as well as Urdan and Turner (2005) describe the following points of overlap based on empirical research across Achievement Goal Theory (Dweck & Leggett, 1988; Elliot & McGregor, 2001; Maehr & Midgley, 1991), Self – Determination Theory (Deci & Ryan, 1985; Ryan & Deci, 2000, 2017) and Social Cognitive Theory (Bandura, 1986):

1) Providing students with work that is not too difficult but optimally challenging; work that is not optimally challenging undermines students' motivation, increase anxiety about failing and produce feelings of guilt as they feel pressured;

2) Providing students with choices and opportunities to exercise ownership over their learning;

3) The teachers' role is a facilitator of learning through nurturing and support rather than a controlling expert;

4) Teachers develop and assign tasks that have personal meaning and relevance to students;

5) Teachers provide students with meaningful informational feedback to develop competence not simply evaluative feedback;

6) Assessments should be focused on facilitating students' development of mastery and competence rather than outcomes of test scores or comparing test scores; and

7) Teachers should be intentional about incorporating humor, novelty, variety and fantasy into the curriculum.

The previous conclusions primarily focus on theories of motivation that focus on social cognition with respect to motivational processes. However, there are other motivational theories that adopt a more situated view of motivation that emphasize the role of cultural and contextual factors that influence internal motivational process (Hickey, 1997; Kitayama, 2002). Pintrich (2003) summarizing the connection between social cognitive approaches and the situated perspectives suggests that both approaches lead to the same conclusion that student motivation is in fact situated. It is important to note here, that while the situated approach to motivation does provide theoretical appeal which to some extent aligns with the aim of the present investigation to understanding the relationship between aspects of culture, diversity and students' educational outcomes including motivation. The situated perspective was not adopted primarily because:

1) The specific aspects of culture and diversity examined in the present investigation were more thoroughly researched with models and measures in ME than in the situated approach;

2) A primary aim of this investigation was to show how seemingly disparate approaches to educational research across paradigms in fact share similarities that can provide a more holistic understanding of the teaching and learning process. Applying the situated approach which is within the motivational paradigm would not serve to advance this purpose;

3) Recent comparisons between achievement motivation research and ME identified three of the basic psychological needs posited by SDT (autonomy, competence and relatedness) as complementary to ME research on Culturally Responsive Relevant Education (CRRE) (Kumar et al., 2018); and

4) The models from the situated perspective would be more appropriate in understanding the role of contextual and cultural factors in developing and internalizing different motivational beliefs (Pintrich, 2003) which was not the primary aim of this investigation.

I specifically focus on SDT from the motivational perspective because it's a meta – theory with different sub – theories which have tremendous empirical cross – cultural support. Secondly, SDT is explicit in its tenets about the role of societal structures including cultural, political and economic factors that may support or undermine motivation. Finally, SDT distinguishes between different motivational orientations (controlled vs autonomous) and regulations that provide much more range in understanding the relationships between the classroom environment and student outcomes. The propositions and tenets of SDT I thought would complement the ME frameworks used in the present investigation discussed in the second section of this chapter.

Self – Determination Theory Applications in Higher Education

There have been various empirical examinations of SDT concepts in university settings. The specific inquires vary in terms of academic domain for example engineering (Trenshaw, Revelo, Earl, Herman, 2016), physical education (Amorse & Anderson – Butcher, 2007), healthcare professions (Crary, 2013; Neufeld & Malin, 2020; Williams & Deci, 1996), and teacher education (Ciani, Sheldon, Hilpert & Easter, 2011) and second language learning (Chen & Kraklow, 2015; Liu, 2016). Inquires also generally focus on students' academic motivation, learning and engagement (Linnenbrink – Garcia & Pattal, 2016) as well as teaching practices, instructional support and pedagogical practices (Abeysekera & Dawson, 2015; Burt, Young – Jones, Yadon & Carr, 2013; Levesque – Bristol, Knapp & Fisher, 2010; McLachlan & Hagger, 2010; Young – Jones, Cara & Levesque – Bristol, 2014).

The results and conclusions of these studies overall validate the theoretical claims of SDT as applied to educational context. First, the importance of satisfying BPNs which serves as a means to more autonomous or self – determined forms of motivation. Second, that autonomous extrinsic motivation regulatory styles lead to adaptive learning strategies and positive learning outcomes versus if less autonomous regulatory styles (i.e. external and introjected) are adopted. Third, autonomous or more self – determined forms of motivation are facilitated when autonomy supportive rather than controlling environments are facilitated through the satisfaction versus

frustration or thwarting of the BPNs (i.e. autonomy, competence and relatedness). Finally, across different studies the role of the teacher or instructor in creating the conditions which either supports or thwarts the BPNs is paramount. However, similar to CRPTE, the conceptual and operational definitions of autonomy – supportive classrooms with respect to instructors motivational orientations and efficacy as well as students outcomes were developed and have largely been examined in K – 12 settings (Reeve, 2002, 2006, 2009; Rogat, Witham & Chinn, 2014; Stefanou, Perencevich, DiCintio &Turner, 2004).

Traditionally, the assessment of the constructs and propositions of SDT apply quantitative methods (Ryan & Niemiec, 2009) using variable – centered approach but more recently shift to a person – centered approach. The former is more focused on different motivational constructs and connecting outcomes while the latter looks more specifically on the specific motivational profiles within the sample and population. SDT research related to students motivational profiles highlight different forms and combinations of self – determined/autonomous motivational profiles compared to controlled forms of motivation impact students' academic adjustment, persistence, engagement and learning (Boiche & Stephan, 2014; Hill, 2013; Ratelle, Guay, Vallerand, Larose & Sene´cal, 2007; Vansteenkiste, Sierens, Soenens, Luyckx & Lens, 2009).

The relationship between SDT motivational constructs such as the classroom environment, motivation and societal educational outcomes (e.g. civic responsibility and citizenship) is an area that remains unexplored. However, there are few examples both within and outside the educational domain. For example, Pelletier (2002) found that self – determination mediated the relationship between people's satisfaction, importance and perceived competence toward the environment and pro – environmental behaviors. While this study was conducted outside the classroom context, he argues that the education of children and more broadly environmental education programs in schools would be critical to developing pro-environmental behaviors. Levesque – Bristol and colleagues (2010) based on the principles of SDT examined the application of service-learning pedagogy in a university classroom to enhance the learning climate of students across different academic disciplines. They found that the autonomy – supportiveness of the classroom environment was significantly and positively associated more autonomous forms of motivation as well as the development of civic skills such as problem solving, civic action and diversity. In classrooms where students perceived low degree of autonomy – support there was no beneficial change in student motivation and civic skills. Levesque – Bristol and Stanek (2009) also describe

the application of service-learning pedagogy as an autonomy – supportive approach which enhances students' motivation and engagement in university classrooms. These examples show broadly the relationship between principles of SDT and pedagogies associated with societal outcomes (e.g. service learning) and associated outcomes with respect to civic responsibility, diversity, and pro-environmental behaviors.

Integrated Approaches to Culture, Diversity and Motivation

An integrated approach to culture, diversity and motivation is not new. Starting with the foundational premise that motivation is inherently cultural some scholars proposed a Motivational Framework for Culturally Responsive Teaching (MCRT: Ginsberg & Wlodkowski, 2009; Wlodkowski & Ginsberg, 1995) developed based on the assumptions of intrinsic motivation described in SDT and the importance of affirming diverse cultural experiences in CRPTE. This model was developed to provide guidelines for professional development and lesson planning in adult education, but no doubt has applications across academic levels K – 16. The scholars' aim was to develop a motivational framework that: a) respected diversity, b) engaged the motivation of a wide range of students, c) created safe, inclusive and respectful learning environments, d) derived teaching practices from across disciplines and cultures, and e) promoted equitable learning (Ginsberg & Wlodkowski, 2009). The MCRT describes four motivational conditions or goals that emphasize the experience of the students in the context of the classroom based on the practices of instructors with respect to: 1) *establishing inclusion*, 2) *developing positive attitudes*, 3) *enhancing meaning* and 4) *engendering competence.* First, *establishing inclusion* involves creating an atmosphere with norms, procedures and structures that affirms and values respect and connectedness between as well as among all students and the instructors. Second, *developing positive attitudes* involves creating favorable dispositions towards learning by developing norms, procedures and structures through choice and relevance. Third, *enhancing meaning* refers to the norms, procedures and structures that expand, refine or increase the complexity of what is learned in a way that matters to the students and includes their values and perspectives. Finally, *engendering competence* refers to the norms, procedures and structures that create an understanding for learners of how they are or can be effective in learning something of personal value. This model integrating culture, diversity and motivation has been applied to instructor professional development, evaluating and developing courses and lesson plans by describing an

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approach to establish a common culture in the learning environment for students (Ginsberg & Wlodkowski, 2009). The application of this model though not widespread in higher education reveals the practicality of an integrated approach to psychological motivation theory specifically SDT and multicultural education. However, I did not use this as a primary framework for this investigation since the goal of this investigation extended beyond the relationship between intrinsic motivation as conceptualized in SDT and culturally responsive teaching. Additionally, there is not much scholarship operationalizing this framework beyond in second language learning among adult educators and learners (Rhodes, 2013).

Kumar, Zusho and Bondie (2018) while not proposing a framework describe how key motivational principles across achievement motivation generally (i.e. psychological motivation theory) differ from principles of culturally, responsive and relevant education (CRRE) while highlighting points of convergence. They focus their analysis specifically on conceptual definitions of *culture*, *autonomy*, *competence*, *relatedness* and *meaningfulness*. The achievement motivation approach to *culture* they maintain is often defined in terms of shared norms and values as well as ethnicity but not explicitly in terms of race, power and inequality. Additionally, achievement motivation typically looks at culture in terms of micro – level processes at the classroom level or school climate. The CRRE approach, however, explicitly focuses on race, oppression, prejudice and the impact of cultural hegemony on minority students' educational experiences.

Regarding *meaningfulness*, they draw on the assumptions of expectancy – value theory which focuses on cost associated with engaging in a specific task as well as specific values or reasons for which students engage in a specific task and the degree to which they find a task useful or interesting. The CRRE approach they argue defines meaningfulness in terms of the cultural relevance of the content and affirms students' individual cultural backgrounds. The distinction with respect to *competence* highlights is based on emphasis of academic competence which determines students' success in schools from the achievement motivation perspective versus developing cultural competence which requires an understanding of one's own and other cultural identities. Therefore, the CRRE approach posits that students' academic competence is directly tied to teachers' cultural competence (Kumar et al., 2018). *Autonomy* from the achievement motivation perspective is defined in terms students perceiving personal agency and volition in endorsing and regulating goals which leads to them being more intrinsically motivated while

relatedness is discussed in relation to forming and maintaining secure attachments and developing sense of belonging. The CRRE approach however, they suggest in defining autonomy emphasizes both personal and collective agency for personal growth and bring about social change while relatedness is focused on being culturally sensitive and caring while breaking down barriers to alienation and structures that undermine the development of relationships.

The purpose for identifying these distinctions Kumar and colleagues (2018) maintain was to encourage collaboration across CRRE and achievement motivation taking the best of both perspectives to gain a greater depth of understanding about the relationship between students' motivational processes and their sociocultural as well as historical experiences. This comparative analysis provides insights into how aspects of multicultural education specifically CRRE or what I refer to as CRPTE overlap with aspects of social cognitive achievement motivation theories despite conceptual differences in definitions. This investigation builds of both these integrated approaches to apply assumptions of multicultural education broadly beyond CRPTE in conjunction with SDT in the context of higher education. After reviewing the literature across both multicultural education and psychological motivation theory and looking at models integrating both perspectives, I realized that there was limited empirical evidence in the context of higher education. Furthermore, many of studies tended to either focus on professional development for instructors or simply assessing the perspectives and experiences of students but almost never both.

In framing this investigation, I leverage the theoretical conceptualizations across frameworks in multicultural education and psychological motivation theory specifically SDT, to develop a dynamic conceptual approach which integrates both perspectives to gain a more holistic understanding of the teaching and learning process from instructors and students' perspectives. I further explore specific aspects of this model to provide empirical evidence on the relationships among constructs associated with culture, diversity and motivation from instructors' and students' perspectives in university classrooms. In the subsequent sections I describe the specific conceptual models and frameworks which informed this investigation from the multicultural approach and psychological motivation theory approach.

Section 2: Theoretical & Conceptual Frameworks

In this section, I begin by discussing the specific ME frameworks that I chose to use. Afterwards I discuss the tenets of Self – Determination Theory (SDT: Deci & Ryan, 2017) which

I think complement the frameworks adopted from the ME approach. Finally, I discuss a dynamic conceptual model which integrates aspects of both theoretical approaches and how all these frameworks collectively fit together to meet the goals of this investigation. My aim is not to describe every aspect of difference and similarity across the different frameworks. Rather, to show how they complement each other and can inform educational research and practice in higher education contexts integrating culture, diversity and motivation using instructors' and students' perspectives.

There are three strands of research in ME with specific conceptual frameworks which are relevant to this inquiry, culturally responsive/relevant pedagogy/teaching/education (CRPTE), intercultural knowledge and competence development and diversity inclusivity in course design and implementation. The focus of research in these areas aim to address individual/personal characteristics as well as social and political contextual factors in educational settings that impact the teaching and learning process specifically as it relates culture, diversity and student outcomes. I describe each strand of research with respect to the specific conceptual and theoretical frameworks relevant to this investigation.

Culturally Relevant/Responsive Pedagogy/Teaching/Education (CRPTE)

The abbreviation CRPTE represents an amalgam of conceptual frameworks applied in educational settings which integrates different facets of culture, diversity, inclusion and social justice. Collectively, CRPTE frameworks describe and explain what constitutes effective and appropriate organization, management and application of pedagogical practices in educational contexts particularly focused culture, diversity, and systemic inequality. I coined this working definition because I recognize that there are myriad frameworks with the title of "culturally_____" with similarities and differences but talk about similar concepts grounded in the philosophical process of ME. This does not imply that all the frameworks mean the same thing. Rather, it is to point out the common thread which drive the work of scholars in this area. This working definition is not an attempt to take away from the work of individual scholars and their conceptualizations or simplify the concept. Rather my goal is to move toward a common understanding of what it is meant by culturally responsive and relevant teaching and learning to more accurately operationalize constructs.

For the present investigation CRPTE is used as the basis for defining and operationalizing the classroom environment, which I refer to as culturally responsive classroom climate/environment or cultural responsiveness. The abbreviation encompasses three distinct frameworks namely: Culturally Relevant Pedagogy (also culturally relevant teaching) (CRP: Ladson – Billings, 1995a, 1995b, 2014), Culturally Responsive Teaching (CRT: Gay, 2002, 2010, 2018) and Culturally Relevant Education (CRE: Aronson & Laughter, 2016). Aronson and Laughter (2016) conceptualization of CRE is based primarily on the work of Ladson -Billings (2014) and Gay (2000, 2018). Other scholars have combined CRP/T frameworks integrating aspects of Critical Race Theory in education (Brown – Jeffy & Cooper, 2011; Ladson – Billings & Tate, 1995; Lynn, 2004) and Culturally Relevant Pedagogy explicitly identifying the centrality of race and systemic oppression in American educational institutions. Although each conceptual framework uses different concepts to describe the role of sociocultural and sociopolitical factors that influence the teaching and learning process, overall, the conceptual frameworks rest on the following tenets:

a) Students find learning more personally meaningful, experience higher interest appeal, and learn more easily and thoroughly when academic knowledge and skills are situated within their lived experiences and frames of reference (Gay, 2000, 2002); and

b) The classroom is the site of social change and thus educational experiences should be structured in ways that empower students collectively to bring about changes in the society (Aronson & Laughter, 2016; Ladson – Billings, 1995a).

Over the past five years some scholars have suggested a need to further extend the conceptualization of CRPTE using the term Culturally Sustaining Pedagogy (CSP: Paris, 2012; Paris & Almi, 2014). This new terminology was proposed to reinforce the purposes and goals of CRPTE, with a more critical focus on an approach to teaching and learning that emphasizes assets that students have as opposed to perceived deficits. The emergence of CSP is also a stance against policies and rhetoric that would marginalize linguistic and cultural diversity in favor of a monocultural/monolinguistic society which undermines democratic ideals. Paris and Almi (2014) maintain that CSP:

> Has its explicit goal supporting multilingualism and multiculturalism in practice and perspective for students and teachers. CSP seeks to perpetuate and foster—to sustain—linguistic, literate, and cultural pluralism as part of the democratic project of schooling and as a needed response to demographic and social change (pg. 88).

Ladson – Billings (2014), explicating the relevance of CSP with respect to CRP, maintains that both conceptualizations operate along a pedagogical continuum which seeks to ensure that those who have been previously disadvantaged by schools receive quality education, while simultaneously ensuring that individuals in the mainstream develop skills that allow them to critique the basis of their privilege. This description of CSP with respect to CRP highlights the relevance of CRPTE not just for students of color as it is often characterized or necessary only in multicultural classrooms but in homogenous classrooms as well which may include primarily individuals who are members of the dominant or mainstream culture. The propositions of CSP therefore serve as an extension of the fundamental principles of CRPTE and while not explicitly examined in the present investigation (i.e. asset pedagogies), the basic premise is incorporated as part of the CRPTE frameworks discussed in the next section. Before describing the specific tenets of the different conceptual frameworks with CRPTE, it is worth noting that there are tensions concerning these frameworks that must be discussed with respect to the present investigation.

As diversity, equity and inclusion become major topics of discussion in institutions of higher education, the principles of CRPTE are becoming increasingly relevant. These changes are catalyzed by continuous demographical shifts increasing domestic and global diversity, globalization trends increasing need for diverse competencies, rising tensions politically and socially among diversities (primarily ethnic, linguistic and religious). Collectively, these factors are driving the need for pedagogical adjustments and CRPTE in my view offers specific principles which can be applied across academic domains and disciplines.

I chose to use CRPTE in this investigation because the fundamental concepts and principles explicated across the frameworks: 1) would be useful in explicitly describing and assessing characteristics of a culturally responsive classroom environment and the relationship with student outcomes, 2) complement fundamental principles of teaching and learning explicated in SDT and more broadly across psychological motivation theories, regarding autonomy, competence, relatedness and meaningfulness (Kumar et al., 2018), and 3) offer a critical perspective on applying diverse pedagogies to meet educational and societal outcomes for college students.

Culturally Relevant Pedagogy/Teaching

Culturally Relevant Pedagogy/Teaching (CRP/T) refers to ways of being and facilitating learning that emphasize collective and individual empowerment of students intellectually, socially,

emotionally and politically using cultural referents to impart knowledge, skills and attitudes (Ladson – Billings,1995a, 1995b, 2014). There are three main propositions: 1) Students must experience academic success, 2) students must develop and/or maintain cultural competence, and 3) students must develop a critical consciousness through which they challenge the status quo of the current social order. The first proposition refers to students' ability display competence in academic tasks related to literacy, numeracy, and technology, social and political content in order to be active participants in a democracy. The role of the teacher in facilitating academic success involves creating opportunities for students to "choose" academic excellence (Ladson – Billings, 1995a). The second proposition involves using students' cultural background as a vehicle to facilitate their learning thereby validating their lived experiences as they develop academic excellence. Proposition three refers to students developing the ability to critically analyze the cultural, social and institutional norms of the society that contribute to social inequalities. This proposition assumes that school is meant prepare students for active citizenship. Therefore, it is not enough for students to demonstrate academic excellence and be culturally grounded. Propositions one and two primarily focus on individual achievement, while proposition three emphasizes collective empowerment (Ladson – Billings, 1995a).

The fact that the tenets of CRP/T are framed with respect to what students ought to experience in classrooms, places significant emphasis on the competencies of the instructors. The instructor, therefore, is expected not only to be sensitive and aware of cultural differences and similarities, but they should be able to apply practices and pedagogies that integrate cultural knowledge and facilitate development of cultural competence. Culturally relevant teachers according to Ladson Billings (1995): (a) identify strongly with teaching, seeing themselves as being a part of the community and giving back to it, an identification they encouraged students to have, (b) keep relations between themselves and students fluid and equitable by encouraging students to act as teachers and they themselves acting as learner, (c) encourage students to learn from each other, and be responsible for each other's learning, (d) show great enthusiasm and vitality for what was taught and learned, (d) create a bond with all students to foster a sense of community rather than unhealthy competition, and (e) engage with the community to which their students belong. Although these propositions and characteristics are general, it is important to understand the context in which they were developed. The origins of the work which developed these propositions was in K – 12 classrooms among predominantly African American students.

Additionally, the ways in which these propositions were applied in classrooms based on instructor practices and student experiences involved extensive parental and community involvement.

Culturally Responsive Teaching/Pedagogy

Culturally Responsive Teaching (CRT/P) as defined by Gay (2002, 2018) refers to the use of cultural knowledge, prior experiences, frames of reference and styles of performance of ethnically diverse students to make their learning more relevant and effective. There are six dimensions of CRT and teachers who adopt this approach are described as: 1) socially and academically empowering, having high expectations for all students and committed to their academic success; 2) multidimensional, through engagement with cultural knowledge, experiences, contributions and perspectives; 3) aware of the importance of the social, political and emotional development with a focus on holistic development – educating the whole child; 4) transformative, they use students' existing strengths as the catalyst for instruction, assessment and curriculum design to transform schools and societies; 5) emancipatory, they work towards liberation from the oppressive educational practices and ideologies and 6) validating of all students cultures and work to bridge the gaps between school and home through diverse instructional strategies and multicultural curricular (Gay, 2000, 2002). Culturally responsive pedagogy Gay (2000) maintains rests on four foundational pillars of practice: 1) the attitudes and expectations of the teacher, 2) cultural communication in the classroom, 3) culturally diverse content in the curriculum and 4) culturally congruent instructional strategies. To enact this type of pedagogy requires that teachers have: 1) thorough knowledge about cultural values, learning styles, historical legacies, contributions, and achievements of different ethnic groups; 2) courage to admit faults in educational system and not blame students; 3) demonstrate the will to confront dominant educational norms and rethink assumptions about cultural universality and/or cultural neutrality in teaching and learning; 4) skills to be productive in translating knowledge and sensitivity about cultural diversity into pedagogical practices; and 5) tenacity to pursue relentlessly comprehensive and high – level performance for children currently underachieving in schools.

On one hand, it is explicit in these principles that CRT/P aims to serve all students in schools. However, the undertones imply that it is for students from traditionally underrepresented groups (Native American, African American, Asian American and Latino/a) who are underachieving in K – 12 classrooms. Additionally, based on the expectations for teachers and the

descriptors of the dimensions it is possible to see how instructors may have difficulty implementing this pedagogy for example in a math course in a college classroom.

Culturally Relevant Education (CRE)

The next conceptual framework (i.e. Culturally Relevant Education [CRE]) in the amalgam (i.e. CRPTE) was developed based on culturally responsive teaching and culturally relevant pedagogy. The authors Aronson and Laughter (2016) go as far as distinguishing between the propositions of Ladson – Billings (1995a, 1995b, 2014) cultural relevant pedagogy and Gay (2000, 2002) dimensions of culturally responsive teaching, stating that although there are clear similarities there is a distinction between them. They state,

> Gay's focus on teaching primarily seeks to influence competency and methods, describing what a teacher should be doing in the classroom to be culturally responsive. Ladson-Billings' focus on pedagogy primarily seeks to influence attitudes and dispositions, describing a posture a teacher might adopt that, when fully embodied, would determine planning, instruction, and assessment. Although many researchers use these terms interchangeably, we think it important to differentiate the two for focusing on two separate but complementary types of outcomes: teaching affects competence and practice whereas pedagogy affects attitude and disposition (p.4-5).

The distinction highlighted here although subtle highlights the complexity and depth of nuance within ME as a paradigm. Culturally relevant education refers to pedagogies of opposition that are committed to collective empowerment and social justice. Such pedagogies are further described as pedagogies of resistance to the focus on individualism, privatization, and competition embedded in neoliberal conceptions of education (Aronson & Laughter, 2016; Dover, 2013). Explicit in this definition is the resistance tension as well as power and privilege in education. There are four main dimensions of CRE: 1) emphasis on academic skills and concepts (AS&C); 2) emphasis on critical reflection (CR); 3) emphasis on cultural competence (CC), and 4) emphasis on critique of discourses of power (CDP) (Aronson & Laughter, 2016). *Emphasizing academic skills and concepts* involves educators using constructivist methods to connect students' cultural references. This means using students' culture and knowledge they bring into the classroom as assets and making the classroom inclusive for all students. *Critical reflection* involves engaging students in thinking about their own and society using inclusive curricular and activities to facilitate analysis of the cultures represented. *Cultural competence* involves students learning

about their own as well as others' cultures and developing affirming views towards their own and others' cultures. *Critiquing discourses of power* involve educators working not only within the classroom but are also active outside the classroom in pursuit of social justice in society for all. The essence of CRE is that it represents the collective fundamental principles of not only works of the two premiere scholars but the range of frameworks and scholarship related teaching and learning with explicit consideration for cultural diversity and social justice (Aronson & Laughter, 2016).

Applying CRPTE Frameworks

The applications of CRPTE in higher education as mentioned earlier are few and far between. However, the principles of CRPTE provide explicit considerations for how to make teaching and learning not only active, but responsive and relevant for all students not only those from culturally diverse backgrounds. Teaching and learning are inherently sociocultural processes. This means that instructors lived experiences as well as students are brought to bear in the classroom as instructors plan and facilitate instruction and students engage in activities to develop the competencies they are being taught. Our socialization is fundamentally cultural. Therefore, for both the instructor and student their lived experiences are at play explicitly and implicitly whether it is acknowledged or not. An instructor who ignores this reality may not be as responsive to their students and therefore utilize practices that would marginalize or undermine the potential of students who are not like them or may have had different lived experiences or who were socialized in a different culture.

To date this has been the case for CRPTE as an approach to facilitate teaching and learning of traditionally marginalized students in education spaces which has been documented as effective for these students (Ladson – billings, 1995a, Gay, 2018). However, if all teaching and learning is sociocultural, it stands to reason that CRPTE is not only for marginalized students but for all students which is consistent with the arguments posited by Kumar and colleagues (2018) about the applications of CRRE in educational spaces for all students. Neither students nor their instructors check their lived experiences at the door when they enter the classroom. Neither do professors ignore their years of professional training and general life experiences when they create their courses and teach. The values, beliefs and orientations about and towards learning and knowledge as well as cultural differences explicitly and implicitly influence what they teach and how they

teach. I maintain CRPTE is for all students and is relevant in the context of higher education classrooms not only because classroom and university demographics are becoming increasingly culturally and linguistically diverse but because the principles represent fundamentally how people learn through social interaction based on how they were socialized and their previous exposure with different people, knowledge and environments. To this extent CRPTE is not only relevant for multicultural classrooms but homogenous classrooms (i.e. all students from the similar cultural and linguistic background) as well.

Furthermore, as technological, social, political and economic factors continue to drive the way people do business, work and live, incessantly crossing national and cultural boundaries, the world is now more integrated than ever before. Therefore, the knowledge and competencies needed to function in this global multicultural society, do not only require dexterity in cognitive abilities but affective capabilities as well. Universities are major proponents in driving this change and therefore provide prime spaces for enacting approaches to teaching and learning that prioritize academic competence as well as cultural competence and fostering capabilities to think critically about the social, cultural, environmental, economic issues that exist today and will emerge as the world becomes more integrated, all of which are aspects of CRPTE. Finally, as student centered learning becomes the norm in higher education classrooms, the principles of CRPTE have become more relevant in order to ensure that students from all backgrounds develop the knowledge, skills and attitudes that will allow them to live and work in the world as it is today and is becoming – global and multicultural.

The role of culture and diversity in the context of teaching and learning are explicit in CRPTE, with respect to the instructors' cultural knowledge and competence as a major factor which influences their pedagogical decisions and practices and how they structure and organize the classroom environment. It also explicitly acknowledges the knowledge and skills students bring into the class informed by their lived experiences and the ways in which students need to develop intellectually, socially, psychologically and politically in order to be effective members in a society. These fundamental principles make it a prime framework for application in higher education. While some scholars have raised questions and examined the practicality of CRPTE in classrooms (Young, 2010) and its effectiveness based on students' perspectives (Byrd, 2016), this scholarship remains focused in K – 12. The applications thus far in higher education have focused mostly within faculty development and training programs (Ginsberg & Wldowski, 2009; Larke,

2013, Sophia Han et al., 2014). Others scholarship has been more focused on conceptualization the applications for assessment (Montenegro & Jankowski, 2017, 2020). Therefore, I chose to build on my previous work developing a questionnaire to assess students' perceptions of culturally responsiveness in university classrooms (Holgate, 2016).

The development and validation of the questionnaire was based on a review several frameworks based on CRPTE including the three described previously. Four specific factors were identified based on the conceptual review and confirmed using factor analysis. Cultural responsiveness was identified as a second order factor represented by four latent constructs: *cultural inclusion, diverse language, diverse pedagogy* and *inclusiveness*. I defined cultural responsiveness as the degree to which the classroom climate/environment validates students' in the classroom and others cultural identities, based on established norms and practices that foster a sense of belonging and respect for diversity while developing diverse ways of analyzing and thinking about different academic and social problems (Holgate, 2016). Defining cultural responsiveness in this way attempts to move beyond focusing on only multicultural classrooms as sites for being culturally responsive or creating a culturally responsive environment but even within a homogenous classroom where students arguably maybe from the same cultural or ethnic background.

I defined *cultural inclusion* as awareness and interest in students' cultural backgrounds and other cultures. Explicitly validating cultural differences by incorporating cultural information in activities and lessons, facilitating the development of cultural competence and individual cultural identities. *Diverse language* referred to openness to using different languages as well as acknowledgement of those who speak different languages and being sensitive to their needs, valuing students' diverse linguistic abilities as a tool for learning. *Diverse pedagogy* referred to using different instructional and assessment practices to facilitate students' development of knowledge and skills related to academic content and reflecting on critical issues. *Inclusiveness* referred to strong connections between instructor and students as well as among students; students feel safe and comfortable to expressing themselves and feel their perspectives are valued and respected.

A major critique of the questionnaire and the factors was the extent to which the statements and factors represented the sociopolitical and critical discourses of power and social inequality aspect of CRPTE. Therefore, the instrument was revised, and the factors modified for the present

investigation accompanied with appropriate statements, addressing sociopolitical consciousness and critical discourses of power. The measure is described further in the section on methodology. Conceptualizing and operationalizing cultural responsiveness in the present investigation includes the following four characteristics/aspects:

1. *Cultural Inclusion* – This refers to including cultural information as part of the activities and lessons, as well as explicitly validating students' in the classroom as well as others cultural background including language;

2. *Diverse Pedagogy* – This refers to using different forms of pedagogical and assessment practices to facilitate students understanding and application of the course content;

3. *Inclusiveness* – This refers to establishing respectful and equitable connections between instructor and students as well as among students; students feel comfortable expressing themselves and feel their perspectives are valued and respected;

4. *Sociocritical Consciousness* – This refers to incorporating critical reflection on local and global issues in society, empowering students with attitudes, skills and knowledge to facilitate positive changes in society.

Collectively these four characteristics of cultural responsiveness serve as markers for examining the extent to which the classroom environment cultivated between instructor and students as well as among students is organized and structured in ways that explicitly address culture and diversity as well as prepare students to engage with cultural diversity beyond the classroom. These characteristics explicitly describe what a culturally responsive classroom would/should like. Additionally, because these are distinct characteristics associated with a single construct it is possible to evaluate the degree to which the classroom climate has some characteristics of cultural responsiveness and not others. Finally, it is possible to examine explicitly the relationship between the cultural responsiveness of the classroom environment and associated student outcomes identifying specific aspects that maybe more related to certain student outcomes. CRPTE was applied in this way in order to ensure there was an alignment between the conceptual and operational definitions and the theory and methods. The tensions within CRPTE highlighted earlier are no doubt relevant and will perhaps continue to exist. However, the principles and characteristics of CRPTE as summarized earlier clearly highlight the central role of culture in the

teaching and learning process. Both the instructors' and the students' cultural experiences are given priority in its conceptual framing. Consequently, the CRPTE framework as an aspect of ME provides specific ways for describing and examining the specific aspects of the classroom environment in relation to culture and diversity.

Intercultural Development Theory

It is explicit in the propositions and characteristics of CRPTE that individual orientations of instructors including attitudes and perceptions towards cultural differences and similarities are requisites for cultivating culturally responsive environments. Additionally, students developing the awareness and value for their own and others cultural identity is an important outcome of the CRPTE. Therefore, intercultural knowledge and competence development is both a pre-requisite and an outcome in Multicultural Education. Larke (2013) maintain that in order to teach cultural responsively in higher education, instructors need to develop a knowledge base of multicultural education before they are able to design a course with the tenets of culturally responsive teaching.

Within ME research related to intercultural knowledge and competence development there are two dominant approaches, a compositional approach and a developmental approach. The compositional approach referred to as the Cognitive Affective and Behavioral (CAB) approach focuses on personal characteristics and factors related to intercultural competence. For example: being open and curious about cultural differences and similarities, as well as being culturally self – aware. The developmental approach, however, focuses on improvement in competence overtime based on interactions and experiences individuals have as they encounter different cultural situations. This approach involves using stages of progression with markers that show improvement in competence over time (Hammer, 2015; Spitzberg & Chagnon, 2009). In the present investigation both approaches are considered. Despite the difference in the framing of the definitions both approaches focus on the fact that intercultural development is an ongoing process which involve on going intentional interactions with cultural differences and similarities (Deardorff, 2009, 2011). The notion of intercultural development being an ongoing process means individuals do not simply arrive at a state or stage of complete intercultural competence. Rather, our ability to adapt and shift perspective effectively and appropriately between and within cultures is increasingly developing throughout our lifetime as we continuously interact with individuals from different cultures. Through this process we can view cultural differences and similarities in

more complex and nuanced ways beyond simple stereotypes and generalizations of different people. This consensus (i.e. compositional and developmental) makes it possible to consider both paradigms as there is consensus among scholars across both paradigms on not only the definitions but measuring intercultural competence an outcome for college students. Nevertheless, I thought it would be prudent to discuss the distinctions between both approaches and how both are relevant to this investigation.

Developmental Versus Cognitive, Affective, Behavioral (CAB) Paradigm

The difference between these paradigms is fundamentally based on the primary underlying questions. The developmental paradigm aims to address the question, "how do individuals experience cultural difference?" The CAB paradigm, however, addresses the question "What are the personal characteristic factors that comprise intercultural competence?" (Hammer, 2015). Consequently, research using the developmental paradigm which is grounded in a constructivist worldview prioritizes individuals' experiences with cultural differences (i.e. dynamic interactions) applying models and assessments that focus on improvement in competence as one develops more complex understanding of cultural differences and similarities. This approach contributed to the development of the Developmental Model for Intercultural Sensitivity (DMIS: Bennett, 1986) which catalyzed the development of the Intercultural Developmental Inventory (IDI®: Hammer, Bennett, Wiseman, 2003). Further research involving the IDI® based on the DMIS produced a modified model compatible with the IDI® referred to as the Intercultural Development Continuum® (IDC®: Hammer, 2009, 2011, 2012, 2020). The IDC® framework is used in the present investigation with the IDI® to define and assess instructors' degree of intercultural competence. These are discussed later in this section.

Research applying the CAB paradigm, however, has focused on the components of intercultural competence in relation to cognitive, affective and behavioral skills and characteristics. Models and assessments applying this approach are described as compositional – represent "lists" of relevant components that facilitate competent intercultural interactions (Spitzberg & Chagnon, 2009). For example, having understanding, awareness, and appreciation of cultural values, managing stress, understanding nonverbal behaviors, asking questions, flexibility, adaptability, confidence and so on (Deardorff, 2006; Spitzberg & Chagnon, 2009).

Considering both approaches, there are clear advantages and disadvantages as well as points of critique for both approaches. First, the developmental approach allows for the examination of change over time but lacks the evidence to show what components facilitate the change. The compositional approach provides "lists" of components that facilitate and represent intercultural development but no meaningful way of documenting changes overtime or evolution in one's perspective. Some scholars have critiqued the CAB paradigm based on conceptual inconsistency and overlap because there are more than 264 components of intercultural competence identified across models, and the lack of clarity and applicability of the models and assessments to generalizable cross – cultural outcomes (Hammer, 2015; Spitzberg & Chagnon, 2009).

There are two reasons why both perspectives are relevant to this investigation. First, the compositional approach was more suited to examine intercultural development as a student outcome than the developmental approach. My aim was to examine educational outcomes that had implications for students beyond the academic context but within society. By applying the CAB paradigm, it would be possible to identify different attitudes, skills and knowledge that students were developing in classrooms as well as the extent to which aspects of the classroom environment were related to those outcomes. This was achieved by using the Intercultural Knowledge and Competence VALUE Rubric (Association of American Colleges and Universities, 2020) which was adapted as an assessment of intercultural knowledge and competence development for students (Holgate, Parker & Calahan, 2020). However, for instructors, I was more interested in their orientation towards cultural diversity, the underlying factors that contributed to their view of cultural diversity and the extent to which their general orientations towards cultural diversity related to how they designed and taught their course. The developmental approach based on the IDC® model was more suited for this to conceptualize and operationalize intercultural competence as a pre-requisite for cultivating the classroom environment. Furthermore, the developmental approach using the IDI® provided the opportunity to follow-up with future investigations regarding change overtime.

Intercultural Knowledge and Competence as Outcome

Intercultural knowledge and competence (IKC) is "a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety

of cultural contexts" (Bennett, J.M. 2008, p. 97). Effective in this case refers to achieving valued outcomes and appropriateness refers not violating valued rules (Deardorff, 2006; Spitzberg, 1989) in intercultural interactions. These cognitive, affective and behavioral skills and characteristics refer to different attitudes, skills and knowledge that facilitate effective and appropriate intercultural communication and interactions. While there are several components and characteristics of IKC, scholars agree on six that relate to the attitudes, skills and knowledge identified on the Association of American Colleges and Universities (AAC&U) Intercultural Knowledge and Competence VALUE Rubric (IKC VALUE Rubric) (Rhodes, 2010; Association of American Colleges and Universities, 2009). The IKC VALUE Rubric was developed by leading scholars in intercultural development research informed in part by the Developmental Model for Intercultural Sensitive (DMIS: Bennett M.J., 1993) and the Process Model of Intercultural Competence developed based on consensus among intercultural scholars (Deardorff, 2006). The purpose of the rubric was to provide a systematic way to measure intercultural competence as an educational outcome (Association of American Colleges and Universities, 2020). The components include, a) intercultural *openness* and *curiosity* (attitudes), b) intercultural *empathy* and understanding *verbal* and *non-verbal forms of communication* (skills), and c) *cultural self – awareness* and *knowledge of other cultural worldviews and frameworks* (knowledge).

Intercultural Attitudes

Intercultural attitudes openness, respect and curiosity are considered fundamental to intercultural competence. Some consider these as requisites for beginning the process of developing intercultural competence. *Openness* refers to the willingness to initiate and welcome interactions with others from different cultural backgrounds and suspending judgement during those interactions. *Curiosity* refers to asking questions and seeking out information about other cultures as well developing capacity to tolerate ambiguity and uncertainty. Respect refers to valuing other cultures and cultural diversity (AAC&U, 2009; Deardorff, 2006).

Intercultural Skills

Intercultural skills involve taking time to listen, analyze and evaluate cultural information, demonstrating empathy and developing the capacity to understand culturally variable verbal and

non-verbal forms of communication. *Empathy* as an intercultural skill involves acting in a supportive way that acknowledges the experiences of other cultural groups by imagining their experience intellectually and emotionally. This extends to being able to interpret intercultural experiences through one's own as well as others way of viewing and experiencing the world. *Verbal and non-verbal communication* skills refer to the capacity to recognize and understand different verbal and non – verbal forms of communication and be able to negotiate shared meanings (e.g. eye contact, implicit/explicit meanings and direct/indirect meanings) (AAC&U, 2009).

Intercultural Knowledge

Intercultural knowledge involves being both culturally self – aware and culturally other aware. *Cultural Self – Awareness* refers to being able to acknowledge and recognize how one's own lived experiences contributes to the way we think and act in different situations. Additionally, it refers to recognizing how one's own cultural rules and biases impact behavior as well as developing comfort in experiencing complex ways of viewing the world. The *knowledge of other worldviews and frameworks* refers to developing nuanced understanding of other perspectives with explicit considerations of the role history, values, beliefs, economy, communication and politics.

Applying this conceptual approach to intercultural development as an outcome for college students suited the present investigation because of the following:

a) To examine the relationship between students' perceptions of classroom environment and their intercultural development and

b) To identify components of intercultural development that students were developing as a result of taking different course and to what degree they had developed the components of IKC.

Intercultural Competence as a Pre-Requisite

The Developmental Model for Intercultural Sensitivity (DMIS: Bennett M.J., 1986, 1993) is one the foundational developmental models in intercultural development research. The model is based on the assumption that there are fundamental differences in the ways that cultures form and maintain worldviews. By grasping this fundamental concept of cultural differences students and instructors can improve their intercultural competence as they begin interpreting events and

interactions (Bennett, 1986). This means that as individuals experience with cultural differences become more complex and sophisticated their potential to interact with greater degree of competence in intercultural situations increases (Hammer, Bennett & Wiseman, 2003).

The DMIS provided one the earliest comprehensive developmental models of intercultural development which informed intercultural development training as well as assessment (Hammer, Bennett, Wiseman, 2003). It includes six "stages of intercultural development," each stage representing a way of interpreting difference. The six stages are depicted on a continuum with increasing intercultural sensitivity from more ethnocentric to more ethnorelative ways of interpreting differences. Each "stage" is described in terms of different competence orientations informed by one's worldview that reflect the degree to which one's mindset or orientation towards cultural differences and similarities reflects more monocultural/ethnocentric orientations or more intercultural/ethnorelative/global towards cultural differences and similarities.

The classic DMIS describes three ethnocentric orientations (Denial, Defense, Minimization) and three ethnorelative orientations (Acceptance, Adaptation, Integration). Ethnocentric/monocultural orientations describe a worldview where an individual's culture is experienced as central to reality while ethnorelative/intercultural/global orientations describe a worldview where an individual's culture is experienced relative to other cultures (Hammer et al., 2003). Figure 1 shows the DMIS continuum. The model was developed from reviews of previous intercultural development theoretical models, scholarly discussions and seminars, real – life observations of intercultural development educators and actual experiences reported by students over time (Bennett, 1986). Each orientation on the DMIS represents a worldview which is associated with certain attitudes and behaviors.

Experience of Difference →

| Denial | Defense (reversal) | Minimization | | Acceptance | Adaptation | Integration |

Ethnocentric Orientations "Stages"   Ethnorelative Orientations "Stages"
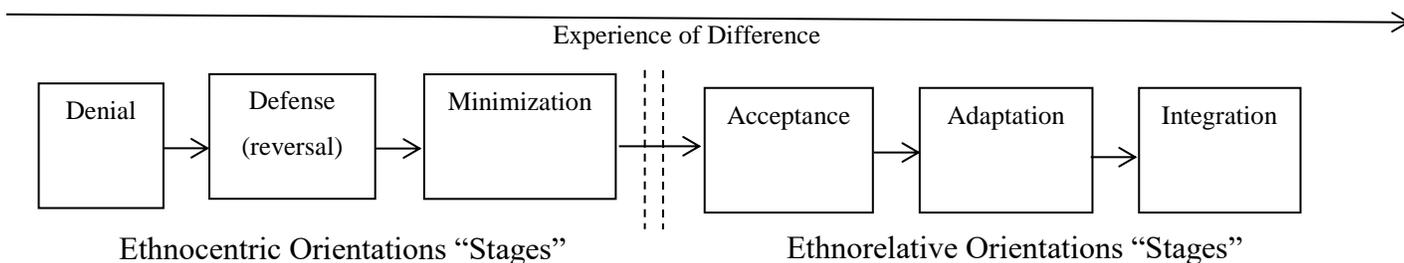
Figure 1
Developmental Model for Intercultural Sensitivity (DMIS) Visualization adapted from Bennett (1986) and Spitzberg & Chagnon (2009)

In the present investigation, the Intercultural Development Continuum® (IDC®) adapted from the DMIS model (Hammer, Bennett & Wiseman, 2003) was used to conceptualize intercultural competence. Based on the IDC®, intercultural competence is described in terms of different competence orientations. These orientations qualitatively describe the way individuals engage with cultural differences and similarities based on monocultural/ethnocentric or intercultural/global/ethnorelative worldview. Individuals with more monocultural/ethnocentric orientations tend to:

a) Makes sense of cultural differences and commonalities based on their own cultural values and practices,

b) Uses broad stereotypes to identify cultural difference and,

c) Support less complex perceptions and experiences of cultural difference and commonality.

However, individuals with more intercultural/ethnorelative orientations tend to:

a) Makes sense of cultural differences and commonalities based on their own and other culture's values and practices,

b) Uses cultural generalizations to recognize cultural difference, and

c) Support more complex perceptions and experiences of cultural differences and commonalities (Hammer, 2020).

The specific intercultural competence orientations which are examined and discussed in this thesis are denial and polarization characterized as monocultural/ethnocentric orientations as well as acceptance and adaptation characterized as intercultural/ethnorelative. A fifth orientation, between the monocultural and intercultural orientations is minimization (Hammer, 2020). Figure 2 shows

the IDC® model with the different orientations highlighting how individuals engage with cultural diversity (i.e. differences). It must be noted that the orientations do not represent fixed or static ways of thinking (i.e. mindset). The orientations describe the primary ways individuals tend to interact in different intercultural situations. The way individuals interact is dependent on their individual worldview developed overtime through experiences with cultural differences.

A *denial* orientation describes someone who can recognize observable cultural differences but not notice deeper cultural differences. In many cases individuals with this primary orientation tend to ignore, avoid or withdraw from cultural differences and as such tend to miss important cultural differences that maybe a factor in their interactions with others. A *polarization* orientation describes someone who primarily has judgmental views towards cultural differences which manifests in their behavior reflecting an "us" versus "them" approach. The tendency with this orientation is having a critical view towards other cultures and an uncritical view towards one's own culture ("us") or an overly critical view toward their own cultural values and practices, and an uncritical view toward others cultural values and practices ("them").

The *minimization* orientation is identified as a transitional orientation between the more monocultural, and intercultural mindsets/orientations. Individuals with this primary orientation tend to highlight cultural commonality and universal values and principles but may also mask deeper recognition and appreciation of cultural differences. In other words, individuals displaying this primary orientation tend to have a more nuanced understanding of cultural differences than individuals whose primary orientations tend to be monocultural. However, there is a tendency to de-emphasize cultural differences and focus primarily on the similarities.

The intercultural/ethnorelative orientations describe individuals who demonstrate greater degree of dexterity in navigating intercultural situations. The *acceptance* orientation describes individuals who tend to recognize and appreciate patterns of cultural difference and commonality in their own and other cultures. Individuals with this primary orientation display greater capacity in understanding cultural differences. The *adaptation* orientation describes individuals who can shift their cultural perspective and changing behavior in culturally appropriate and authentic ways.

Intercultural Development Continuum (IDC™)

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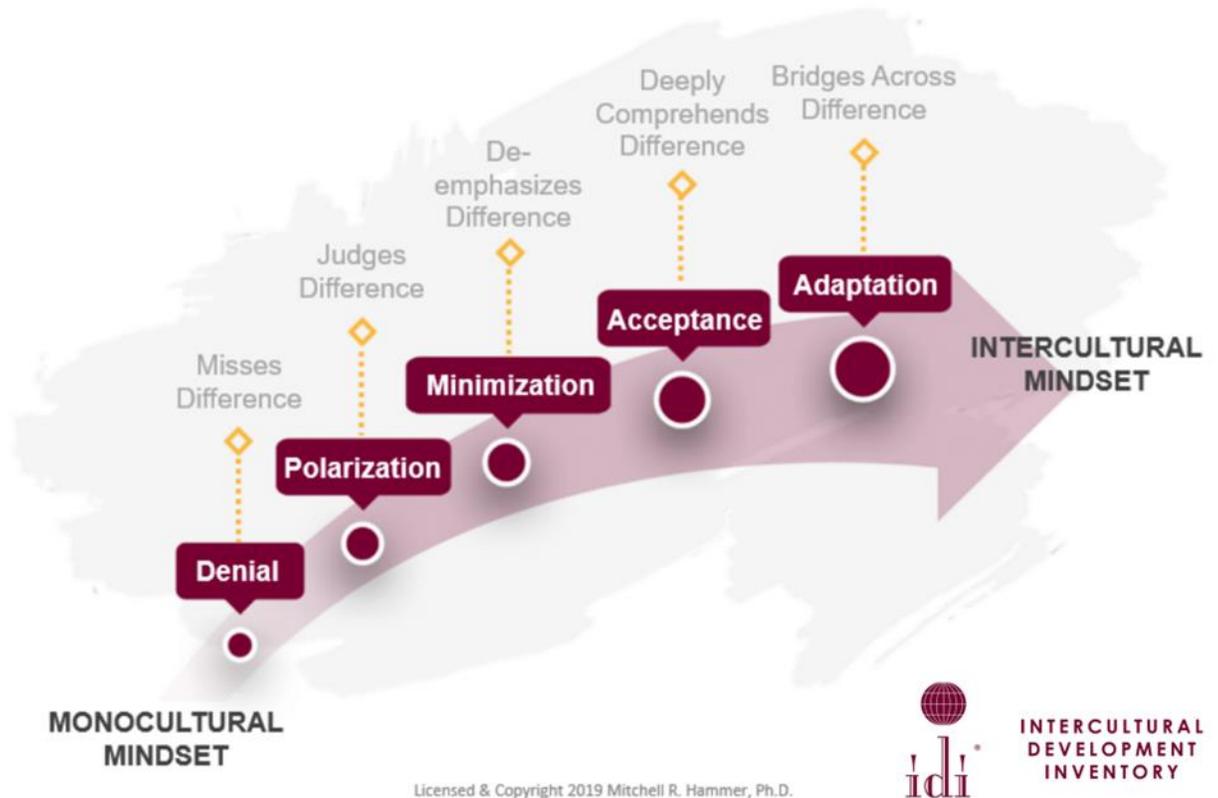
Figure 2
Intercultural Development Continuum® (2020), IDI, LLC. Used with permission.

Applying Intercultural Development Models

There are some scholars who argue that more interculturally competent instructors are capable of more effectively communicating with students from different cultural backgrounds and applying culturally competent pedagogies (Gopal, 2011; Paige & Good, 2009). Being an interculturally competent instructor begins first with understanding the lens through you view the world and engage with cultural differences – cultural self – awareness (Deardorff, 2009a). Applying the IDC® model provides insights into the ways that instructors engage with cultural diversity based on their experiences overtime. By understanding how instructors view and engage with cultural differences and similarities it is possible to gain insights into not only how they design and teach their course but why they design and teach their course the way they do. The application

of the developmental paradigm based on IDC® operationalized with the IDI® provides the language to describe the different orientations which represent ways different instructors view and engage with cultural differences and similarities and how that relates to their teaching and subsequently what students experience in the classroom. Table 1 summarizes characteristics of different instructors based on their degree on intercultural development identified on the IDC® as assessed by the IDI®. The descriptions are adapted from Individual Profile Reports associated with different profiles from the IDI® (Hammer, 2020). The final conceptual framework adopted from the ME approach describes the considerations of making diversity more explicit in different aspects of course design and implementation.

Table 1

Descriptions of Instructors Behaviors based on Orientations towards Cultural Differences

Orientations Towards Cultural Differences & Similarities	Characteristics of Instructors
Denial	Not very effective at building cross-cultural understanding and awareness within the school environment across diverse administrators, faculty, staff and students. Uses teaching strategies that have worked well in the past to make sure everyone has the opportunity to participate in class discussions and learn. Has challenges recognizing cultural differences and lacks awareness of how to create more inclusive environment. May experience some frustration when culturally diverse students do not participate in class discussions. Often uses strategies that likely work well with students from their own cultural background but may not be as effective with students whose learning approach is culturally different.
Polarization	Not very effective at building cross-cultural understanding and awareness within the school environment across diverse administrators, faculty, staff and students. Uses teaching strategies that have worked well in the past to make sure everyone has the opportunity to participate in class discussions and learn. May sometimes feel their teaching motivation and skills are being questioned, particularly by people whose cultural background and experiences are different from their own. Somewhat overly critical toward their own cultural values and practices and uncritical toward other cultures. Likely to create a more inclusive classroom by attempting to help culturally diverse students learn how to assimilate. May experience frustration that some culturally diverse students do not participate in class discussions as often. Uses strategies that likely work well with students from their own cultural background but may not be as effective with students whose learning approach is culturally different.
Minimization	Able to identify and use relevant commonalities to bridge across cultural diversity among faculty, staff and students. Uses teaching strategies found to be successful in a variety of classroom situations to ensure everyone has an opportunity to participate in class discussions and learn. May not be as attentive to how cultural differences need to be recognized and adapted to in the classroom to help students learn more effectively. May experience frustration when culturally diverse students do not participate in class discussions as often. Lacks awareness about effective teaching strategies for students whose learning approach is culturally different.

Table 1 continued

Orientations Towards Cultural Differences & Similarities	Characteristics of Instructors
Acceptance	Effective in building cross – cultural awareness and understanding among faculty, administrators and students. Recognizes commonalities across diverse groups and values cultural differences. Accurate sense of what it means to create an inclusive environment. Open to using different teaching strategies, recognizing that students participate in class discussions and learn through different methods depending on the cultural frameworks they have gained from their culture. Have some awareness and understanding that there are different, culturally learned ways students participate in classroom discussions. May have challenges identifying and implementing specific adaptive teaching strategies that facilitate cross-cultural learning. May have difficulty developing creative, mutually adaptive teaching and learning approaches.
Adaptation	Effective in building cross – cultural awareness and understanding among faculty, administrators and students. Recognizes commonalities across diverse groups and values cultural differences. Clear understanding of the ways culturally diverse students participate in class discussions and learn. Uses a variety of teaching strategies to base on a recognition that students often participate in class discussions and learn through different methods depending on the cultural frameworks they have gained from their cultural community. Encourage mutual adaptation in the classroom. Has accurate sense of how to create inclusive environments. May have challenges code – switching among groups with less familiarity.

Characteristics Adapted from Different IDI® Individual Profile Examples (Hammer, 2020)

Diversity Inclusivity Framework

The *Diversity Inclusivity Framework* (DIF: Nelson Laird, 2011, 2014) is a model for evaluating the degree of diversity inclusivity for different elements of a course. It was developed from a review of models in ME and diversity education literature. Nine core elements of a course are identified, each element accompanied by an inclusivity continuum (Nelson Laird, 2011, 2014). The nine elements and the degree of inclusivity as defined by Nelson Laird (2014) are described below. Table 2 summarizes the different elements of the DIF along with descriptions for the inclusivity continuum.

The *purpose/goals* element of the course refer to what instructors expect students to be able do at the end of the course i.e. the intended outcomes or objectives of the course. The associated continuum ranging from less inclusive to more inclusive purpose/goals. This shows that courses with more inclusive goals emphasize preparing students to actively engage in a diverse society as opposed to simply preparing students or preparing students for diverse experiences which represent less inclusive course goals.

The *course content* refers to the subject matter being taught example mathematics, English, history, chemistry and the way it is organized and presented. The inclusivity continuum identifies three degrees of diversity inclusivity of course content: monocultural, additive and multicultural. In courses that present a singular perspective on the subject matter represent less inclusivity. Courses that include some diversity in the subject matter include alternative perspectives on traditional topics as well as explicitly addressing topics that have traditionally been ignored in traditional courses. In the more inclusive courses, the course content integrates the experiences and perspectives of diverse cultural groups.

Related to course content, the *foundations/perspectives* refer to how aspects of the course content are understood and interpreted based on the background characteristics of the students and instructors. This involves their interpretation for example about historical events (e.g. slavery, Columbus's voyages) as well as sociopolitical issues (e.g. social justice). More inclusive courses incorporate theories and perspectives about human differences in understanding the subject matter. However, in less inclusive courses such differences are unexplored and often rely on foundations and perspectives that reflect a certain view on the topic or subject matter being studied.

Learner(s) as an element of a course refer to students' backgrounds and characteristics (e.g. developmental needs, race, ethnicity, gender, skill level) and the degree to which such factors are

considered as part of course. Courses that are less inclusive do not address student characteristics as part of the teaching and learning process; students are casted in the role as passive acceptors of information rather than active participants in the process. More inclusive courses account for the different needs that different students may have accounting for their background and characteristics. In such courses, students are seen as collaborators in the teaching and learning process, therefore their inputs and perspectives are considered.

Instructor(s) refers to those charged with facilitating and planning exploring how their own identities, biases and values influence how they operate in the classroom and learning about identities, biases and values that are different from their own to incorporate different perspectives in their course. At the less inclusive end of the continuum are instructors whose views, biases and values about the subject matter and others are largely unexplored. However, increasing inclusivity of instructors involves beginning to explore their own views, biases and values and developing greater degree of understanding of their own and others.

Pedagogy refers to the methods of teaching, as well as theories and research about student development and learning that inform the teaching process and methods used in the course. At the more inclusive end of the continuum, are pedagogies that address diverse learning needs of students through differentiating instruction and instructional techniques with increasing critical focus on pedagogies that address the experiences of diverse student. However, at the less inclusive end of the continuum, the pedagogy is undifferentiated and merely focuses on filling students with knowledge.

The *classroom environment* as an element of course design refers to both the space where the course takes place as well as the interactions that occur within the space. This involves the values, norms, ethos and experiences of the instructors and students that reflect how the course is organized and structured. In more inclusive courses the classroom environment is structured and organized in ways that empower students and reflects the diverse backgrounds of the students and the instructors.

Assessment/Evaluation refers to the methods used to assess student characteristics and learning considering potential biases across various assessment techniques. More inclusive methods of assessment involve formal and informal assessments considering the characteristics of students from diverse backgrounds. This also involves multiple ways for students to show their understanding of course content. Lastly, *adjustments* refer to sensitivity to student needs as the

course progress and new information becomes available about student desires or frustrations that may improve or undermine their learning. More inclusive adjustments in courses involve considering students' needs and alignment with the goals of the course. However, less inclusive adjustments exclusively focus on covering the course material without regard for students' needs.

Table 2

Showing Elements of the Diversity Inclusivity Framework along the Inclusivity Continuum

Element					Inclusivity Continuum
Purpose/goals	Prepare Students	→	Prepare students for diverse experiences	→	Prepare students to actively engage in a diverse society
Content	Monocultural	→	Additive	→	Multicultural
Foundations/ Perspectives	Unexplored	→	Exposed	→	Multiple foundations and perspectives examined
Learner(s)	Passive acceptors	→	Participants with some learning needs	→	Collaborators with diverse learning needs
Instructor(s)	Unexplored views, biases, & values	→	Exploring own views, biases, values	→	Understands own views, biases and values
Pedagogy	Filling students with knowledge	→	Transitional using varied techniques	→	Critical/equity oriented
Environment	Ignored	→	Inclusive	→	Empowering
Assessment/ Evaluation	Standard	→	Mixed methods	→	Methods suited to student diversity
Adjustment	Adjustment to cover material	→	Adjustment to some needs of students	→	Adjustment to diverse needs of students

Adapted from (Nelson Laird, 2011, 2014)

Applying ME Frameworks

In the previous sections I have summarized the theoretical and conceptual frameworks from a multicultural perspective. Framing the investigation through this lens as mentioned earlier provides explicit conceptual and operational definitions (discussed further in Chapter 3) for

variables in the present investigation related to culture and diversity in the teaching and learning context. The amalgam of the CRPTE frameworks provide ways of conceptualizing the classroom environment as culturally responsive which addresses sociocultural and sociopolitical characteristics for examining the structure, organization and interactions among students and with instructors in the classroom. The frameworks on intercultural development provide a way to conceptualize intercultural competence as a requisite (IDC® model) and outcome (IKC framework) for teaching and learning in culturally responsive classrooms. Finally, the DIF describes how to evaluate diversity inclusivity considering different elements of the course and different elements of the course instructors need to consider in the teaching and learning process. The frameworks and models I have discussed so far in relation the ME approach describe the relationship between the personal characteristics of the actors (i.e. students and instructors), the social context (i.e. the classroom environment) and educational outcomes directly associated with sociocultural and sociopolitical development (i.e. intercultural knowledge and competence).

Applying only this perspective to the present investigation I argue ignores the explicit role of the psychosocial factors that also impact the teaching and learning process. These psychosocial factors include but are not limited to psychological processes and mechanisms which undermine or support both students and instructors as they engage in the teaching and learning process. For example: motivation for learning, motivational climate, motivational orientations, personality, self – efficacy, values, interests, agency and goals (Eccles & Wigfield, 2002; Linnenbrink – Garcia & Patall, 2016). While these are general psychological factors that impact the teaching and learning process, the frameworks described previously do not explicitly account for how such factors relate to cultivating the classroom environment, the relationship with student outcomes, and the role of these factors with respect to different aspects of cultural diversity as discussed earlier. In the subsequent sections I describe the application of the psychological motivation approach to understanding students and instructors' perceptions of the classroom environment in relation to student outcomes. In the sections that follow I summarize SDT and the application of the theory in the present investigation.

Self – Determination Theory (SDT)

SDT is a meta – theory of human motivation, personality, healthy development and well – being. The foundational assumption of SDT is the inherent human capacities for growth and

development. The theory is posited based on an organismic dialectical approach in which factors within the social context are postulated to either support or thwart the inherent human tendencies toward growth and development which subsequently affects performance, well – being and development. The theory was developed from an integrated scientific perspective including, evolutionary biological, psychophysiological, neuroscientific, economics and sociocultural theoretical perspectives. Taking this nested scientific approach, the SDT perspective deviates from the conceptualization of motivation as a unitary concept (i.e. defined and examined in terms of amount or strength), to assume motivation as differentiated in terms of types, qualities or orientations. Proponents of SDT argue that its tenets are applicable across political, cultural, or economic perspectives and as such aims to evaluate how all forms of environments either support or thwart humans' basic psychological needs (Deci & Ryan, 2002; Ryan & Deci, 2017). The SDT framework and the research conducted is defined in terms of conducting,

> critical inquiries into factors, both intrinsic to the individual development and within social contexts, that facilitate vitality, motivation, social integration and well – being and alternatively, those that contribute to depletion, fragmentation, antisocial behaviors and unhappiness (Deci & Ryan, 2017 pg.3).

The conceptualization of SDT is based on assumptions about the self and the basic psychological needs (BPNs), the social context, and the reasons and types of motivations which energize human behavior. As a meta – theory, SDT includes six mini – theories: *Cognitive Evaluation Theory* (CET), *Basic Psychological Needs Theory* (BPNT), *Organismic Integration Theory* (OIT), *General Causality Orientations Theory* (GCO), *Goal Contents Theory* (GOT) and *Relationships Motivation Theory* (RMT). I primarily focus on the applications of BPNT, CET, OIT in the present investigation and to a lesser extent on GCO. Each mini – theory is summarized in the sections that follow. One of the more controversial claims of SDT is the universality of the basic psychological needs. This means that the psychological needs as defined within SDT (i.e. autonomy, competence and relatedness) exist within all people, cultures and are applicable across all life domains (Milyavaskia & Koestner, 2011; Ryan & Deci, 2000, 2017). This is discussed further in the subsequent section.

Basic Psychological Needs Theory (BPNT)

SDT posits that human beings have three basic psychological needs that are essential for growth, integrity and well-being – *autonomy*, *competence* and *relatedness*. *Autonomy* means "self – governance" which by connotation is taken to mean regulation by the self. This definition and connotation of autonomy is in direct contrast to heteronomy which implies regulation by something or someone other than the self (Ryan & Deci, 2000; Ryan & Deci, 2017). The need for *competence* is defined as individuals feeling effective and capable in their interactions with the social environment which leads them to seek out optimal challenges and hone their skills. *Relatedness* refers to a desire to feel connected to others in the social environment, form secure attachments and relationships feeling a sense of community or unity within the social environment (Deci & Ryan, 2002; Reeve, Deci & Ryan, 2004). The basic needs are part of the self. In SDT terms, the self involves actions and development from within (Deci & Ryan, 1991). Ryan and Deci (2017) describe the "self" as,

> both the psychological organization that integrates and the structure to which new functions, narratives, values, regulations, and preferences are integrated. To the extent that action is regulated through the integrated (and integrating) self, it is said to be autonomous" (p. 52).

While there is no hierarchy in the psychological needs, autonomy is considered central because it describes the process of internalizing and regulating behaviors in different contexts. Therefore, to be autonomous is to perceive that the action or behavior is initiated and sustained by internal regulation. In this sense autonomy is synonymous with self – determination. The conceptualization of human psychological needs is unique to SDT since most other motivational theories focus on goals and outcomes. Motivational goals and outcomes, SDT researchers argue, addresses the direction of behaviors but not the energization. However, the SDT approach claims to address both direction and energization of motivation by focusing the innate psychological needs of humans. The reason for examining human motivation in terms of psychological needs is because it provides the basis for examining the social contextual conditions that support or thwart motivation, performance and well – being. In social contexts where all the needs are satisfied people thrive and flourish as they experience autonomous or self – determined motivation. However, in social contexts where the needs are not satisfied people are amotivated and feel controlled as opposed to autonomous (Deci, Vallerand, Pelletier, Ryan, 1991; Deci & Ryan, 2002).

It is imperative that all three needs are satisfied. If one need (for example autonomy) is frustrated or thwarted it is proposed that the individual will not be autonomously motivated which has detrimental effects on performance and well-being. Thus, proponents of SDT makes a distinction between autonomy – supportive environments that are organized in ways that satisfy BPNs leading to positive outcomes and controlling environments that thwart BPNs satisfaction leading to negative outcomes. Autonomy – supportive environments nurture and facilitate (as opposed to neglect or thwart) satisfaction of the BPNs and inherent pursuits towards curiosity and proactive engagement (Reeve, 2006).

Proponents of SDT claim that the psychological needs are universal which the topic of much controversy is in psychological research especially in relation to the need for autonomy.   The universality of psychological needs from the SDT perspective rests on the following assumptions:

1. Individuals are inseparable from culture because the self develops through a process of internalization and integration of cultural practices, values and regulations (Ryan, 2013)

2. The way in which different cultures transmit values and behaviors has varied degrees of effect on how well the values and behaviors are internalized by individuals,

3. The practices, values, norms and rituals of a culture vary in degrees of supporting or thwarting individual psychological needs (Ryan & Deci, 2017).

There is a great deal of empirical support for universality of the psychological needs across cultures in different domains but particularly in education (Chirkov, Kim & Ryan, 2003; Levesque, Stanek, Zuehlke, & Ryan, 2004; Milyavaskia & Koestner, 2011; Rudy, Sheldon, Awong & Tan, 2007).

Autonomy-Supportive Environments and Instructors

SDT assumes that students' innate tendencies and motivational resources including the basic psychological needs and interests exist in a dynamic and interactive relationship with the classroom surroundings. Therefore, as students naturally express these inherent tendencies in class activities and interactions, the extent to which the classroom structure or climate supports the expression of the students' inherent motivational resources they will experience positive outcomes. Alternatively, if the classroom environment does not support the students' expressions of inherent motivational resources, by overpowering them with controlling and amotivating structures, students experience less engagement and positive outcomes (Reeve, Deci & Ryan, 2004; Reeve, 2006). Therefore, as students initiate engagement in class activities, based on their interests and

needs to feel competent, make decisions and relate to others; if the classroom environment does not support or matches these expressions by the student, then motivation for learning and engagement is thwarted. Some outcomes that students experience in learning environments that do not support the inherent tendencies are disengagement, factual rather than conceptual learning and external regulation (Reeve, 2006).

There is some research distinguishing different categories of autonomy – support namely: organizational autonomy – support – developing rules together, or latitude over rate of progress toward a goal (e.g. selecting due dates for assignments); procedural autonomy – support – ownership of form, teachers offering students choice of media to present ideas (e.g. a graph or picture to illustrate a science concept); and cognitive autonomy – support – asking students to justify or argue for their point, asking students to generate their own solution paths, or asking students to evaluate their own and others' solutions or ideas. These conceptualizations of autonomy – support have been proposed to provide a broader view of what constitutes autonomy – supportive learning environments, to counter conceptualizations of autonomy – support as simply choice related to organizational and procedural decisions. It is suggested that integrating all three aspects of autonomy support represents and provides much deeper level of psychological and motivational engagement in learning (Furtak & Kunter, 2012; Rogat, Witham & Chinn, 2014; Stefanou, Perencevich, DiCintio &Turner, 2004). There is also some contention about the degree to which autonomy – supportive learning environments provide any sort of structure. It is suggested that autonomy – support involves structure that is not seen as controlling (Jang, Reeve & Deci, 2010). Empirical evidence suggests that autonomy – support and structure are positively correlated (Jang, Reeve & Deci, 2010; Vansteenkiste et al., 2009) and that structure is associated with more self – regulated learning behaviors under moderate and high autonomy supportive conditions (Vansteenkiste et al., 2009). Autonomy – support and structure were also found to predict students' behavioral engagement but autonomy – support alone predicted self – report engagement (Jang, Reeve & Deci, 2010).

In SDT research, what constitutes an autonomy – supportive learning environment is based on the teachers' actions, attitudes, dispositions and motivation styles. Teachers that: (a) nurture students' inner motivational resources; (b) use informational, non – controlling language; (c) communicate value and provide rationale; and (d) acknowledge and accept students' expressions of negative affects feelings (Reeve, 2006) are described as autonomy – supportive. However,

teachers that: a) try to motivate students with external incentives; b) compel students to act or think in certain ways; c) overrule students' perspectives (Hornstra, 2015; Reeve, 2006; Reeve & Jang, 2006) are considered controlling. Reeve (2009) proposes that the autonomy – supportive teacher and thus the autonomy – supportive learning environment is defined by the, "interpersonal sentiment and behavior teachers provide during instruction to identify, nurture, and develop students' inner motivational resources (p.160)." However, a controlling teacher and by extension a non – autonomy – supportive classroom environment is defined by "interpersonal sentiment and behavior teachers provide during instruction to pressure students to think, feel, or behave in a specific way (p. 160)." He also examined reasons why teachers adopt controlling motivational styles. Results suggested that teachers adopted controlling motivation styles because of: 1) Pressures from above – related to accountability and responsibility, cultural values, power differential social role, and to provide structure; 2) Pressure from below – response to disengaged or unengaged students; and 3) Pressures from within – personality dispositions and beliefs oriented in controlling behaviors.

Orientations towards controlling or autonomous motivational styles is discussed explicitly in the *General Causality Orientations Theory* (GCO) mini – theory. Causality orientations refer to peoples' tendencies towards different situations that call for motivational regulation based on the degree to which they exercise autonomy, use controls, fear or noncontingent reactions (Deci & Ryan, 2017). There are three types of motivational orientations that people tend to display towards environments and regulating behaviors, *autonomy orientation*, *controlled orientation* and *impersonal orientation*. These constructs describe individual differences towards environments and individual motivations. An individual with an *autonomy orientation* focuses on values and interest that are both internal and external treating their environment as a source of relevant information. Individuals with more *controlled orientations* focus on rewards or contingencies within the environment. They tend to perceive and experience their environment in terms of social pressures or rewards that they comply with or defy even at the expense of their own values or interests. The *impersonal orientation* describes individuals who are lacking in intentionality and initiative which often manifests in terms of high levels of anxiety, focus on obstacles towards progress and become easily overwhelmed by environmental forces as well as their own emotions.

SDT research based on teacher and student motivational orientation is sparse and often limited to K – 12 settings and even more specifically in sports education related to PE teachers and

athletes (e.g. Amorose & Anderson-Butcher, 2007; Assor, Kaplan, Kanat-Maymon & Roth, 2005; Van den Berghe, Soenens, Vansteenkiste, Aelterman, Cardon, Tallir & Haerens, 2013). However, there is enough evidence in SDT research which supports the claim that a more autonomous motivational orientation is associated with more positive outcomes related to performance and well – being. The different motivational orientations are not examined empirically in the present investigation. However, they are useful in describing the conceptual distinctions between SDT and ME (e.g. CRPTE) with respect to how explicit each framework focuses of sociocultural versus psychosocial factors.

The BPNT was used to conceptualize the classroom environment from the motivational perspective. The specific focus on the basic psychological needs provided the basis for describing characteristics of the classroom environment explicitly related to psychosocial factors. This is contrasted with the CRPTE frameworks which describe sociocultural and sociopolitical characteristics to consider in the classroom environment. By examining both the degree of autonomy – support and cultural responsiveness of the classroom environment it is possible to gain a more holistic understanding of how the structure and organization of the classroom relate to students' educational outcomes. This includes educational outcomes necessary for academic achievement and engaging in the broader society. The other two sub – theories of SDT, OIT and CET address the conceptualization of academic motivation.

Cognitive Evaluation Theory (COT) and Organismic Integration Theory (OIT)

SDT, draws a clear distinction between types of motivation on a continuum based on the degree of perceived autonomy – control regulations. Three qualitatively different types of motivation are proposed: *amotivation*, *extrinsic motivation* and *intrinsic motivation*. *Amotivation* is characterized by the lack of intent, willingness or interest towards action. *Intrinsic motivation* is the prototype for self – determined activity (i.e. behavior that is fully endorsed or initiated by the no external force) in which action is initiated and sustained through the joy and inherent interest in the activity itself. The CET mini – theory is specifically concerned with intrinsic motivation. Intrinsic motivation is rooted in people's proactive nature and is spontaneous as it emanates from the individual's internal tendencies to promote growth – oriented behavior assuming the environmental and social conditions allows it (Reeve, Deci & Ryan, 2004). In applying CET, the beginning question is basically, how does extrinsic rewards affect individuals' intrinsic

motivation? It is by answering this question it is possible to see how the environment affects the individuals well – being and innate tendencies for growth. It is expected that in an environment where the basic psychological needs of autonomy, competence and relatedness are satisfied, the individual will be more likely to experience more self – determined forms of motivation than if the needs were thwarted. The CET perspective provided the foundation for more explicit distinctions between intrinsic and extrinsic motivation and the role of the social context in supporting or thwarting intrinsic motivation.

Unlike intrinsic motivation where people engage in activities for its own sake, extrinsic motivation is characterized by engagement in activities to obtain rewards or other forms of external satisfaction. The distinct feature of the SDT perspective is the proposition for further delineation of extrinsic motivation based on forms of regulations (external, introjected, identified or integrated) and the perceived locus of causality (external versus internal) considering experiences within the social context. This is explained by the OIT. This mini – theory explains the process by which individuals can feel autonomous while performing activities which they do not find to be intrinsically motivating. This is facilitated through the process of internalization whereby people naturally transform external regulation into self – regulation (Deci & Ryan, 2002). The more self – determined or autonomous forms of extrinsic motivation are identification (internalized as valuable or of personal importance) and integration (internalized values taken as part of self) based on an internal perceived locus. Alternatively, less self – determined or less autonomous, specifically, controlling forms of extrinsic motivation are those regulated externally with external perceived locus (least internalized, actions based on external rewards, compliance or punishments) or through introjection (actions based on internal contingencies, ego, self – esteem, guilt or shame). The assumption regarding the delineation in forms of extrinsic motivation is that it is possible for human beings to be autonomously extrinsically motivated (i.e. be self – determined based on external factors). It is also assumed that human beings have natural inclinations to integrate ongoing experiences under the condition that they have the necessary nutriments (i.e. satisfaction of BPNs) through the process of internalization (Deci & Ryan, 2002). This is depicted in Figure 3.
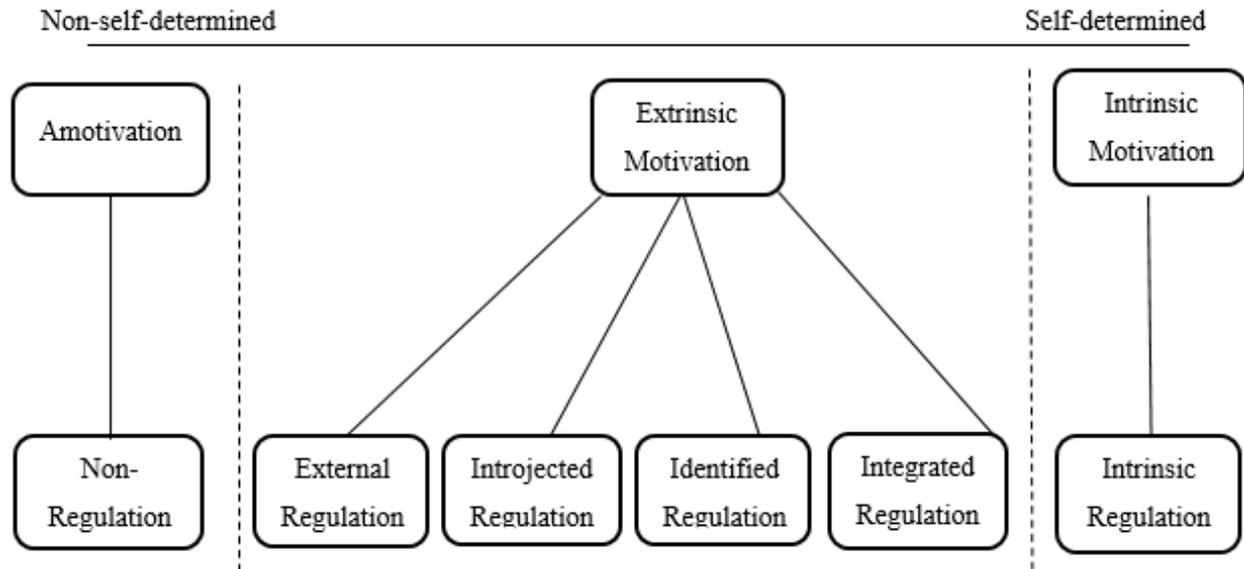
Figure 3
Self – Determined Motivation Continuum adapted from Ryan & Deci (2017)

Applying Self – Determination Theory (SDT)

Factors intrinsic to the individual and within the social context refers basic psychological needs (i.e. autonomy, competence and relatedness). SDT posits that all students, regardless of the backgrounds (cultural, ethnic, linguistic or gender) have inherent growth tendencies and three basic psychological needs. Therefore, students enter the classroom with the desire and capacity to actively engage in learning. However, the extent to which the classroom environment is structured and facilitated in ways that support or thwart their inherent growth tendencies and BPNs directly impacts their motivation for academic tasks, engagement and well – being (Niemiec & Ryan, 2009; Reeve, 2006). If we assume that students enter the classroom with inherent desires for curiosity and tendencies towards exploring, learning new things and becoming competent in their specific area of study; then this provides a basis for not only how we teach but what we teach. The framework explicitly describes the psychosocial factors educators must pay attention to in order to effectively facilitate teaching and learning (e.g. motivational orientations and basic psychological needs).

Autonomous motivation is the direct outcome of classroom environments that are structured is ways that facilitate psychological needs satisfaction. In SDT, motivation is described along a self – determined internalization continuum providing a more nuanced understanding of the different ways students are motivated towards academic tasks in relation to how the classroom

environment is organized. Higher education is primarily focused on extrinsic factors such as passing courses, maintaining a good grade point average, gaining practical experiences in preparation for jobs and ultimately starting a career or a job. Based on SDT approach it is possible to differentiate the degree to which students are self – determined in their academic coursework in relation to their psychological needs satisfaction, frustration or dissatisfaction (Cheon, Reeve, Lee, Ntoumanis, Gillet, Kim & Song, 2019). The present investigation only examines students perceived need satisfaction. However, from a theoretical and conceptual standpoint, the SDT framework presents different approaches to gain more nuanced understanding of the psychosocial aspects of the classroom environment associated that make for quality teaching and learning experiences for instructors and students. Beginning with the assumption of students' inherent capacities and the satisfaction of their psychological needs as crucial to their motivation brings into focus the salience of the instructors' role in organizing and structuring the social context (i.e. classroom environment) and by extension the course.

Integrating Multicultural Education Frameworks and Self - Determination Theory

The activities that go on in the classroom are dynamic and complex. Therefore, it stands to reason that in our attempts to investigate these complex dynamics it is necessary to consider not just specific aspects based on a narrow set of assumptions but embrace a more expanded and holistic approach that integrates different perspectives. The reality is that students and instructors do not check their cultural and motivational orientations towards teaching and learning when they enter the classroom. The SDT approach exclusively focuses on students' psychological needs and interests to guide instructional practices, while the ME approach focuses on students' cultural background, prior experiences and the relevance of the social issues within their communities and the global community. However, both multicultural education and motivation researchers would agree that the structure and organization of the classroom environment/climate along with specific teacher characteristics (e.g. supportive, caring and affirming) are crucial to students' success (Kumar, et al., 2018).

In framing this investigation, I chose to focus on frameworks from ME more broadly in relation to the meta – theory, SDT. This was to have a more holistic view what was happening in the different classrooms from both the instructors' and students' perspectives. Additionally, despite the distinctions of each framework, collectively there are shared aspects that when put

together facilitate a greater depth of understanding about the teaching and learning process in 21st century college classrooms. When put together the frameworks formulate a dynamic conceptual model showing how instructors' orientations, attitudes and dispositions (motivational and cultural/intercultural) relates to how they cultivate the classroom environment for and with their students (i.e. social context) which both impact educational outcomes directly and indirectly. The dynamic conceptual model also assumes it is possible to use students' perspectives from the classroom environment instructors cultivate to facilitate instructors' reflection on their overall teaching and learning experience as a means of reforming educational practices to meet educational outcomes more effectively. To this extent, the frameworks can be viewed as complementary. This dynamic conceptual model is depicted in Figure 4.

The overall model was developed by reviewing the assumptions of ME and the propositions of the respective frameworks compared to the assumptions and propositions of SDT. From the review four aspects of comparison were identified. I determined these aspects by focusing on the propositions about: a) the actors directly involved in the teaching and learning process (i.e. students and teachers/instructors), b) the characteristics of the social context where the actors are directly engaged (i.e. classroom environment) and c) the instructional strategies and pedagogies that were applied in the teaching and learning process. Conceptualizations about these three aspects of the teaching and learning process are shared across both approaches but discussed in different ways sometimes using different concepts. These are summarized in table 3.

For example, both approaches identify students lived experiences as well as inherent capacities as assets that are crucial to students' success. However, ME focuses on cultural lived experiences while SDT focuses on inherent psychological needs. Additionally, both approaches highlight how social structures may undermine students' inherent capacities and experiences that thwart their success. ME situates these social structures within the historical context of prejudice and discrimination against people of color that undermine students' inherent capacities and experiences. SDT however, focuses on how practices of socialization within cultures, political or economic structures may undermine human autonomy for example focusing primarily on external incentives and controlling practices.

In relation to instructors, both approaches focus on orientations, attitudes and dispositions that influence how instructors approach the teaching and the practices they use. However, once more the distinction is based on the emphasis of sociocultural versus psychosocial factors. For

example, ME frameworks focus on the instructors' attitudes and orientations towards cultural differences and similarities, with respect to degree of knowledge, awareness and value for cultural diversity. The SDT approach, however, focuses on the instructors' motivational orientation based on the degree to which they are more oriented towards autonomous or controlled forms of motivation. The former being more valued and deemed important for facilitating effective student learning and cultivating classroom environments that support students' inherent capacities that they bring into the classroom. The instructors' orientations are directly related to the pedagogical strategies that are used. While both perspective propose the adoption of pedagogical practices that facilitate optimal challenge for students to build competence in communal non – competitive ways (e.g. scaffolding, using multiple approaches, active and collaborative), the ME approach is explicit in using pedagogies that are critical of power structures in an attempt to foster equity.

This difference is seen in how the classroom environment is conceptualized and the specific characteristics highlighted. ME frameworks describe the classroom environment as culturally responsive or inclusive while from the SDT perspective the classroom environment is described as autonomy – supportive. There are similarities but then there are key differences. The similarities involve developing strong communal relationships between instructors and students and among students (i.e. in SDT terms satisfying need for relatedness) and providing students a voice, making them active participants in both teaching and learning (i.e. in SDT terms satisfying the need for autonomy). However, from the ME perspective, the classroom environment must be explicit in the inclusion of diverse cultural and linguistic groups and facilitate individual and collective empowerment to bring about changes in society. The SDT approach is not explicit in its tenets concerning these aspects of the classroom environment, though one could argue that true autonomy – support recognizes and values the culturally diverse experiences of those in the classroom. However, the explicit focus on individual and collective empowerment to facilitate societal changes is not espoused in the tenets of SDT. This highlights an important distinction regarding competence. The need for competence in SDT emphasizes individual competence and developing the capacity to be effective in completing the tasks. However, competence from the ME perspective is not only individual but collective and serves not only specific academic objectives but broader sociopolitical objectives. Nonetheless, the SDT perspective would argue that the overall proposition of satisfying the basic psychological needs is the foundation for empowering individuals who will act to bring about changes in society (Deci & Ryan, 2017).

Notwithstanding these differences and similarities, as stated earlier both approaches when put together in a dynamic conceptual provides a more holistic understanding of the sociocultural, sociopolitical and psychosocial factors involved in the teaching and learning process. The conceptual model integrating these two approaches assumes that:

a) Instructors' cultural and motivational orientations and dispositions relates to,

b) How they structure and organize their classroom environment for and with their students and pedagogical strategies used, as students experience the motivational and cultural climate as responsive and supportive which has implications for,

c) Psychosocial, academic and societal educational outcomes.

The conceptual model also assumes that instructors' reflecting on their own and students' experiences in the classroom can be effective in facilitating changes in their motivational and cultural orientations as well pedagogical approaches in the classroom. In the present investigation, only the relationships between instructors' orientations and perceptions towards culture and diversity with respect to the classroom environment and educational outcomes for students are explored. The other aspects of the conceptual model are discussed in chapter 5 in relation to future investigations and theoretical implications for advancing interdisciplinary research across achievement motivation and multicultural education.
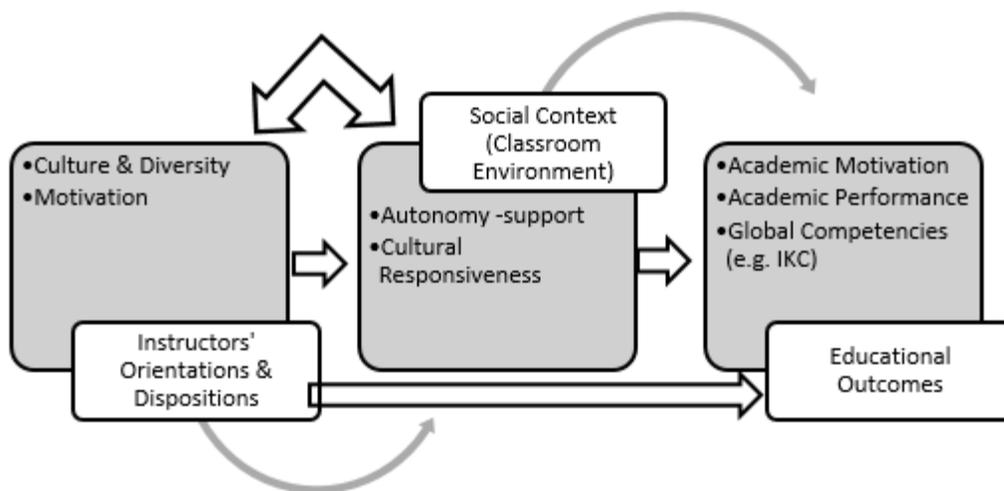
Figure 4
Integrated Dynamic Conceptual Framework Showing the Relationships Among Instructors Cultural and Motivational Orientations, Students Classroom Experiences and Predictable Educational Outcomes

Table 3

Comparing Self – Determination Theory and Multicultural Education Frameworks

	ME (CRPTE)	SDT
Assumptions/Propositions	1. Freedom, justice, equality, equity, and human dignity are fundamental human ideals for effective functioning in society. 2. Students find learning more personally meaningful, experience higher interest appeal, and learn more easily and thoroughly when academic knowledge and skills are situated within their lived experiences and cultural frames of reference (Gay, 2000, 2002). 3. The classroom is the site of social change educational experiences should be structured in ways that empower students collectively to bring about changes in the society (Aronson & Laughter, 2016; Ladson – Billings, 1995a).	1. People are active organisms with inherent tendencies towards growth, mastery, and integrating new experiences as part of the self. 2. Social and cultural factors can facilitate or undermine people's inherent capacities for growth, performance and well-being. People across different diversities (culture, gender, ethnicity) thrive and experience positive performance when the social contexts supports their psychological needs but experience detrimental effects when the needs are unsatisfied in the social context. 3. Students' innate tendencies and motivational resources exist in a dynamic and interactive relationship with the classroom surroundings
Student(s) *Capacities and Experiences*	1. Students enter the classroom with a wealth of knowledge developed through their lived experiences 2. Historical events and structures in society disenfranchise and marginalize specific populations of students (i.e. students of color) undermining their capacity flourish in academic spaces and society. 3. Students must develop culturally, emotionally, intellectually and politically	1. Students across cultures enter the classroom with natural inherent capacities and psychological needs to experience: a. Autonomy – Meaningful choices in their academic activities b. Competence – Optimally challenging situations that allow for improvement in specific knowledge and skills c. Relatedness – connectedness between their peers and instructors
Instructor(s) *Orientations & Dispositions*	1. Cultural knowledge and competence 2. Resistance and critiquing of oppressive structures that marginalize and undermine different populations 3. High expectations for students' academic success 4. Awareness of personal biases and values	1. Nurture students' inner motivational resources 2. Demonstrate autonomy – supportive motivational orientation as opposed to controlling motivational orientation 3. Avoid motivating students through pressure and external incentives 4. Express care towards students
Pedagogy *Paradigms and Tools*	1. Cooperative, Collaborative, Constructivist methods and strategies 2. Critical and equity pedagogies 3. Multiple forms assessments (formative and summative) 4. Experiential Learning	1. Teaching to students preferred ways of learning 2. Informative feedback 3. Active involvement of students in teaching and learning process 4. Different ways for students to show and improve competence
Classroom Environment *Social Context*	1. Culturally Responsive and inclusive 2. Respecting and valuing different cultural perspectives and languages 3. Opportunities that allow students to have choice and voice 4. Classroom environment empowers students to change society	1. Autonomy – supportive 2. Strong relationships between instructor and students and among students 3. Not competitive 4. Developing competencies

Chapter Summary

The literature discussed in this chapter provides meaningful insights into the relationship between culture, diversity and motivational constructs in the higher education context albeit from different theoretical perspectives. In general, this review describes the distinctions between the multicultural education approach to teaching and learning in higher education and the psychological motivation approach specifically SDT and the gaps in the literature with respect to: 1) applying CRPTE in higher education context outside of education programs, b) the lack of empirical evidence connecting motivational constructs and the different aspects of ME and c) examining both students and instructors perspectives using mixed methods approaches. However, despite the distinctions it is possible to see how both perspectives could be integrated in a complementary approach to gaining a holistic understanding of the sociocultural, sociopolitical and psychosocial factors involved in the teaching and learning process in university classrooms.

Therefore, my aim in conducting this investigation is to further expand the research in this area by leveraging the theoretical conceptualizations of concepts related the culture and diversity and motivation using a mixed methods design to explore the extent to which university instructors' *intercultural competence* and degree of course *diversity inclusivity* relates to students' perceptions of the classroom environment as *culturally responsive* and *autonomy – supportive* and associated educational outcomes related to *academic motivation*, perceived *achievement* and *intercultural knowledge and competence* development. The ultimate goal of this investigation is provide empirical support regarding the claims of how culture and diversity relates to students' outcomes, and the implications for transformative changes in educational policy (Graham, 2018; Zusho & Kumar, 2018; Sleeter, 2012).

CHAPTER 3. METHODOLOGY

This chapter describes the design and procedures employed for data collection and analysis. As mentioned previously, I used a mixed method design specifically the Convergent Design or Parallel Design with equal emphasis on both strands (QUANT + QUAL) based on the typology developed by Creswell and Plano Clarke (2018). First, I describe why I chose to use the Convergent Design. Second, I describe the research context, participants and sources of data collection with respect to the aspects of the convergent design (i.e. quantitative and qualitative methods). Third, I describe the overall analytic procedures and finally how the data and subsequent results were integrated and interpreted from the analysis. Before discussing the design, I describe the epistemological paradigm that informed my approach to framing and conducting the investigation.

Philosophical Worldviews, Epistemologies, Paradigms and Assumptions

It is well documented that researchers bring their own set of beliefs and assumptions about knowledge which informs how they approach research (Creswell & Plano Clark, 2018; Jones, Torres, & Arminio, 2014). These assumptions or beliefs about knowledge are primarily philosophical referred to as worldviews or paradigms (Creswell & Plano Clark, 2018; Guba & Lincoln, 2005); other scholars also use the term epistemologies (Crotty, 1998; Jones, Torres, & Arminio, 2014). I start this section briefly describing my personal worldview to provide some insights into the process I went through to conceptualize and ultimately carry out this investigation. The research paradigm that informs both the theoretical and methodological framing of this investigation was motivated by my personal worldview, the research questions I was interested in exploring as well as the calls for research discussed in chapter 1.

I identify as a Christian; therefore, my values are framed based on a Judeo – Christian worldview. I am a black male of Afro – Caribbean decent and I identify as Jamaican. I was born in Jamaica and spent almost 20 years of my life there. But I have been privileged to travel, live and study outside of Jamaica for the past 10 years. Most of this time was spent in the United States primarily in the south and the mid – west in higher education contexts. I view education and schooling in general as a human right as well as a crucial social institution for facilitating social

mobility and developing individual capacities in order to contribute to society. My Judeo – Christian values have tremendously shaped my view of history, justice, freedom and what it means to value unity in diversity when it comes to interacting with individuals from my own as well as different cultural backgrounds and perspectives. Living in the U.S. as an international student has significantly shaped how I view myself, others and generally cross – cultural interactions. Based on these identities and my lived experiences moving within and across geographical and cultural boundaries, I have grown to adopt a global perspective and holistic approach generally in life as well as research.

Taking a holistic approach, firstly, I assume that a phenomenon or social problem is the product of several different but interconnected factors which form a whole. Secondly, I assume that by examining diverse perspectives, applying diverse methods and approaches will yield greater depth of understanding about the phenomenon than using a singular approach. Finally, I assume that the conclusions drawn, and proposed solutions or recommendations will serve the greater good for all. Because of this worldview it is often difficult to find out which philosophical or epistemological paradigm that not only aligns with my worldview but will provide the best perspective and methods to examine the questions I am interested in or my research goals.

There are five fundamental research paradigms that researchers identified that inform educational research; and each paradigm is distinct with respect to its ontology, epistemology, axiology, methodology and language. These paradigms represent specific theoretical perspectives and epistemologies that influence how researchers design studies and approach their topic (Crotty, 1998; Jones, Torres, & Arminio, 2014). Table 4 summarizes each paradigm with respect to the different elements. After reviewing these paradigms, I was somewhat confused as I thought that in some way different aspects of each paradigm not only aligned with my worldview but would provide a useful lens for examining the research questions and responding to the calls. Additionally, reflecting on my professional and academic training in psychology which falls primarily within the postpositivist worldview raised further tensions regarding my competence if I chose to work within the other paradigms. Ultimately, I chose pragmatism because it aligned with my view of the knowledge and I think is the best approach that reconciles the tensions that develop between the more positivist (positivism and postpositivism) and interpretivist (constructivism, critical, and postmodern) epistemological paradigms (Lincoln, Lynham & Guba, 2011). These epistemological tensions provide further context for the quantitative versus

qualitative divide. However, I intentionally chose to adopt an approach that aims to bridge the divide.

Pragmatism

The philosophical assumptions of pragmatism describe how multiple as well as singular realities exist, ascribes value to both objective and subjective knowledge, and affords the application of diverse approaches. Additionally, it emphasizes the outcomes of the research and the importance of the research question(s) as opposed to emphasizing the methods. Multiple methods and perspectives are considered and interpreted as a whole (Creswell & Plano Clarke, 2018) which implies a more holistic approach to educational research. There are three reasons why I chose pragmatism as the worldview to develop and carryout this investigation. First, because of the study context, which was classrooms on a four- year university campus. Both instructors and students are active participants in the teaching and learning process. Therefore, examining both perspectives provides a more holistic understanding of the realities that they experience individually and together. Second, the research goals, questions and constructs. Finally, the calls to action for pursuing interdisciplinary research. Evident in the research calls is the need for multimethod and integrated theoretical approaches to gain greater insights into the teaching and learning process to advance practice and policy. This approach provides the most balanced and holistic understanding of the teaching and learning process through which educational practice and policy can be transformed; subsequently achieving the objectives of educational psychology (Kaplan, Katz & Flum, 2012).

From a more anecdotal viewpoint, by virtue of my lived experiences and worldview, I am more oriented towards building bridges and providing means towards inclusivity that benefit all accounting for differences both between groups and perspectives as well as within groups. The notion of having unity in diversity is fundamental to my personal worldview and therefore informs not only how I live but what I do. As I mentioned earlier, my background being from the Caribbean and experience with cultural differences and similarities in the U.S. both within the educational context and society have been instrumental in shaping my worldview. I have experienced and witnessed how cultural differences and similarities both within ethnic groups (e.g. those categorized as people of color Black/African American, Hispanic, Latino/a Asian, Native

American etc.) and between ethnic groups (e.g. people of color and Caucasian/White European) may not always reflect unity in diversity or inclusivity.

Specifically, I have perceived, experienced and witnessed exclusion of different forms both from within the group I would be considered a part of being of African descent (i.e. people of color) as well as the ethnic group I would be categorized as culturally different from (i.e. Caucasian/White European). Consequently, my approach to life, teaching, learning and scholarship is towards finding ways of reconciling tensions between and within groups and perspectives by building bridges that will provide more holistic understanding that can ultimately benefit all. In reviewing educational research, across motivation and multicultural education theory, research and practice, from my observation there are these tensions and conflicts that exist both between and within the respective approaches. However, upon more careful examination when considered together could serve to provide more holistic understanding of challenges in education and can be used to inform practices and policies beneficial to all.

Notwithstanding, I recognize that there are absolutes and not everything is relativistic or subjective. Hence, the are objective ideological and epistemological differences that cannot be easily reconciled between and with perspectives, just as there are historical and situational differences among cultures which does not facilitate seamless integration or inclusion. However, the assumptions of pragmatism provide what would be considered the "best" way to examine the questions and respond to the calls while simultaneously attending to the individual unique differences that exist. The "best" way in this sense does not mean the only way. It means what is appropriate in order to meet the specific objectives and outcomes of the investigation.

In the context of the research investigation, the epistemology is defined in terms of the relationship between the researcher and those involved in the research. Taking the assumptions of pragmatism, the data were examined across multiple sources which allowed me to maintain some degree of objectivity and impartiality while gaining insights into individual perspectives as well as the collective experiences of students and instructors in the classroom. I intentionally attempt to integrate the voices from both students and instructors. Two people or group of people looking at the same thing may come to different conclusions all of which may be valid depending on the situational factors, context and the people themselves. Following this logic, it is possible to reason that students and instructors despite being in the same classroom for an entire semester may have different or similar perspectives and experiences.

We can consider an additional component, where an observer examines the classroom - in this case me. It is possible that each individual account of what was happening in the classroom would have differences and similarities. I assume the individual and collective accounts of the classroom environment from different perspectives using different sources of information would reveal a greater depth of understanding about the extent to which instructors address culture and diversity in their courses and classroom environments and students' perceptions and experiences in the class.

Table 4

Description of Different Educational Research Paradigms

Worldview Element	Postpositivism	Constructivism	Participatory	Pragmatism
Ontology (What is the nature of Reality?)	Singular reality (imperfect understanding)	Multiple realities (based on human interaction)	Political reality	Singular & multiple realities
Epistemology (What is the relationship between the researcher and the researched?)	Distance & impartiality (data collection with using instruments)	Closeness (visiting participants at different cites, co-creating knowledge)	Collaboration (researchers actively involve with participants)	Practicality (whatever works to address the question research question)
Axiology (What is the role of values?)	Unbiased (efforts to eliminate bias, values are neutral or objective)	Biased (based on participants perspectives)	Negotiated (biases are discussed with participants)	Multiple stances (biased and unbiased)
Methodology (What is the process of research?)	Deductive (testing a priori theory)	Inductive (participants views form the basis of the analysis and used to form patterns, theories and generalizations)	Participatory (participants work with researchers at all stages in a cyclic review of results)	Combining and mixing quantitative and qualitative methods
Rhetoric (What is the Language of research?)	Formal style	Informal style	Advocacy and change	Both formal and informal
Research approaches	Determination Reductionism (hypotheses testing) through empirical observation and measurement	Understanding multiple participant meanings through social and historical construction	Critical political analysis focused on empowerment and sociopolitical issues through collaboration	Examine consequences of actions, focused on specific problem through multiple methods
Research Purpose and Outcomes	Theory Verification	Theory generation	Change oriented, liberation	Real – world practice oriented

Synthesized based on Creswell & Plano – Clarke (2018) and Jones, Torres, & Arminio (2014)

The Convergent Mixed Methods Design

The convergent mixed-methods design with equal emphasis is characterized by simultaneous collection of quantitative and qualitative data, which are analyzed separately, then results are compared and/or combined then finally interpreted together based on an overall research aim or goal (Creswell & Plano Clark, 2018). Equal emphasis means that both quantitative and qualitative methods were emphasized (QUANT + QUAL) as opposed to one or the other (e.g. QUANT + qual or quant + QUAL). The QUANT + qual notation denotes there is unequal emphasis with the quantitative methods being emphasized while quant + QUAL denotes emphasis placed on the qualitative methods. I considered several different factors in choosing the research design. These include: the purpose and goals of the research, the questions of interest, the theoretical basis and potential implications of the research findings, and characteristics of the design approach compared to other mixed method designs (e.g. timing for data collection, independent methodological strengths and weakness of qualitative and quantitative designs). These are all factors suggested to consider when choosing a mixed methods design (Creswell & Plano – Clarke, 2018). Creswell & Plano Clark (2018) maintain that the assumptions of pragmatism provide an umbrella worldview for researchers considering merging quantitative and qualitative data and results at one time point.

Justification of Methods

The convergent design is appropriate when the aim is to illustrate completeness, complementarity, expansion and triangulation. One of the primary goals of the study is to make both a theoretical and methodological contribution to educational psychology research by responding to calls for greater scholarship drawing connections between cultural and psychological motivation constructs. Consequently, it seemed both practical and prudent to adopt a mixed methods approach that integrated multiple sources of data and perspectives. Specifically, convergent design affords: 1) the opportunity to collect multiple sources of data which can be triangulated to form a holistic understanding of a phenomena, 2) the balance of having both quantitative and qualitative data which offsets the strengths and weaknesses of each, 3) all of the data can be collected at the same time and are not dependent on each other, 4) feasibility to get large amounts of data quickly, 5) all sources and types of data are given equal value and priority,

and 6) the ability to see points of convergence and divergence in the findings and results based on different perspectives (Creswell & Plano – Clarke, 2018).

The latter is particularly important because the population of interest includes both university students and their instructors. Instructors and students by virtue of their roles in classroom context and their lived experiences may have different or similar perceptions on different variables (e.g. perceptions of the classroom climate) (Fraser, 2001). This approach allowed me to examine the data across multiple sources and perspectives which has methodological and practical implications which I discuss in Chapter 5. Additionally, the convergent design was also well aligned with the complementary theoretical approach adopted, integrating multiple frameworks across different disciplinary boundaries that operate under similar but different assumptions in some regards as discussed in Chapter 2. Therefore, in the context of the current investigation the convergent was well suited considering:

a) A primary goal of the investigation is to integrate complementary theoretical perspectives,

b) Examine research questions from different perspectives (i.e. instructors and students) and

c) Combine quantitative and qualitative methods in a single investigation through triangulation.

Applications of Mixed Methods Design

Combining quantitative and qualitative methods is relatively common in educational research across different domains and academic levels. However, researchers applying specific mixed methods designs (Creswell, 2003; Creswell & Plano – Clarke, 2018; Leech & Onwuegbuzie, 2009) across multicultural education research and educational psychology has been increasing over the past decade. Hales (2016) describe three exemplars that intentionally used mixed methods designs in social justice education research defined based on the application of cultural relevant teaching and critical race theory. Siwatu (2011) used the explanatory mixed methods design (Creswell, 2003) to examine preservice teachers' self – efficacy beliefs. Malo – Juvera, Correll and Cantrell (2018) used the partially mixed sequential dominant status design (Leech & Onwuegbuzie, 2009) to examine elementary school teachers' self – efficacy for culturally responsive instruction. McCrudden and colleagues (2019) as well as Plano Clark (2019)

describe the applications of different mixed method designs for educational psychology research to address the complexities involved in the teaching and learning process. Recent applications of the convergent mixed methods designs in higher education context include examining, the relationships between racial identity, science identity, science self – efficacy and science achievement among African American students in Historically Black Colleges & Universities (White, DeCuir – Gunby & Kim, 2019), and factors that influence prospective teachers professional self – efficacy including perceived autonomy – support in college, attitudes towards teaching profession and levels of professional self – efficacy beliefs (Kanadli, 2017). The present investigation adds to this growing body of research across multicultural education and educational psychology by specifically mixing methods and integrating theoretical perspectives to provide greater depth of understanding about the relationship between culture, diversity and motivation in university settings. Although the overall research design for this investigation is the convergent mixed methods design, specific quantitative and qualitative research methods and procedures were incorporated. A quasi-experimental correlational design was selected for the quantitative strand and case study design, specifically Multiple Case Study (MCS: Stake, 2006) for the qualitative strand. These are briefly described for each strand later in this chapter.

Research Context and Setting

This investigation was conducted at a large four-year public research-intensive university in the mid – western region of the United States. The university offers programs of study for undergraduate, graduate and professionals ranging across various natural sciences, social and behavioral science as well as arts, humanities and professional disciplines. I chose to conduct the research at this university because it was convenient to gain access to a sample of students and instructors. Since my aim was not to generalize or compare the findings of the present investigation to other higher education institutions the research context suited the purpose of the investigation and aligned with the pragmatic approach adopted. Student enrollment during the 2018 – 2019 academic year when I completed the data collection was approximately 43,000 (75% undergraduate, 23 % graduate, 2% professional). During the 2018 – 2019 academic year international student enrollment was approximately 9000 accounting for 21% of the total student enrollment.

Sampling and Participants

The sample for this investigation was drawn from faculty and Graduate Teaching Assistants (GTAs) (which I refer to as instructors) and undergraduate students at the university during the 2018 – 2019 Fall and Spring academic year. I compiled a list of instructors teaching undergraduate courses during that academic year from a directory of faculty and GTAs who participated in faculty or instructional development through the university teaching center. Participation in instructional development included but was not limited to, participating workshops related to improving teaching and learning and enrolling in programs to redesign or transform their course using different pedagogical techniques and approaches. This group of instructors were targeted because I presumed, they would be more open to allowing research to be conducted in their course and would be interested in how the findings could benefit them in improving their course. My rationale for approaching the recruitment in this way was to:

1) Establish the ecological validity of the study by looking at intact classroom settings as opposed to in the context of lab or have instructors and students provide general reflections about different courses or classrooms,

2) To ensure reciprocity, such that participants find personal value and relevance and therefore would likely be more open and honest in their responses, and

3) Practicality, this is related to ecological validity and reciprocity, my intention was to provide instructors with the results of the investigation specifically in relation to their own course which would provide them with insights that would help them in improving their course to meet student outcomes.

In the sections that follow I describe each stand in relation to the methods and procedures employed. The flow chart in Figure 5, shows the overall methods and procedures associated with each strand which represents the overall convergent design.

General Recruitment and Data Collection

First, I sent an email to instructors describing the purpose of the study and the possibility of participating. Instructors were given the option between fully or partially participating. Full participation involved instructors completing the relevant surveys followed by a 60 minute semi – structured interview, their students would also participate by completing a survey at the end of the

semester with different measures assessing their perceptions of autonomy – support, the cultural responsiveness of the classroom climate, their motivation to study for the course and the extent to which the course helped them to develop intercultural knowledge and competence. The additional component involved students participating in 15 – 20 minutes focus group at the end of the semester, and I would conduct three non – participant classroom observations throughout the semester in their class. Most faculty were not able to commit either due to limited time or because their course was involved in other research investigations.

Partial participation meant that instructors would either complete the surveys without involving their class or their students or allow me to collect data from their students. Of the eleven instructors who agreed to participate only three agreed to fully participate. Those three courses were used as part of the qualitative strand. Instructors who agreed to partially participate completed the relevant surveys but not the semi – structured interview and they allowed me to recruit students from their course to complete the survey at the end of the semester. The primary reason for adopting this approach was to ensure that I received a large enough sample for the quantitative strand. The subsequent sections of this chapter focus on the specific procedures associated with each strand of the investigation.

After the instructors' approval to collect data, I visited each class and gave students a 5-minute overview of the study and the benefits for participating. Some instructors provided student with extra credit if they participated and all students who completed the survey had a chance to win 1 of 10 Amazon Gift card valued at $25. Students completed the survey anonymously to maintain confidentiality in keeping with the considerations of the Institutional Review Board (IRB). Additionally, instructors had to provide alternative opportunities for students to gain extra credit if they did not choose to participate in the research study. Instructor responses to the survey were not anonymous in order to match instructors with the students enrolled in their classes/course and collect the qualitative data (i.e. semi – structured interview). However, instructors were assured that efforts would be made to maintain the confidentiality of their responses and maintain anonymity. Therefore, instructors' names have been removed from this report along with any directly identifiable information related to their course or otherwise that may reveal their identity.

QUANTITATIVE STRAND

Quasi – Experimental Correlational Design: Examine RQ 1
& RQ 2
Data Collection:
Instructors (n=11) complete surveys (IDI & DIS)
Students (n=152) complete survey assessing perceptions of the
classroom environment (CRCS & LCQ), academic motivation
(SIMS), and intercultural knowledge & competence (ASKS[2])

QUALITATIVE STRAND

Multiple Case Study: Examine RQ 3 & RQ 4
Data Collection: 3 courses taught by instructors who completed
IDI & DIS
60 mins Semi – Structured interview with instructors (n=3)
Classroom Observations for each course (3x during the
semester)
Focus Group and Short Answer Survey with students

Data Analysis:
Descriptive Statistics based on instructors' responses to IDI & DIS
Grouped instructor into intercultural orientations based on IDI
scores and degree of diversity inclusivity based on DIS score.
Correlations among variables based on students' responses
ANOVAs & t-tests examine relationships between instructors'
intercultural orientation and degree of diversity inclusivity and
students' perceptions of the classroom environment, academic
motivation and intercultural knowledge and competence.

Data Analysis:
Transcribe and analyzing semi – structured interviews (Thematic
Analysis) coupled with descriptive and analytic memos
Summarize data from classroom observations, short answer surveys
and focus groups
Conduct within and cross case analysis based on themes for each
case (i.e. courses)

Merge Quant and Qual Data & Results

Include quant and qual data for each case
Compare results across cases
Display merged results for each case (i.e.
course)

Interpret Merged Results: based on RQs
Summary of results from Quant and Qual
strands
Compare results across both strands
Discuss how both results relate to goal of the
investigation

Figure 5
Flow Chart of Overall Study Procedures

Quantitative Strand

The quantitative strand was based on correlation design. A correlational design is appropriate when researchers aim to answer questions about a sample or preexisting group differences without manipulating variables or random assignment (Devlin, 2018). I collected data from both instructors and students using a combination of surveys and questionnaires administered at different times. Table 6 shows a summary of the different measures in relation to the specific variables and time of administration.

Participants

The overall study included students (n=152) and instructors (n=11). Table 5 shows demographic details for students. The sample included students from different ethnic and national backgrounds, gender, academic classification, academic discipline, and family background with respect to access to post-secondary education (first generation and parents' educational attainment). Demographic information related to student ethnicity was divided into three groups (domestic minority, domestic majority and international) based on students' report of the nationality and ethnicity. Students were not given options to choose from such as (Black or African, Native American, Hispanic etc.) instead they had the option to write how they identified. This was intentional so as not to force students into specific categories which may not reflect how they identified ethnically.

They were also asked to report their nationality. I combined students reported ethnicity and nationality to summarize the ethnic makeup of the sample. Students who identified as White/Caucasian and from the United States were placed in the *domestic majority group*. Students who identified as American or being from the US and identified ethnically as Hispanic, Asian American, Asian, African American, Native American or mixed (e.g. Asian American and Caucasian, Japanese and African American) were included in the *domestic minority groups*. Students whose nationality was outside the United States (e.g. India, Korea, China, New Zealand, Vietnam, Bangladesh, Eritrea, Taiwan, Philippines, Spain and Pakistan) and identified as (South

Asian, Hispanic, Latina, Chinese, Asian, Indian, Black, or Korean) were included in the *international* group[1].

Instructors came from different academic disciplines including sciences, business, agriculture, arts and humanities. The overall sample included GTAs (n= 3 males and n = 2 females), Faculty (n=2 males and n = 2 females) and Staff (n=1 male and n = 1 female). GTAs refer to instructors who teach individual sections of larger courses under the supervision of a course coordinator. These individuals usually do not have control over course content and assessments but primary control over instructional strategies and pedagogies. Faculty are instructors who have primary control over the course content, assessments, instructional and pedagogical strategies. Staff refers to instructors who teach different sections of a specific course where they usually do not have specific control over all course content but have control over assessments and instructional strategies and pedagogies. Notwithstanding these differences all instructors have control over how they go about cultivating their classroom environment to facilitate student outcomes which was the primary focus of the investigation.

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[1] Ethnicity is a social construct which we use to categorize people based on characteristics that reflect their association with groups that may share a common ancestral, cultural, historical and racial heritage. The categories described above (domestic majority, domestic minority and international) are meant to merely group participants in relation to their status in the context of the classroom. This grouping is meant to summarize the ethnic demographic make-up of the sample using broad categories that subsume different aspects of ethnicities students reported. The differences in the ways students identify for example as Korean or Chinese or Latina as opposed to simply Asian or East Asian or Hispanic reflects the complexity in how students identify by virtue of their lived experiences. All the ethnicities students reported as well as the different countries students came from are also listed in parentheses to respect their respective identities.

Table 5

Summary of Student Demographics

Demographics	Descriptions
Ethnic Identity (Ethnicity and Nationality)	Domestic Majority (76%) Domestic Minority (10%) International (14%)
[2]Gender	Male (57%) Female (41%) Queer (1%) Declined response (1%)
Academic Classification	Freshman (58%) Sophomore (19%%) Junior (19%) Senior (4%)
First Generation	Yes (9%) No (91%)
Parent Highest Education Level	High School Diploma (13%) Bachelors (35%) Associate (5%) Masters (32%) Doctorate (7%) MBA (7%) Other (1%)
Academic Discipline	Agriculture (10%) Education (9%) Exploratory Studies (7%) Liberal Arts (2%) Business & Management (10%) Pharmacy (1%) Polytechnic & Technology (30%) Natural & Technological Sciences (8%) Engineering (15%)
Native English Speaker	Yes (85%) No (15%)

[2] The categories presented reflect those reported explicitly by the participants and were not modified by the researcher. The survey was intentionally designed to allow participant to express themselves however they identified.

Table 6

Summary of Measures and Variables Assessed in the QUANTITATIVE Strand

VARIABLE	MEASURE	TIMING	PARTICIPANTS
Intercultural Competence	Intercultural Development Inventory (IDI®) (Hammer et al., 2003; Hammer, 2011)	Anytime Before Semester End	Instructors
Diversity Inclusivity	Faculty Survey of Student Engagement Diversity Subscale (FSSE: Faculty Survey of Student Engagement, 2017)	Anytime Before Semester End	Instructors
Academic Motivation	Situational Motivation Scale (SIMS: Guay et al., 2000)	Administered Week 14-16	Students
Autonomy – Supportive Class Environment	Learning Climate Questionnaire (LCQ: Williams & Deci, 1996)	Administered Week 14-16	Students
Culturally Responsive Classroom Environment	Revised Culturally Responsive Classroom Climate Scale (Adapted from CRCS: Holgate, 2016)	Administered Week 14-16	Students
Intercultural Knowledge & Competence	Attitudes Skills and Knowledge Short Scale (ASKS^2 v.2: Holgate, Parker & Calahan, 2017, 2020)	Administered Week 14-16	Students

Data Collection

Instructors who agreed to participate in the study were asked to complete two questionnaires, the Intercultural Development Inventory (IDI®) and the Diversity Inclusivity Survey (DIS). Both measures are described in the next section. Instructors were given the flexibility to complete the measures any time during the semester after which they could schedule a time to meet with me to discuss their IDI® scores[3]. Students completed an electronic survey with different measures during week 14 – 16 of the semester.

Instructor Measures

The Intercultural Development Inventory

The Intercultural Development Inventory v3 (IDI®: Hammer, 2011) is a 50 – item questionnaire that assesses one's orientation towards cultural differences based on the degree to which they are capable of shifting cultural perspective when interacting across cultures in different situations (i.e. intercultural competence). Scores on the IDI® range from 55 – 145 along a continuum (i.e. Intercultural Development Continuum®, IDC®) with five developmental orientations (*Denial, Polarization, Minimization, Acceptance* and *Adaptation*). These orientations represent movement towards greater degrees of intercultural competence from less complex perceptions and behaviors towards cultural differences and similarities (i.e. monocultural/ethnocentric orientations/mindsets), to more complex perceptions towards cultural differences and similarities (i.e. intercultural/ethnorelative orientations/mindsets). Orientations that represent or highlight only one's own cultural perspective represent more monocultural mindsets/orientations (i.e. *Denial and Polarization*; scores range from 55 to 85). However, orientations that represent or highlight the capability shift perspective across cultural contexts are identified as intercultural mindsets/orientations (i.e. *Acceptance* and *Adaptation*; scores from 115 to 145). The IDC® identifies the orientation *Minimization* as a transitional orientation between

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[3] After individuals complete the IDI they are required to conduct an IDI debrief with a Qualified IDI Administrator in order to review their scores. As the instrument is copy right the standard procedures would need to be followed before disclosing the individual's scores. Without scheduling an IDI debrief participants would not know their scores. The purpose of the IDI debrief is to allow individuals to understand their score and reflect on how they can improve their overall intercultural development using intentional practices. The IDI provides information to individuals about their degree of intercultural development and provides a tailored Intercultural Development Plan®(IDP®) for each individual based on their score and developmental orientation.

monocultural mindsets and intercultural mindsets with scores ranging from 85 to 115. The minimization orientation is characterized by being able to readily identify commonalities but is challenged in new and complex situations that require deep cultural understanding and adaptation.

Cross cultural validity studies show strong correlations among the different orientations (*r*=.83 *Defense* and *Denial*; *r*= .64 *Acceptance* and *Adaptation*) and acceptable reliability statistics based on Cronbach alpha for each orientation based on validity studies (Hammer, 2011; Hammer et al., 2003) (*Denial*, alpha= .66, *7 items*; *Defense* alpha= .78, 6 items; *Minimization* alpha =.74, 9 items; *Acceptance* alpha= .69, 5 items and *Adaptation* alpha=*.71, 9 items)*. Participants respond to statements using a five-point Likert scale stating the degree to which they agree with each statement. The scale ranges are *1 Strongly disagree*, *2 Somewhat disagree 3 Neither agree nor disagree, 4 Somewhat agree, 5 Strongly agree*. Sample items include: "our common humanity deserves more attention than culture difference" and "it is appropriate that people do not care what happens outside their country".

The IDI® is generally completed electronically and takes approximately 15 – 20 minutes. Once the individual has completed the questionnaire, a web – based analytic program is used to score responses and generates different reports which provide the individual with their intercultural profile which is related to 5 orientations on the Intercultural Development Continuum® (IDC®). Two scores are produced from responses to the IDI® which are mapped onto the five orientations on the IDC®. The developmental orientation score (DO, alpha =.83) which is computed based on a weighted formula and identifies the individuals primary orientation along the IDC®, and the perceived orientation score scores (PO, alpha .82) which is computed using an unweighted formula and reflects where the individual places themselves on the IDC® (Hammer, 2011; Hammer, Bennette & Wiseman, 2003; Paige, Jacobs – Cassuto, Yershova & DeJaeghere, 2003). The Perceived Orientation (PO) reflects where instructors placed themselves along the Intercultural Development Continuum® which could be Denial, Polarization (Defense/Reversal), Minimization, Acceptance or Adaptation. The Developmental Orientation (DO) indicates the instructors' primary orientation toward cultural differences and commonalities along the continuum assessed by the IDI. The DO is the perspective instructors most likely use in those situations where cultural differences and commonalities need to be bridged. Instructors Developmental Orientation can be Denial, Polarization (Defense/Reversal), Minimization, Acceptance or Adaptation. Table 1 summarizes the qualitative differences among the orientations of the IDC® based on the

developmental orientation (DO) score. Higher DO scores on the IDI® are classified as being more interculturally competent representing more intercultural mindsets while lower scores represent less complex understanding and capability to shift perspectives representing more monocultural mindsets. After completing the IDI® each participant is offered an opportunity for an individual debrief where they discuss their scores with a qualified IDI® administrator and discuss ways to further develop their intercultural competence. This is described further in the Qualitative Strand as part of the semi – structured interview data collection process.

Diversity Inclusivity Survey (DIS)

The Diversity Inclusivity Survey (DIS), developed from the Diversity Inclusivity Framework (Nelson Laird, 2011, 2014) was used to assess perceptions of diversity inclusivity. The DIS is a subset of items from the Faculty Survey of Student Engagement (FSSE: Faculty Survey of Student Engagement, 2017; FSSE Topical Modules, 2017). The DIS item set are a part of the larger national FSSE survey which is also a copy righted instrument including a topical module with a set of items on inclusiveness and engagement with cultural diversity (FSSE Topical Modules, 2017). This set of items examines environments, processes and activities that validate cultural diversity and understanding of diverse perspectives in society from the instructors' perspective (FSSE Topical Modules, 2017). Items particularly important in this study are the 12 items related to faculty responses on the extent or frequency that the 9 different elements of their course are inclusive using the scale *Very Much, Quite a bit, Some, Very Little*. The 12 items are separated into two factors based on factor analysis which formed two subscales, *Diverse Grounding* (6 items, alpha = .83) and *Inclusive Learning* (6 items, alpha= .83) with each item corresponding to specific element of course design and delivery on the *Diversity Inclusivity Framework* (Nelson Laird, 2011). Instructors respond to statements based on the prompt "In your selected course how much do the following happen": "students gain an understanding of how course topics connect to societal problems or issues" and "students develop skills necessary to work effectively with people from various backgrounds".

Both measures are grounded in strong empirical evidence based on confirmatory and exploratory factor analysis procedures using diverse samples (see Nelson Laird, 2011; Hammer, 2011) and are widely used in higher education research. The IDI® for example is used in corporate organizations, non-profit organizations as well as colleges and universities with key personnel

involved in decision and policy making (Intercultural Competence: IDI®, 2017) and in teacher education (Mohan, 2006). Similarly, the FSSE is a frequently used in postsecondary institutions with the results being crucial to policy making decisions (Faculty Survey of Student Engagement, 2017).

The IDI® provides the means to explicitly assess the instructors' orientations towards cultural differences at a more general level which may include day to day interactions outside of the classroom context but nonetheless reflects how they relate with cultural difference. Additionally, the IDI® provides a profile for each instructor which provides descriptions of how instructors with different orientations tend to approach the teaching and learning process in creating their classroom environment, interacting with colleagues, as well as pedagogical practices and challenges (see Table 1). However, the DIS provides a more focused understanding of the extent to which instructors include diversity in the context of their course. By using both measures I was able to operationalize instructors' orientations towards culture and diversity in broader sense looking at how instructors' general worldviews about cultural differences as well as the degree to which they include diversity in their course are related to the classroom environment and educational outcomes from students' perspectives.

Student Measures

Learning Climate Questionnaire (LCQ)

Perceptions of the classroom environment were measured using Learning Climate Questionnaire (LCQ: Williams & Deci, 1996) and a revised version of the Culturally Responsive Classroom Climate Scale (CRCS: Holgate, 2016). The LCQ assesses perception of the classroom environment as autonomy – supportive, which is the extent to which students perceive their psychological needs for autonomy, competence and relatedness are satisfied versus undermined in the classroom. The LCQ was developed based on the assumptions of SDT described in the BPNs mini – theory. The long version of the questionnaire consists of 15 items on a seven-point Likert-type scale anchored by *strongly disagree* (1) and *strongly agree* (7). Example items include: "I feel my instructor provides me with choices and options," "I feel understood by my instructor," and "my instructor conveyed confidence in my ability to do well in the course." Previous studies report strong alpha reliability for the LCQ across multiple time points of .93 and .94 for time one

and time two respectively (Black & Deci, 2000) and alpha .96 for single administration (Levesque-Bristol et al., 2010). A shortened form of the LCQ was used consisting of 13 items. This was done in order guard against survey fatigue since students would be completing multiple measures as part of an overall survey. The overall internal consistency for the 13 items was excellent, Cronbach alpha (.95). Higher scores on the LCQ represent greater autonomy – supportiveness which means students perceive the classroom environment as positive and supporting their basic psychological needs in general.

Culturally Responsive Classroom Climate Scale (CRCS)

A revised version of the CRCS was adopted for this investigation by including additional items to assess perceptions of sociopolitical consciousness as an aspect of cultural responsiveness. This revised version consists of 18 items based on a seven-point Likert-type scale anchored by *strongly disagree (1)* and *strongly agree (7)*. The 18 items were divided across four subscales developed based on a review of CRPTE frameworks along with items from the initial version of the CRCS (Holgate, 2016). The four subscales represent four aspects or characteristics of the culturally responsive classroom which have strong reliability for the current sample: *cultural inclusion* (4 items, α=.81), *diverse pedagogy* (4 items, α=.84), *inclusiveness* (6 items, α=.93) and sociocritical consciousness (4 items, α=.89). Example items include: "My instructor seems to have an understanding of my culture (cultural inclusion)" and "My instructor used different forms of instruction to help students understand content" (diverse pedagogy). The 18 items also have strong reliability for the current sample alpha .95. Higher scores on the CRCS suggest students perceive the classroom climate as positive in the sense that they perceive it to be affirming and validating of cultural differences and diverse perspectives.

[4]*The Attitudes, Skills & Knowledge Short Scale Version 2 (ASKS[2])*

The Attitudes, Skills & Knowledge Short Scale version 2 (ASKS[2]: Holgate, Parker, & Calahan, 2017) is a 14 item formative assessment tool which assesses students' perceptions of their development on different components of intercultural knowledge and competence namely:

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[4] The ASKS[2] is NOT a measure of Intercultural Competence or Cultural Intelligence. It provides insight into the components (attitudes, skills and knowledge) that can be targeted as markers for increasing Intercultural Competence and Cultural Intelligence.

attitudes (*openness* [2items] and *curiosity* [2 items]), skills (*empathy* [2 items] and verbal and nonverbal communication [2 items]) and knowledge (cultural self – awareness [4 items] and knowledge of worldviews and frameworks [2 items]). The measure was developed by adapting statements from the Association of American Colleges and Universities (AAC&U) Intercultural Knowledge and Competence VALUE Rubric (Association of American Colleges and Universities, 2009; Holgate, Parker & Calahan, 2020). Students respond to statements using a six - point scale based on Bloom's Affective Domain which represent degrees of internalization and valuing of different behaviors associated with interacting with culturally different others as well as cultural awareness. The 6 point scale ranges from *1 – not at all aware or don't recognize this behavior, 2 – low degree, I am only aware of and recognize this behavior, 3 – somewhat low degree, I cooperate or comply if required by others, 4 – somewhat high degree, I recognize the value of and prefer this behavior, 5 – high degree, this behavior is an important priority for me to 6 – very high degree, the behavior is natural, habitual or represents who they are.* Sample items include: "I ask questions about other cultures different than my own" (curiosity) and "I am aware of my own cultural rules and biases" (self – awareness). Reliability of the scale was excellent for the current sample, Cronbach alpha .96. Students responded to statements as part of the larger survey based on the prompt: "As a result of taking this course I am able to." The ASKS[2] was developed to assess the degree to which students perceived they were developing the different components of intercultural knowledge & competence and as means to help instructors and intercultural development program coordinators (e.g. study abroad and on-campus development) use information from students to evaluate the extent to which their course, program or classroom environment was organized and facilitated in ways that contributed to students increase internalization of different intercultural attitudes, skills and knowledge (Holgate, Parker & Calahan, 2020; Render, Holgate & Calahan, 2018).

Situational Motivation Scale (SIMS)

The *Situational Motivation Scale* (SIMS: Guay, Vallerand, & Blanchard, 2000) adapted for academic contexts is an 18-item scale which assesses the different types of motivation and regulation forms proposed by SDT (Deci & Ryan, 1985; Ryan & Deci, 2000): amotivation, external regulation, introjection, identification, integration and intrinsic motivation. Students were asked to respond to statements about the reasons why they study for a particular course using a

seven-point Likert Scale anchored at 1 *Strongly Disagree* to 7 *Strongly Agree*. The statements students respond to are associated with each motivational subscale. For example: "Because it allows me to develop skills that are important to me" (integrated), "Because I would feel bad if I didn't" (introjection), "Because I really enjoy it" (intrinsic), "Because that's what I am supposed to do" (external). In the present sample, the overall internal consistency for the scale was acceptable Cronbach alpha (.78) and ranged between Cronbach alpha (.72) and (.92) for each motivational subscale. Students were asked to respond to the statements as part of the larger survey based on the prompt: "*I study for this class because*."

Academic Achievement

Students' academic achievement was measured in two ways. First, based on students' self-report of their overall grade point average (GPA). This measure of achievement was collected in order to examine the relationship between students' actual achievement and their perceptions of the classroom environment in the course they were taking as well as their perceived intercultural development and academic motivation. More specifically, related to the course, academic achievement was measured, by having students report their expected final grade in the course. Using expected final grade in the course as a measure of students perceived academic achievement provides insights into how students evaluate their performance in the course based all they have done. This measure was collected as part of the survey as students reported whether they anticipated receiving a final grade in the course of an A, B, C, D, or F. These letter grades were then recoded into numeric values where A=4, B=3, C=2, D=1, and F=0.

Data Analysis

The data were analyzed using IMB SPSS Statistical Software 26. Three quantitative analytic procedures were conducted, descriptive statistics, bivariate correlations and a series of one-way analysis of variance (ANOVA) and independent samples t-tests.

I conducted descriptive analysis of instructors' intercultural orientation (i.e. degree of intercultural competence) and the degree to which they included diversity in their courses. The instructors' developmental orientation scores (DO Score) and Perceived Orientation scores (PO scores) were used to create three groups to represent instructors' orientations towards cultural

diversity based on the Intercultural Development Continuum® (IDC®). Figure 6 shows the three groups based on instructor IDI® scores. Monocultural mindsets/orientations included instructors whose IDI® scores ranged from 55 to 85 reflecting *Denial and Polarization* orientations. Intercultural mindsets/orientations included scores ranging from 115 to 145 reflecting *Acceptance* and *Adaptation* orientations. Scores ranging from 85 to 115 were grouped as minimization orientation.

Descriptive statistics were also used to group instructors based on diversity inclusivity in their course. Instructors were grouped as **High Diversity Inclusivity** (HDI) and **Low Diversity Inclusivity** (LDI)**.** Groups were formed based on the mean score on the Diversity Inclusivity Survey. Instructors who had mean score greater than 3 were grouped in the HDI while instructors with mean diversity inclusivity less than 3 were grouped in LDI (see Figure 7). An instructors' course designated as HDI means that on average the instructor responded on average 'Quite a bit' or 'Very Much' to statements about including diversity in their course for different elements. However, LDI means that instructors responded on average only including diversity for specific elements of their course 'Very Little' or 'Some'.

Bivariate correlations were examined based on students' perceptions about the classroom environment (the extent to which it was autonomy – supportive and culturally responsive) and educational outcomes including: 1) their academic motivation to study for the specific course, 2) intercultural knowledge & competence development as a result of taking the course, and 3) their overall GPA and expected final grade in the course.

This analysis was carried out in order to examine specific relationships particularly in relation to autonomy – support and cultural responsiveness. This analysis provided some insights into how aspects of cultural responsiveness maybe different or similar to autonomy – support; additionally, how aspects of cultural responsiveness correlated with the different motivations and intercultural development. In general, I assumed that cultural responsiveness would be highly correlated with autonomy – support in general but would have different strengths in relationship with the different aspects of cultural responsiveness (cultural inclusion, sociocritical consciousness, diverse pedagogy and inclusiveness). Similarly, I expected that generally cultural responsiveness would be positively correlated with different forms of motivation and intercultural knowledge and competence development. The relationship between instructors' intercultural

competence (based on DO score) and degree of diversity inclusivity was also examined. I anticipated that there would be a positive relationship.

To specifically examine research question 1, the grouped instructor scores from the IDI® as well as the DI were integrated with the student survey responses. Each student was assigned with the intercultural orientation (i.e. DO) and degree of diversity inclusivity for the specific course. By doing so, it was possible to examine whether there were differences in students perceptions of autonomy – support, cultural responsiveness, academic motivation and intercultural knowledge & competence develop and academic achievement based on the instructors' degree of intercultural competence (i.e. monocultural, minimization or intercultural orientation) and degree of diversity inclusivity in the course (i.e. HDI vs LDI).

I conducted a series of one - way analysis of variance (ANOVA) to examine the following:

1. Whether there were differences in students' perceptions of the classroom environment as culturally responsive and autonomy – supportive based on instructors' degree of intercultural competence.

2. Whether there were differences in students' motivation to study for the course, intercultural knowledge and skills development as a result of taking the course and their anticipated final grade in the course based on instructors' degree of intercultural competence

I also conducted specific analysis to examine whether there were differences with respect to students' perceptions of the different aspects of cultural responsiveness as well as motivation regulations based on instructors' degree of intercultural competence. This was done to gain further insights into potential conceptual differences and similarities between autonomy – support and cultural responsiveness with respect to instructors' intercultural competence. I conducted a series of independent samples t-tests to examine the same differences based on the degree of diversity inclusivity.

Assumptions for normality and equal variances assumed were examined prior to conducting the analysis for each dependent variable. All distributions were approximately normally distributed and equal variances were assumed for most dependent variables. For the ANOVA analysis since there was adequate sample size in each group and the ANOVA is considered robust to slight deviations for normality, the test was conducted. However, I used Bonferroni adjustment, so significance was determined based on alpha (.01) instead of (.05) to

control for type 1 error rate. Additionally, follow-up comparisons were conducted using the Bonferroni – which is the most restrictive. Significant differences were also reported based on the Games – Howell for follow – up comparisons where equal variances were not assumed. Similar procedures were followed for the t-test with respect to Bonferroni adjustment where alpha was set at .01 to determine significance. Procedures for conducting the analyses and testing assumptions were based on guidelines described by Tabachnick and Fidell (2007) and Laerd Statistics (2015).

I recognize that alternative statistical analytic approaches could be used such as the two – way ANOVA or the multivariate analysis of variance (MANOVA) or the two – way MANOVA, however I decided against these analyses for both practical and statistical reasons which are related. First the investigation is primarily exploratory and the assumptions for these analyses are restrictive which would not be appropriate given the sample sizes. For example, an important assumption for the MANOVA is that the dependent variables do not have multicollinearity (i.e. $r > .90$). Based on the correlation matrix the relationship between autonomy – support and overall cultural responsiveness was .88 and among different aspects of cultural responsiveness between .58 and .89 which would introduce a possible significant issue of multicollinearity when conducting the analysis. Second, by using the Two – way ANOVA or MANOVA I would be assuming an interaction effect between the independent variables (i.e. instructors' intercultural competence and diversity inclusivity) which would need to be based on some prior theoretical or conceptual basis from the literature for which I found no strong evidence. This is also compounded by the more restrictive assumptions for normality and equal variances required for such analyses. Finally, because of the nested structure of the data, a multi – level approach would have been more appropriate. However, due to the small sample size it would not be possible to effectively conduct this analysis to gain meaningful results. This is a limitation of the present investigation and as such the results must be considered considering this limitation and others which are discussed in the section on limitations.
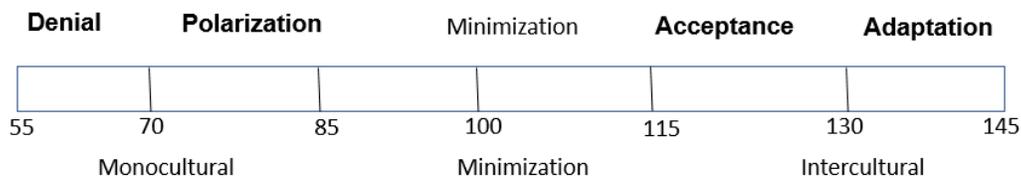
Figure 6
Showing Grouping for Instructors' Developmental Orientation Scores Based on IDI[®]

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Very Little	Some	Quite a bit	Very Much
1	2	3	4

Low   High
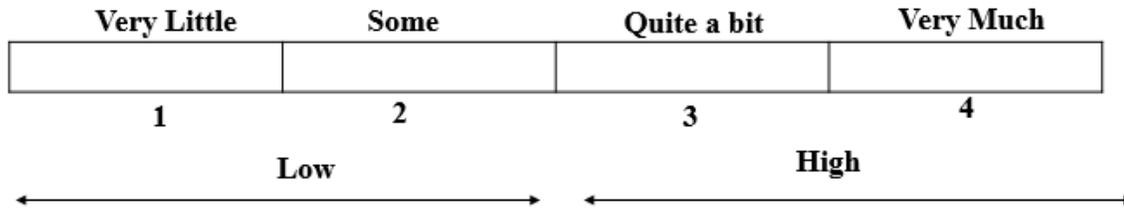
Figure 7
Showing Grouping for Diversity Inclusivity Based on Instructors Mean Diversity Inclusivity

Qualitative Strand

The purpose of this strand was twofold. First, to ascertain a more in-depth understanding of the role cultural diversity played in how instructors structured and organized the overall course and their classroom environment to meet student outcomes. By extension, based on the conceptualization of the classroom environment as autonomy –supportive and culturally responsive, I further explored what such classroom environments looked like in university settings. The second purpose of this strand was to further examine the degree to which the classroom environment instructors aimed to cultivate, was similar or different to what students experienced. This was guided by the following questions:

   a. To what extent instructors address culture and diversity in creating their course and cultivating the classroom environment?
   b. To what extent is the classroom environment instructors cultivate similar or different than students' perceptions and experiences in the class?

I used qualitative case study methodology, specifically multiple or collective case study design (Stake, 2006; Creswell, Hanson, Plano & Morales, 2007) to examine these questions. Case study methodology involves an in-depth exploration about the operations or functions of a bounded system using multiple sources of data (Baxter & Jack, 2008; Chmiliar, 2012). Defining case study research Creswell and colleagues (2007) maintain that,

> case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports) and reports a case description and case-based themes (pg. 245).

According to Stake (2006) a case is a thing or entity that can be visualized, usually a noun and seldom a verb. Examples may include, schools, programs, training modules, managers or business.

The case as a bounded system refers to the boundaries or confines that will be investigated as well as what will not be investigated (Baxter & Jack, 2008). Multiple case study involves systematically gathering information from more than one case using multiple methods to gain a better understanding of an issue or theorize about a broader context (Chmiliar, 2012). A single qualitative cases study focuses on a single issue or concern in "bounded system" based on time, place or space. This may involve an individual, a program or organization. For multiple or collective case studies, the focus is also on a single issue or concern but in multiple "bounded systems" based on time, place or space. This could include several programs from different sites or multiple programs in a single site (Stake, 2006, Creswell et al., 2007). I chose to use the multiple case study approach in order to have a more holistic and in-depth understanding of the role instructors approach to culture and diversity played in how they design their course, cultivate their classroom environment (i.e. the extent to which it is culturally responsive and autonomy – supportive) with respect to students educational outcomes.

By gathering data from multiple sources across multiple courses/classes I was able to compare and contrast: 1) similarities and differences within and across courses/classes with respect to how instructors factor culture and diversity in cultivating their course and the classroom environment to meet student outcomes and 2) instructors perspectives and students perspective on the classroom environment. Subsequently, I was able to use a triangulation of evidence and perspectives to further explain the extent to which instructors' orientations towards culture and diversity and diversity inclusivity relate to students' perceptions of the classroom environment as culturally responsive and autonomy – supportive and their educational outcomes. I examined three cases which I refer to as classes/courses. Each case was bounded as a specific course and the duration of time for the course which was a 16 – week period or one semester. The units of analysis were the instructors and students involved in the course/class that semester.

Case Selection

Stake (2006) argues that a typical multicase study will involve about four (4) cases or more than ten (10) cases since two or three cases does not provide much interactivity while 15 or 30 cases may provide too much unique interactivity that may be difficult for the research team and even reader can comprehend. Nevertheless, Stake does make exceptions suggesting that there may be good reasons for a multicase study to have fewer than 4 cases or more than 15 although it is

unclear what specifically those "good reasons" might be. However, in general when selecting cases Stake (2006) suggest the following criteria: a) relevance to the "quintain" (i.e. the condition or phenomenon to be studied), b) cases provide diversity across contexts and c) cases provide opportunities to understand the complexity and contexts. In multicase research Stake (2006) explains the goal is to better understand the quintain, which is achieved by studying the individual cases looking for what is similar or different. In other words, cases are selected because they represent or are in some way related to the phenomenon. Selecting cases because they provide diversity across contexts, is appropriate when the goal is to understand how the program or phenomenon functions in different contexts which warrants including cases that reflect the phenomenon of interest in typical as well as atypical contexts (Stake, 2006).

I chose to select only three cases for my multicase study primarily based on accessibility and time to carry out the investigation. First, since I was the lone researcher conducting a mixed methods investigation, I was advised by a qualitative methodologist to keep the number of cases to a manageable number, also considering I would be collecting multiple sources of data. Second, the participants in the qualitative strand were also a part of the quantitative strand and were instructors who agreed to fully participate in the study by giving me access to observe their classes as well as administer surveys to their students in addition to completing surveys and an interview themselves.

The cases included in this strand volunteered to participate in this aspect of the investigation. However, in the overall selection of participants I intentionally chose to include instructors with different class sizes in order to have a range of representation of class sizes in the university contexts. Additionally, a broad cross-section of courses across different academic departments were selected in order to have access to different types of courses that would represent the overall university. This general approach to sampling provided access to examine cases across diverse contexts that would provide insights about the quintain I was interested in studying i.e. instructors' orientations towards culture and diversity in relation to students' perceptions of the classroom environment and educational outcomes. I specifically targeted introductory courses with a range of sections and class sizes in order to gain a more diverse sample of students and instructors. A total of three (3) instructors agreed to fully participate in the investigation. Therefore, each class/course was selected as a case to collate the multiple case study. I describe each case in chapter 4 along with the results based on data collected from different sources. A brief summary

and description of each case is provided below. Each case is identified based on the instructor who taught the course. The case is identified throughout the document primarily by the instructors using assigned pseudonyms in short – form as the instructor's name to protect their identity.

Case 1 Introductory English Course/Class

This course was taught by Instructor K. Instructor K is a staff member teaching an introductory English course for international students. Instructor K is female from a non-Anglo European background. She teaches two sections of this course of which there are more than 10 sections taught by different instructors. The course was designed to focus on students developing academic skills, English language skills and intercultural competence. This course is the first in the sequence of two courses which covered a total of six units. Instructor K worked with a team of other instructors and academic coordinators to develop the content, assessments and assignments but has control over how to structure and organize her classroom environment as well as choose her instructional practices. The class met for 50 minutes 3 times per week during the sixteen-week semester.

Overall student enrollment across both sections taught by Instructor K was 21 students. A total of 12 students participated across both sections of the course (75% males, 25% females) from 8 different countries (Spain, India, China, Pakistan, South Korea, Philippines, Taiwan, and Vietnam). Students came from a range of academic backgrounds including Liberal Arts, Engineering, Polytechnic, Business and Management, Health and Human Science, as well as Pharmacy. All students were in their first semester (freshman) at the university and were required to take this course because their English proficiency score did not fully meet the required university admission requirements for English proficiency.

Case 2 Introduction to Communications Course/Class

Instructor H is a staff member teaching an introductory communication course which was open to all students across majors at the university and had multiple sections taught by different instructors. Instructor H identifies as a male, a native-born American from a Caucasian background. The course was designed to focus on students developing knowledge and skills with respect to communication theories applied to interpersonal and small group speaker – audience

situations to inform or persuade. The text assignments and content of the course were predetermined by the overall coordinator for the course, but Instructor H had control of classroom environment and instructional practices. The class met three times per week for 50 minutes.

Total student enrollment for Instructor H's section was 23. Sixteen (16) students participated in the investigation (44% females, 56% males) with a mix of domestic and international students. Majority of the students identified as Americans (88%) and came from two ethnic backgrounds (Asian American, 2 and Caucasian, 12) while 2 identified as international (12%) from Bangladesh and Vietnam. Majority of the students were freshman (88%), the remainder identified as Sophomore (6%) and Junior (6%). Students' academic disciplines included: engineering, natural sciences, business and management as well as health and human sciences.

Case 3 Introduction to Economics Course/Class

Instructor C is a faculty member teaching an introductory economics which was open to all students across different majors at the university. Instructor C identifies as a male, a native-born American from a Caucasian background. The was designed to focus on students developing and applying knowledge about economic theories and principles with respect to individual, governmental and non – governmental institutions and organizations. The overall course was structured as a large lecture which all students were required to attend two times per week along with additional lab sections which students were also required to attend once per week facilitated by teaching assistants. I only focused on the primary lecture section of the course.

Total course enrollment was 274 students. Eighty – two (82) students participated in the investigation (60% males and 40% females). Majority of the students were from a range of different domestic ethnic backgrounds (Caucasian, 78%; Asian American, 7%; African American, 2 %; Latino/a, 2 %; Mixed, 1%; Hispanic, 1% and Native American, 1%) while a few identified as international from different backgrounds including Chinese (2%), Indian (2%), French (1%), Korean (1%) and New Zealander (1%). Students also identified their academic classification: freshmen (56%), sophomores (28%) Juniors (12%) and seniors (4%) and came from a range of academic disciplines (natural and technological sciences, education, agriculture, business and management, health sciences and engineering).

Data Collection

Stake (2006) identifies observations, interviews, coding, data management and interpretation as primary sources of research methods in single and multicase studies. He also describes focus groups as being useful during situations where time is constrained. The methods used for data collection maybe similar or different from case to case, however, for case studies using a more quantitative approach it is beneficial to have similar methods across all the cases (Stake, 2006). Since, the present investigation was informed by a convergent mixed methods design with equal emphasis on both quantitative and qualitative methods, I attempted to maintain this balance in the overall data collection and analysis for the three cases I examined. I collected qualitative data from instructors and students as well as documents relevant to the course using semi – structured interviews, open – ended survey responses, focus groups in the form of a Small Group Instructional Diagnosis (SGID) and classroom observations.

Each data source was intentionally designed in some aspect using the conceptual and theoretical frameworks discussed in Chapter 2. This was done to align the conceptual and operational definitions used for the variables in the quantitative strand with the qualitative strand based on the research questions and overall research goals. I also collected the course syllabus for each course and assignments where available. The data sources were aligned with different voices including the participants (i.e. instructors and students) and the researcher (i.e. me) which would inform the analysis and interpretation of data and findings for each case and across the cases. In addition to addressing the explicit research question of comparing instructors' and students' perspectives, this also served as means of ensuring the validity and trustworthiness of the findings and interpretations which I discuss later in this chapter.

Although multiple case study facilitates using multiple sources of data collection across cases, this also makes it challenging because the workload is heavy and usually requires a team to employ the different data collection methods in order to get data that captures what Stake (2006) describes as the unusual and the ordinary. As a lone researcher responsible for planning, managing, collecting, analyzing and writing up the results and interpretations of the overall investigation, there were many challenges which emerged throughout the process which required adjustments in the data collection process and subsequently how the data were analyzed and interpreted. In the subsequent sections I describe each data source and method of data collection as well as situations where challenges emerged and how they were addressed.

To make the workload more manageable in data collection, analysis and interpretation, the methods and sources of data collection were divided into primary sources and secondary or supplemental sources. I used the interviews as well as the SGID focus group and open-ended survey responses as primary sources because independently the contents had explicit relevance to answering the research questions for the qualitative strand. The classroom observations and documents (i.e. student assignments and course syllabi) were treated as secondary or supplemental sources, used in conjunction with the primary sources to triangulate findings as they emerged. Table 7 summarizes the different sources of data with respect to specific voices and perspectives represented.

Table 7
Summary of Data Sources & Perspectives for Multicase Analysis

Cases	Data Sources & Perspectives					
	Interviews (Instructor Voice)	Focus Group (SGID) (Students' Voice)	Open– Ended Surveys (Students' Voice)	Syllabus (Instructor Perspective)	Assignments (Students' Perspective)	Classroom Observations (Researcher)
Case 1 (Instructor K)	Yes	Yes	No	Yes	Yes	Yes
Case 2 (Instructor H)	Yes	No	Yes	Yes	No	Yes
Case 3 (Instructor C)	Yes	No	Yes	Yes	No	Yes

Semi – Structured Interviews

Instructors completed a 60-minute semi – structured interview. The interview was conducted after instructors completed their IDI® and was audio recorded. The interview was divided into two sections of 30 minutes each. The first section followed the procedures of a standard IDI® debrief which involved reviewing the instructor scores on the IDI® providing an opportunity for them to reflect on the degree to which the scores (i.e. Developmental Orientation and Perceived Orientation) reported on the IDI® were consistent with how they engaged with and perceived cultural differences and similarities. In addition to reviewing the instructors Individual Profile Report, I also introduced the instructors to the Intercultural Development Plan®(IDP®) which accompanies their profile report which describes ways for instructors to continue reflecting

on the intercultural competence and implement ways to improve. This was provided as a resource for instructors and optional but was not assessed.

In the second section of the interview I focused more specifically on how instructors accounted for culture and diversity in how they created and taught their course. The specific questions that guided this portion of the interview are also shown in Appendix A. The questions addressed what instructors did in their classroom to be explicit in accounting for culture and diversity in their assessments, making the content relevant to students' experiences, building respect and connectedness between themselves and students and among students, and making learning optimally challenging learning experiences. I developed the questions based on review of literature which describe aspects of both autonomy – supportive and culturally responsive classrooms which reflect the principles of Self – Determination Theory (SDT) and Culturally Responsive/Relevant Teaching/Pedagogy/Education (CRPTE) respectively. Follow-up questions were asked as necessary during interview.

SGID Focus Group and Open – Ended Survey

A traditional focus group is described as a specific type of interview which involves a small group of people, usually about 5 – 10, who are purposefully selected to discuss a specific topic or issue facilitated by a group leader who asks questions and guides the discussion (Devlin, 2018). This approach allows for dialogue and discussion among the participants in order to gain insights from a range of individual perspectives which provides insights into differing or similar perspectives among the participants about the topic or issue. While typical focus groups do not necessarily strive to gain consensus among the participants, for this investigation I used a method that bears semblance to the traditional focus group called a Small Group Instructional Diagnosis (SGID: Black, 1998; Clarke & Redmond, 1982) to collect data from students.

The SGID was developed as a method and process to provide feedback to instructors about students' experiences in the course. It is meant as a type of formative evaluation initiated by a faculty/instructor and carried out by a consultant usually one in the capacity of instructional development. The consultant/instructional developer is invited by the instructor to the class usually during the middle of the semester to get feedback from students about the strengths of the course, what is helping their learning and to provide suggestions for changing the course that will help them as the semester progresses. First, the instructor turns over the course to the

consultant/instructional developer and leaves the classroom. The consultant explains what will take place and the purpose of conducting the SGID, and then divides the students into groups of 4 or 5. Each group is then given a sheet with two questions: 1) What is helping you learn in this course? List specific examples and 2) List changes that could be made to assist you in learning. List specific examples.

The SGID was developed as method and process to provide feedback to instructors about students' experiences in the course. The procedures for conducting a SGID is as follows:

1. Students have about eight minutes to respond to these statements in their groups by coming to consensus.

2. Afterwards each group shares the responses they developed which are recorded by the consultant/instructional developer using some type of overhead projector which can be seen by the entire class. The responses from each group placed on the overhead projector are discussed and clarified by the entire class to develop consensus.

3. After collecting the information from the students, the consultant/instructional developer meets with the faculty/instructor to review the feedback and discuss possible strategies to address students' suggestions and reinforce what students identify as helping their learning (Black, 1998; Clarke & Redmond, 1982).

The value in this approach, while not a traditional "focus group", is that it provides insights into students' perspectives about their course experiences and solicits their participation in the process of improving the course.

I modified the methodology and statements of the Small Group Instructional Diagnosis (SGID: Clarke & Redmond, 1982) to document students perspectives about how the activities, environment, and structure of the course/class helped their learning and facilitated their understanding of cultural awareness about themselves and others as well as what suggestions they had for changes in the activities, structure or environment of the course that would help their learning and facilitate greater cultural awareness about themselves and others

The SGID was conducted at the end of the semester during week 15 – 16 and lasted approximately 15 minutes. This was done when the instructor was not present in the classroom.

When conducting the SGID, first, students were asked to organize themselves in groups of 3 – 5. Each group was then given a SGID form with four questions (See Appendix B) and asked

to respond to the questions as a group. Students were asked to come to a consensus in their groups for each question and write down their responses. The groups had 6 – 8 minutes to generate responses. After all the groups completed their responses, the entire class was brought together to review the same four questions. Each group was asked to report their response to each question which was discussed as a class to achieve consensus for the whole class. The whole class consensus responses were recorded on a PowerPoint which was projected for the entire class to see. If there was no consensus from the entire class, then the item would not be recorded on the PowerPoint. However, since the groups came to a consensus their response would still be recorded on the SGID form which I collected at the end of the fifteen-minute period. Finally, I summarized and analyzed the responses generated from consensus in the groups and the class consensus in the PowerPoint. These responses were then sent to the instructors at the end of the semester as feedback from students about the course which they can use to inform future course design and redesign.

Unfortunately, the full extent of this approach was only possible for Case 1. For Case 2 and 3 because of scheduling conflicts at the end of the semester, it was not possible to gain access to the entire class. The instructors were unable to allot time for me to collect the data in order to ensure students were adequately prepared for their final exams and projects. Therefore, I administered the questions on the SGID form using an open – ended survey through Qualtrics. Since the responses to the SGID questions in the open – ended survey represented individual students rather than consensus within groups or for the entire class, I had to treat this data differently during the analysis because it was not possible to achieve consensus using these responses in the same way as I did administering the SGID for Case 1. While this limited the depth of comparison across all three cases, I was still able to draw meaningful insights about the individual cases and describe similarities and differences which emerged from the data analysis across the cases based on students perspectives.

Nonparticipant Classroom Observations

Nonparticipant observation is where there is no direct involvement in the activities being observed by the observer. It is used primarily in case study research to collect data by observing events, activities or interactions to gain direct understanding about the topic of interest by observing the natural context (Liu & Maitlis, 2012). An advantage of using nonparticipant observation was that it allowed me to enter the classroom space and witness what was happening

in the classroom environment firsthand and not merely interpreting through the eyes of the instructors and the students. However, practically as a method of data collection, nonparticipant observation requires researchers spend extensive time in the field to develop a better picture of what is happening in the space. The extensive time spent at the site using nonparticipant observation also affords the researcher the chance to go through the stages of first *descriptive* observations, followed by *focused* observations and finally *selected* observations, which is a process of increasingly narrower observations of the phenomenon of interest until theoretical saturation is achieved – continued observations only add little or no new information about the phenomenon (Liu & Maitlis, 2012). As the lone researcher conducting this investigation, this was not possible due to time constraints and the magnitude of the investigation.

Other challenges involved in using nonparticipant observation involve researcher/observer ethics and maintaining objectivity. Regarding ethics, nonparticipant observation to some extent raises the researcher's voice to a level of authority above and beyond the participants in describing the events and activities in the space (Liu & Maitlis, 2012). This is a point of concern since it is likely the observer's analysis and interpretation may contradict that of the participants. The observer/researcher ability to remain objective is a point of concern since it is possible, they may simply analyze, or form interpretations based on their own values or beliefs. To address the ethical concerns, Liu and Maitlis (2012) suggest that observers draw on insider (the participants) and outsider (the researcher) accounts which reflect a more collaborative approach to describing the events and activities in the context. They also suggest that researchers can maintain objectivity and develop trustworthiness of the observation data by using rigorous systematic analysis, field notes and data analysis.

In the present investigation, I completed three non-participant observations in each classroom using an observational protocol I created. The first observation was done during week 1 – 4, the second observation half – way through the semester in week 8 – 9, and the third during weeks 12 – 14 of the 16 – week semester. I organized the observations such that I would have data at the beginning of the semester, half – way through the semester and finally towards the end of the semester. In developing the observation protocol, there were certain constraints that I had to account for considering the challenges coupled with the fact that I was the lone researcher in charge of the project. This impacted my decisions in how I designed the protocol and the way I used it in the analysis. Some of the considerations included: 1) the amount time I would spent in the

classroom or number of observations, 2) how to align observation measure with the other measures with respect to operationalizing the variables in concert with the quantitative strand and the goals of the investigation, and 3) effectively and efficiently collect the data in the moment as it is happening since I was not able to have video recordings of the class sessions.

The observation protocol was designed to identify aspects of classroom environment based on autonomy – support and cultural responsiveness as well provide insights into the structure and organization of the classroom environment. To address the challenges as the lone researcher using multiple case study, I developed the observation protocol with two components, one component related to identifying and rating specific practices in the classroom deemed autonomy – supportive and culturally responsive and the other component as a way to record fieldnotes to describe activities and interactions occurring in real time in the classroom. This allowed for me to balance gaining insights into the classroom environment in a more focused way during the three allotted observations by identifying autonomy – supportive and culturally responsive practices in the classroom as well as document specific events, interactions or practices that occurred during the session. The field notes also served to document my feelings and thoughts in the moment as I observed the activities and interactions in the class. This was also used analysis and interpretation of the in addition to my overall reflections in my journal after the observing the sessions.

To develop the observation protocol, I selected items from the 15 – item version of the LCQ which represented behaviors and practices that could be easily observed in the classroom context. Based on a review of literature examples and descriptions of autonomy supportive behaviors were matched with the specific items from the LCQ to provide a clear description of the behavior that would match that particular item. During the literature review some descriptions and examples of autonomy – supportive behaviors were not seen on the LCQ therefore items were created, and appropriate descriptions and examples were included. The protocol was organized based on different conceptualizations of autonomy – support: procedural, organizational and cognitive autonomy – support (Furtak & Kunter, 2012; Stephanou, Perencevich, DiCintio & Turner, 2004). This was done in order to easily identify and categorize the range of autonomy – supportive practices in the classroom as well as ensure that the construct was operationalized in alignment with the theoretical and conceptual framing from the literature.

I used a similar procedure using the items listed on the CRCS. I selected items from the survey that represented behaviors and practices that could be observed in the classroom context. I

reviewed the literature on culturally responsive practices to develop descriptions that would match each item so that I could easily identify the practices and behaviors in the classroom. The cultural responsiveness aspect of the protocol was organized based on the different aspects of cultural responsiveness: inclusiveness, cultural inclusion, sociocritical consciousness and diverse pedagogy. An example of the original and rephrased sample item from LCQ, "I feel that my instructor provides me choices and options" (original), "The instructor provides the students with choices and options" (procedural autonomy – support). An example of original and rephrased sample items from CRCS, "My instructor allows students to use their native language in class during small discussions" (original), "The instructor allows students to use their native language in class during small group discussions" (rephrased). The final observation protocol is presented in Appendix C along with the descriptions for each aspect and item.

I rated behaviors and practices as they were observed on a 5-point scale. An item rated as a 1 meant that the particular behavior or practice was observed but was not consistent with quality execution and best practices, while an item rated as 5 meant that the particular behavior or practice was observed in way that was consistent with a quality execution and best practices. If a behavior was not observed during a class session it was left blank. An example of higher quality autonomy – support involves instructors listening to students' inputs about completing an activity or task, while lower quality would be instructor primarily telling students what to do and how to do it without considerations for how they would approach the task or activity. An example of higher quality cultural responsiveness would be instructors using examples from multiple cultural backgrounds and students lived experiences to connect concepts while lower quality cultural responsiveness would be using examples that reflect only one cultural perspective or ignoring students lived experiences to connect concepts.

I started to record the ratings in the protocol after half of the class period passed. This was so there was enough time to not only record the notes but to gauge the extent to which a practice whether related to autonomy-support or cultural responsiveness matched the descriptions developed based on the literature. The limitation with this approach coupled with the fact that I was the only observer and there was no video recording was that sometimes I would miss something that happened either a particular interaction or expression or slide that would have reflected one of these practices and it would not be recorded. Having the field notes and the reflection journal also helped to recall different things that were said and done in the classroom

that either did not fit into any of the descriptions of autonomy – support and cultural responsiveness or I was not able to record in the moment. The ratings reflected in the present investigation only represent practices as they were recorded in the classroom at that specific time. Developing the observation with two components, one that was developed from the literature and established works and the field notes section which served to document field notes allowed me to maintain some level of objectivity in the data collection process and provided additional sources of analysis which were useful in analyzing and interpreting the observation data.   The observation data was used primarily as a secondary source of data in the analysis and interpretation of the findings based on what was found in the other sources of data. This is discussed further in the analysis and interpretation section.

Documents

Documents include written, visual, and physical material, including artifacts that can be used to provide further insights about the case (Merriam & Tisdell, 2015). Merriam and Tisdell (2015) maintain that these are items that existed before the start of the investigation but could also be generated during the research process. Depending on the author documents can be used to provide insights into the perspectives and experiences of the participants in the case or the case. As part of my data collection I included course syllabi and different artifacts such as class activities and assignments. These served as secondary sources of data that aided in the analysis to provide greater context for the overall structure and organization of the course as well as insights into the instructors' perspective and student perspectives. These were used as references and in some instances to provide clarity and context for specific activities as well as the general structure and organization of the course/class.

Validation and Trustworthiness

To ensure the validity, reliability and trustworthiness of the data, results and subsequent interpretations I followed specific procedures unique to both quantitative and qualitative methods. The measures used in the quantitative strand were drawn from the literature and those that were developed and tested had acceptable construct validity and reliability evidence. For the qualitative strand trustworthiness of the data, analysis and interpretation was established by triangulating

different sources of data, using feedback from an expert in qualitative methods (faculty member) who reviewed initial codes based on the different sources of data across the cases and provided feedback for revisions to initial coding procedures, as well as reviewing and reporting disconfirming and divergent findings (Creswell & Plano Clarke, 2015, 2018) informed by the literature. Additionally, I used memos and reflection journals both during data collection and analysis to maintain reflexivity and bracket my assumptions and presuppositions about the constructs and the relationships among them.

Mixing and Integrating Data Analysis and Interpretation

The data were mixed and integrated at two levels. First in the case analysis for the qualitative strand and second in interpreting the findings from the quantitative strand and the qualitative strand to address the overall research goals and questions. Because the three cases were also included in the quantitative strand, the quantitative results based on the instructors' degree of intercultural competence and diversity inclusivity along with other close ended questions about the instructors' general perceptions towards addressing culture and diversity in their teaching and facilitating student learning were also included. The students' perceptions of the classroom environment and educational outcomes were also integrated for the specific cases. These data were integrated with different qualitative sources to form rich and thick descriptions of each case. I also transformed data from classroom observations into frequency data to compare autonomy – supportive and culturally responsive practices across the classes.   The overall results and findings from both the quantitative and qualitative strands were interpreted to provide a holistic understanding of the relationships among the variables as well as from the instructors' and students' perspectives based on the results obtained across multiple sources of data. By mixing and integrating the data I was able to triangulate data across the different sources and compare instructors and students' perspectives.

Multiple Case Study Analysis

According to Stake (2006), the most important job for the researcher in a multicase research is to show how the program or phenomenon being studied appears in different contexts. He further maintains that in studies that have a more qualitative focus greater emphasis will be placed on the

experiences of the people in the program or with the phenomenon. The present investigation draws on both quantitative and qualitative methods grounded in specific theoretical conceptualizations of the classroom environment and participants involved in the teaching and learning process. The integrated theoretical and conceptual frameworks which were used as the basis for conceptualizing and operationalizing the variables examined in the present investigation were also incorporated in analyzing and interpreting the data collected for the three cases. In parallel with the quantitative strand which explored the relationship between the instructors' intercultural orientation and degree of diversity inclusivity with respect to students' perceptions of the classroom environment as autonomy – supportive and culturally responsive, the qualitative strand also explored this relationship in the context of the three classroom/course cases. Therefore, in the data collection and analysis process efforts were made to draw on the theoretical conceptualizations of the classroom environment as well as participants experiences to describe the individual cases as well as develop and describe common themes across the cases based on patterns observed in the different sources of data.

One of the challenges I encountered in the data collection and analysis process was the fact that I was not able to obtain the exact source of data for each case as shown in Table 7. This made it difficult to compare cases based on the specific sources of data, therefore I chose to focus on the patterns that revealed similarities and differences in themes across the cases in addition to different perspectives (i.e. instructors, students and researcher). NVivo version 12 Pro provided the means for organizing, categorizing, coding, and developing themes based on the qualitative sources of data.

The analysis and interpretation of the data within and across the cases was conducted through an iterative process which involved: identifying patterns based on reviewing primary sources of data for each case and developing codes and themes guided by the research questions, 2) checking across secondary sources of data and perspectives for convergence or divergence with codes and themes identified from the primary sources for each case, 3) reviewing reflections and developing synthesis of codes and general themes using analytic memos and annotations within each case, 4) applying different theoretical and conceptual frameworks to develop the coding structure for the cross-case analysis based on the patterns that emerged within each case across the different sources of data and 5) integrating quantitative data from each case related to instructors' degree of intercultural competence and diversity inclusivity, students' perceptions of the classroom

environment as autonomy – supportive and culturally responsive and development of components of intercultural knowledge and competence to develop rich and thick descriptions of each case in the cross – case analysis.

Preliminary Analysis

The procedures conducted during the preliminary analysis served the purpose of organizing the data for coding and developing themes as well as helping me to familiarize myself with the data. The notion that data analysis started during data collection was quite new to me since most of my previous work and training was large quantitative. Merriam and Tisdell (2015) maintain that,

> Data collection and analysis are simultaneous activities in qualitative research. Analysis begins with the first interview, the first observation, the first document read. Emerging insights, hunches, and tentative hypotheses direct the next phase of data collection, which in turn leads to the refinement or reformulation of questions, and so on. It is an interactive process throughout that allows the investigator to produce believable and trustworthy findings (p. 191).

While I did not systematically engage in any coding or theme development, the process of keeping reflection journals after the observations and interviews as well as developing the organizational system for uploading, checking and verifying the contents and quality of the data across the different sources allowed me to begin thinking about the data analysis, possible themes and how it connected to the theoretical and conceptual frameworks.

The data analysis process started with developing an organizational structure for the files for each case in NVivo. During this process I created a project log which documented the activities I performed on each data source within each case. The primary and secondary data sources were uploaded to NVivo with assigned labels to the specific case. The audio files for the interviews were transcribed verbatim using NVivo transcription. I then listened to audio and corrected the transcript for each case. I also transferred data from the SGID focus group and the open – ended survey into a format that was compatible with NVivo for coding since the data was recorded in PowerPoint (class consensus) and on the SGID forms (group consensus) for Case 1 and in Qualtrics for Cases 2 and 3. For Case 1 I separated the responses based on group consensus and general class consensus for each question while for Cases 2 and 3 I simply separated the responses based on the four questions. I also maintained the original individual responses to the complete

open – ended survey in order to have access to the complete response set for each student from each class. I also uploaded the data course syllabus for each as along with specific class assignments (Case 1).

The fieldnotes from the observations I conducted which were handwritten, I typed out and uploaded to NVivo and labelled according to the specific time in the semester I collected the data for each class ([Observation 1] Week 1 – 4, [Observation 2] Week 8 – 9 and [Observation 3] Week 12 – 14). Since the fieldnotes not only included my in the moment reactions as well as the specific interactions and activities I observed in the classroom I highlighted these separately to manage my assumptions and biases and account for them in the analysis process. Additionally, the reflections after the observation were also uploaded for each case to be used in the analysis process as means of managing my assumptions as well as a secondary source of data which provided insights into my earlier thoughts about what I was observing in the classroom in relation to the conceptual and theoretical frameworks used in the investigation. These reflections were not structured, therefore the contents varied widely so I did not conduct any systematic analysis. They merely served as references to bring me back to the classroom context as I observed different patterns across the different sources of data.

I also counted and tabulated the number of autonomy-supportive and culturally responsive practices I recorded using the observation protocol for each case based on the different aspects on the protocol and the ratings on the 5 – point scale. Figure E.1 (Appendix E) shows the total number of autonomy – supportive practices divided across the different forms of autonomy – support identified from the literature (procedural, organizational and cognitive). This was calculated by counting the total number of items for each aspect that I observed for each case over the course of the three observations I conducted. I did the same for each aspect of culturally responsiveness on the protocol. The rating on the 5 – point scale was separated in terms of quality where practices rated 1 – 2 represent lower quality and 3 – 5 representing higher quality. I combined all aspects of autonomy – support identified on the protocol, then counted the number of items (i.e. observed practices) rated 1 – 2 to represent lower quality forms of autonomy – support that I observed and the number of items rated 3 – 5 that I recorded as higher quality autonomy support. The same approach was taken for cultural responsiveness in determining the number of lower quality and higher quality items observed related to cultural responsiveness by counting all the items rated 1 – 2 and those rated 3 – 5.

[5]Since these ratings were done in the moment during the time of data collection and months had elapsed between the actual ratings and the data analysis, the ratings were not treated as primary sources of data. The lapse in time coupled with the fact that I was the only observer collecting the data and there was no video recording for the sessions, limited the assertions that I was able to make using this aspect of the observation data. Therefore, the results displayed in Figures E.1 and E.2 (Appendix E) were used in conjunction with the fieldnotes as well as other sources of the data facilitate a richer description of the classroom environment and what was happening in each class. I used the frequency data, along with my fieldnotes and reflections to develop *Observation Summaries*. *Observation Summaries* are a description of the general classroom environment and atmosphere. These summaries identify salient observations in the respective classrooms that show aspects of autonomy – support and cultural responsiveness being demonstrated or undermined as well as highlight practices or observations that were consistently observed over the course of the three observations I conducted. The observation summaries were used in the cross analysis to provide general description of the classroom environment for each case.

The classroom observations provided a portion of the portrait that was overall classroom environment of each course. By combining the observation notes and the ratings on the different aspects of autonomy – support and cultural responsiveness with the instructor interviews, student responses to the open ended survey, the focus group (SGID) and the respective quantitative data from students and instructors, I was able to address the specific research questions associated with the qualitative strand as well as the overall goals of the investigation.

After organizing all the data for each case in NVivo, the next step was to commence the coding and development of themes. This was done in conjunction with Stake (2006) recommendations, starting with within cases analysis and triangulation across data sources in each case to develop codes and themes which form the basis for analysis across the cases used to describe the similarities and differences across the cases. In the subsequent sections I describe the within case and cross cases procedures which contributed to the development of the themes described in Chapter 4.

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[5] The observation ratings using the five-point scale was designed to aid the observer in identifying specific autonomy – supportive and culturally responsive practices based on the conceptualizations from the literature. Since there was no additional rater neither was there any video recording these data were not treated at the same level as other data sources. The number of practices and distinction of quality reflect only what the observer (I) saw in the moment. These were treated as secondary and in conjunction with other sources of data to describe the cases. This is a limitation in the present investigation and thus the observation reports should be interpreted in light of these circumstances along with other challenges discussed in sections describing the use of the nonparticipant observation method.

Within Case Analysis

Within case analysis involves an in-depth exploration of a single case to understand the specific phenomenon (Paterson, 2012). One of the key processes involved in the within and cross case analysis is triangulation. Stake (2006) describes triangulation in multicase research as the process of gaining assurances about the meanings and interpretations of what is seen and heard based on the different sources of data. It provides assurance that the right information and interpretations were obtained. Each important finding Stake (2006) suggests needs at least three or more confirmations and assurances which ensures that the subsequent interpretations are supported by the data. Stake (2006) also draws attention to Norman Denzin (1989 as cited in Stake, 2006) synthesis of different types of triangulation which include: a) using multiple rather than single observers of the same thing, b) using second and third perspectives or more (e.g. views of parents and kids as well as teachers), c) using more than one research method (e.g. document review and interview), and d) carefully checking the extent to which the total description can be generalized. In conducting the within and cross case analysis the suggestions identified in b and c were primarily considered, in addition to ensuring that each category or theme as well as subsequent findings for each case and across cases were supported by three or more confirmations.

Initial Codes and Categories

The questions (*see* Appendices A and B) from the primary sources of data (i.e. instructor interviews and SGID focus group and Open-ended) were used to create initial codes and categories for coding the data. These initial codes and categories reflected different aspects of the theoretical and conceptual frameworks from both the instructor and students' perspective which aligned with the specific research questions for the qualitative strand: 1) To what extent instructors address culture and diversity in creating their course and cultivating the classroom environment and 2) To what extent is the classroom environment instructors cultivate similar or different than students' perceptions and experiences in the class? I then reviewed the responses from the respective respondents (i.e. instructors and students) and assigned specific aspects of the data to each category and code. I coded the sections broadly and used annotations and wrote reflections related to specific questions and responses which would warrant further exploration in conjunction with other data sources. The observation fieldnotes and review of course syllabi were used as a means

of triangulating the findings and patterns that were seen in instructor interviews and the students' responses to the SGID questions collected through the SGID focus group and the open – ended survey.

I coded each case completely triangulating the data across all sources before coding the next case. Therefore, all the data sources were coded completely for CASE 1, followed by CASE 2 and finally CASE 3. I also used analytic memos to record emerging patterns I was observing in each data source related to theoretical and conceptual frameworks and the research questions. Additionally, after completely analyzing a case I wrote an analytic memo summarizing the coding process, my feelings and reactions about specific data points which I thought would be useful in cross- case analysis and developing the final themes. According to Saldana (2013),

> The purposes of analytic memo writing are to document and reflect on: your coding processes and code choices; how the process of inquiry is taking shape; and the emergent patterns, categories and subcategories, themes, and concepts in your data – all possibly leading toward theory (pg. 41).

The analytic memos I wrote for each case were structured as individual case reports which gave me insights into each individual case and set the stage for the cross - case analysis. The memos and reflections during the data collection process were also ways to address reflexivity. Being reflexive involves systematic documentation of the researcher's thoughts and assumptions that impact the research process. The reflections and memos helped me see how my aspirations to be a professor, personal worldview, and experiences in instructional development influenced what I choose to observe and highlight or not observe. By having the reflections, I was able to be more focused in my analysis by not simply looking on what I would have liked to see but what happened. Additionally, the reflections and memos helped me to approach the data from different perspectives looking at the data through the experiences of the participants not simply applying my own evaluative lens, rather allowing what the instructors and students said and did to speak for itself. This way I was able to develop a more nuanced interpretation of the findings within and across the cases as well as when integrating the quantitative and qualitative data.

Cross – Case Analysis

Cross case analysis involves examining themes, similarities and differences across individual cases (Burns, 2012). For Stake (2006), cross – case analysis involves reading the individual case reports

and applying the findings of the experiences within the respective contexts to the research questions of the quintain (i.e. the phenomenon being studied). First, I reviewed the analytic memo I wrote for each individual case. This allowed me to identify specific codes from the within the case analysis and then review the data that was coded. Based on the two research questions associated with the qualitative strand, I separated the codes which aligned with addressing the different research questions of the qualitative strand:

   a) To what extent instructors address culture and diversity in creating their course and cultivating the classroom environment and

   b) To what extent is the classroom environment instructors cultivate similar or different than students' perceptions and experiences in the class?

Based on the initial codes used in the within case analysis and the data coded, I developed a new coding structure which aligned with the specific theoretical and conceptual frameworks related to instructors' orientations towards culture and diversity (i.e. intercultural development theory and diversity inclusivity) and the structure and organization of the classroom environment as culturally responsive and autonomy -supportive. I proceeded to code the data again more specifically looking at aspects of the data from both the instructors and students perspective across the different data sources that revealed insights into course being structured in ways that addressed elements of culture and diversity, aspects of the classroom environment that reflected autonomy – support and cultural responsiveness comparing what instructors said they did, what I observed in the classroom and students' perceptions as well as reported experiences. This allowed me to develop greater depth of insight into how the responses provided by students and instructors to the specific prompts and questions, compared not only within cases (i.e. in individual classrooms) but across cases (the university classrooms as a whole). Although I was using a specific coding structure, I remained open to new codes which emerged from coding the data again that highlighted findings that aligned with theory or raised questions about specific aspects of the theoretical and conceptual frameworks.

I wrote an analytic memo to document patterns that emerged across different perspectives and data sources which addressed the research questions with respect to the new coding structure. In this way I was able to synthesize my thoughts based on the data which represented the participants voices and my analysis of the documents and observations with theoretical and conceptual frameworks I used. Finally, I used the integrated conceptual approach and points of

convergence between Multicultural Education (CRPTE) and SDT presented in Figure 4 and Table 3 to develop themes that reflected the patterns observed in the data across the three cases. These themes are presented and discussed in Chapter 4 along with the results.

Aligning Perspectives with Theoretical and Conceptual Frameworks

As stated earlier, the qualitative strand provided the means to examine what classroom environments looked in university contexts using the multiple case study approach. The theoretical and conceptual frameworks used in the present investigation although were validated in different educational contexts, the integrated approach I have adopted has not been fully examined in university contexts beyond the references discussed in chapter 2 (see Ginsberg & Wlodkowski, 2009). To this end, the analysis and interpretation of the data within and across the different cases was guided by: a) the theoretical conceptualizations of instructors orientations and perceptions towards culture and diversity (i.e. intercultural competence and diversity inclusivity) and b) the conceptualizations of the classroom environment (i.e. autonomy – support and cultural responsiveness) that instructors cultivate for and with their students. These were used as the basis for developing codes and subsequently the themes based on analysis of the different data sources with respect to the participants voices and experiences as well as my synthesis and analysis of observations and document reviews. The theoretical and conceptual frameworks were primarily applied in developing the codes and themes in the cross – case analysis and the themes used to describe the results of the analysis across the cases.

CHAPTER 4. RESULTS

The goal of this investigation was to use a mixed methods design and integrated theoretical approach to explore the extent to which university instructors' intercultural competence and degree of course diversity inclusivity relates to students' perceptions of the classroom environment as culturally responsive and autonomy – supportive and associated with educational outcomes related to academic motivation, perceived achievement and intercultural knowledge and competence development. Four specific research questions guided this investigation:

1. To what extent does instructors' intercultural competence and degree of diversity inclusivity relate to students' perceptions of the classroom environment as culturally responsive and autonomy – supportive?

2. To what extent does instructors' intercultural competence and degree of diversity inclusivity relate to students' academic motivation, perceived academic achievement and intercultural knowledge and competence development?

3. To what extent instructors address culture and diversity in creating their course and cultivating the classroom environment?

4. To what extent is the classroom environment instructors cultivate similar or different than students' perceptions and experiences in the class?

This chapter describes and explains the results based on data collected and analyzed using quantitative and qualitative procedures. The chapter is divided into three main sections with subsections. The first section (Section 1) is divided into three subsections; it describes and explains the quantitative results based on aggregated data collected from instructors and students. The first subsection (Section 1.1) describes the results from the instructors' and students' perspective with respect to the relationship among the variables. The second subsection (Section 1.2) includes results in response to research questions for the quantitative strand. The final subsection (Section 1.3) briefly summarizes and discusses the quantitative findings.

The second section of the chapter (Section 2) is also divided into two subsections that describe and explain the qualitative results based on the three cases (i.e. classes/courses). In the first subsection (Section 2.1), I describe and compare the three cases based on four themes and subthemes which I developed from analyzing the data across the cases and integrating specific

data for each case from the quantitative strand. In the next subsection (Section 2.2), I briefly summarize and discuss the findings from the qualitative strand in relation research questions. In the third and final section of the chapter, I discuss and interpret the findings from both the quantitative and qualitative strands. I integrate the results and findings from the quantitative and qualitative strand as a response to overall research goals.

Section 1: Quantitative Results

Section 1.1 Instructors Analysis and Results

Table 9 summarizes the results based on instructors' responses to the IDI® and the Diversity Inclusivity Survey. The Perceived Orientation score (PO score) and associated orientation represents where each instructor place themselves on the IDC® while the Developmental Orientation Score (DO score) and associated orientation represents the primary orientation instructors use as they attempt to bridge across cultural differences and commonalities as assessed by the IDI®. On average instructors placed themselves along the continuum (PO) representing an *Acceptance Orientation* (*M* = 123.32, *SD* = 11.04). This result suggests that instructors perceive that they can recognize and appreciate patterns of cultural differences and commonalities in their own as well as other cultures. This orientation represents a more intercultural orientation/mindset which suggests the instructors' capacity to accurately adapt to cultural differences and commonalities and cultivate inclusive learning environments by being aware of their own and others culture.

However, based on the IDI® (DO), instructors' scores on average represent a *Minimization Orientation* (*M* = 98.51, *SD* = 24.73). These results suggest that instructors' primary orientation involves highlighting cultural commonality and universal values and principles that may sometimes lead to masking deeper recognition and appreciation of cultural differences. Overall, the results show that 73% (8 instructors) based on their PO score have more intercultural orientations and 27% (3 instructors) have more monocultural orientations. However, examining the DO score revealed that only 18% (2 instructors) primary orientation reflected the more intercultural orientations, 27% (3 instructors) demonstrated more monocultural orientations, while the majority 55% (6 instructors) displayed a minimization orientation.

Overall, the results from the instructor IDI® suggest that instructors perceived themselves to be more interculturally competent reflecting more intercultural orientations based on their PO score which was not consistent with their primary orientation as recorded by the IDI® denoted by the DO score. Table 8 provides a description of the intercultural orientations comparing instructors perceived intercultural orientation to their developmental orientation in an educational context. This kind of mismatch between individual perception and primary orientation is very common. The IDI® scoring metric suggests that a discrepancy greater than 7 points between the PO and DO score suggests a meaningful difference between the scores. A gap scores greater than 7 points suggests that the individual has overestimated their degree of intercultural competence referred to as an Orientation Gap (OG) (Hammer, 2011). Instructors on average had an OG of ($M = 24.81$, $SD = 14.03$). The results from the IDI® provides insights on instructors' interactions and perspectives when encountering cultural differences and similarities with respect to individual and potentially group differences and the descriptions provides insights strengths and challenges instructors may face in an educational context. Considering the descriptions of the different orientations described in Table 8 for the instructors in the present sample, it is possible to see the differences in how instructors with the respective orientations would approach teaching and learning and cultivate the classroom environment. This does not mean that these instructors display none of the characteristics related to the Acceptance orientation. Since the IDI® scores are organized along a continuum it is very likely that in general these instructors display some of the characteristics associated with Acceptance, but their primary approach tends towards reflect those characteristics associated with the Minimization orientation. Being able to identify the specific tendencies based on both instructors perceived and developmental orientation is useful in helping them not only personally develop their intercultural competence but specifically in the context how they design their course and interact with students. More targeted interventions can be developed for instructors based on their degree of intercultural development and they themselves can make use of the information to make changes in their teaching practices.

Table 8

Descriptions Comparing Average Instructors Perceived and Developmental Intercultural Orientations

Perceived Orientation: *Acceptance*	**Developmental Orientation:** *Minimization*
1. Recognizes commonalities across diverse groups and values cultural differences. Accurate sense of what it means to create an inclusive environment.	1. Able to identify and use relevant commonalities to bridge across cultural diversity among faculty, staff and students.
2. Open to using different teaching strategies, recognizing that students participate in class discussions and learn through different methods depending on the cultural frameworks they have gained from their culture.	2. Uses teaching strategies found to be successful in a variety of classroom situations to ensure everyone has an opportunity to participate in class discussions and learn.
3. Have some awareness and understanding that there are different, culturally learned ways students participate in classroom discussions.	3. May not be as attentive to how cultural differences need to be recognized and adapted to in the classroom to help students learn more effectively.
4. May have challenges identifying and implementing specific adaptive teaching strategies that facilitate cross-cultural learning.	4. May experience frustration when culturally diverse students do not participate in class discussions as often.
5. May have difficulty developing creative, mutually adaptive teaching and learning approaches.	5. Lacks awareness about effective teaching strategies for students whose learning approach is culturally different.

Characteristics Adapted from Different IDI® Profile Examples Hammer (2020)

Table 9

Descriptives for Instructors Intercultural Competence and Diversity Inclusivity

INSTRUCTORS	PO Score	DO Score	IORTPO	IORTDO	DVINC	MDVINC
Instructor A	123.73	100.5	Intercultural	Minimization	LDI	2.92
Instructor B	125.74	109.41	Intercultural	Minimization	LDI	2.92
*Instructor C	**111.59**	**68.51**	**Minimization**	**Monocultural**	**HDI**	**3.58**
Instructor D	109.9	66.16	Minimization	Monocultural	LDI	1.75
Instructor E	119.68	88.36	Intercultural	Minimization	LDI	2.08
Instructor F	128.96	102.73	Intercultural	Minimization	LDI	2.50
Instructor G	111.5	73.95	Minimization	Monocultural	LDI	2.18
*Instructor H	**147.14**	**147.14**	**Intercultural**	**Intercultural**	**HDI**	**3.25**
Instructor I	127.11	114.25	Intercultural	Minimization	LDI	1.42
Instructor J	117.85	89.13	Intercultural	Minimization	LDI	2.25
*Instructor K	**133.35**	**123.46**	**Intercultural**	**Intercultural**	**HDI**	**3.33**

*Instructors in Case Study, PO=Perceived Orientation, DO=Developmental Orientation, IORTPO=Perceived Intercultural Orientation, IORTDO=Developmental Intercultural Orientation, DI Diversity Inclusivity=MDI=Mean diversity Inclusivity HDI=High Diversity Inclusivity and LDI = Low Diversity Inclusivity

The Diversity Inclusivity Survey provided insights into specifically what instructors did in their courses to address diversity. After calculating the overall mean for each instructor responses, the scores were grouped into high or low inclusivity such that scores less than 3 represented low diversity inclusivity (LDI) and scores greater than 3 represented high diversity inclusivity (HDI). Low diversity inclusivity means that instructors seldom considered diversity as they design and implement their course. High diversity inclusivity means that instructors more often than not considered diversity as part of their course based on the elements of the Diversity Inclusivity Framework (DIF: Nelson Laird, 2011, 2014; Nelson Laird & Engberg, 2011). The results show that 73% (8 instructors) had low diversity inclusivity in their course while the remainder were classified as high diversity inclusivity approximately 27% (3 instructors). Table 9 shows the percentage of instructors who considered diversity inclusivity as part of their course based on the different elements of course design and implementation.

The results show that in general instructors considered diversity with varying degrees for different aspects of their course. Majority of the instructors considered diversity more often than not in relation to the *foundational perspectives* addressed in the course, the *learners/students' perspectives* by attempting to understand student characteristics, the *pedagogical strategies* used

to empower to students, creating a *classroom environment* that all students are engaged, using *multiple assessment techniques* and *adjusting* the course based on student needs. However, diversity inclusivity with respect to the *purpose and goals* of the course, *the content*, and *exploring their own biases* were less frequently considered by instructors. The Diversity Inclusivity Scale as described earlier is comprised of two sub scales Diverse Grounding Subscale (DGS) and the Inclusive Learning Subscale (ILS). Based on the results shown in Table 9 we can see that instructors' diversity inclusivity in their course mostly focused on elements related to inclusive learning denoted by the ILS. However, elements of course design and implementation with respect to diverse grounding denoted by DGS were considered less except the foundations and perspectives.

Table 10

Showing the Extent to which Instructors considered Different Elements of Diversity in their Course

Course Elements	Item from DIS	Very Little	Some	Quite a Bit	Very Much
Purpose/Goals (DGS)	Students gain an understanding of how course topics connect to societal problems or issues	**5 (45.5%)**	2 (18.2%)	3 (27.3%)	1 (9.1%)
Purpose/Goals (DGS)	Students develop skills necessary to work effectively with people from various backgrounds	-	**8 (72.7%)**	2 (18.2%)	1 (9.1%)
Content (DGS)	The course content covers contributions to the field by people from multiple cultures	**5 (45.5%)**	3 (27.3%)	2 (18.2%)	1 (9.1%)
Foundations/ Perspectives (DGS)	The course emphasizes multiple approaches to analyzing issues or solving problems	1 (9.1%)	2 (18.2%)	**5 (45.5%)**	3 (27.3%)
Instructor (s) (DGS)	You explore your own cultural and scholarly biases as part of class preparation	**4 (36.4%)**	3 (27.3%)	3 (27.3%)	1 (9.1%)
Instructor (s) (DGS)	You address your potential biases about course-related issues during class	**5 (45.5%)**	3 (27.3%)	3 (27.3%)	-
Learner(s) (ILS)	You learn about student characteristics in order to improve class instruction	1 (9.1%)	3 (27.3%)	**4 (36.4%)**	3 (27.3%)
Pedagogy (ILS)	You vary your teaching methods to allow for the multiple ways students learn	1 (9.1%)	2 (18.2%)	**4 (36.4%)**	**4 (36.4%)**
Pedagogy (ILS)	Students feel empowered in their learning	-	2 (18.2%)	**7 (63.6%)**	2 (18.2%)
Classroom Environment (ILS)	The classroom atmosphere encourages the active participation of all students	-	3 (27.3%)	3 (27.3%)	**5 (45.5%)**
Assessment/Evaluation (ILS)	You evaluate student learning using multiple techniques	1 (9.1%)	**4 (36.4%)**	**4 (36.4%)**	2 (18.2%)
Adjustment (ILS)	You adjust aspects of the course based on students learning needs.	1 (9.1%)	2 (18.2%)	3 (27.3%)	**5 (45.5%)**

Intercultural Competence and Diversity Inclusivity

The relationship between diversity inclusivity and intercultural competence although positive *r*=.30 was not statistically significant. However, the results described above highlight how different instructors regardless of their degree of intercultural competence consider diversity as part of their teaching but with varying degrees of emphasis on different elements of the course. It is reasonable to expect that the more interculturally competent an instructor the more inclusive of diversity they would be. The results from Table 8 show that instructors with a developmental orientation representing more intercultural orientations (i.e. acceptance and adaptation) tend to also be high in diversity inclusivity. However, instructors with monocultural orientations (i.e. denial and polarization) tend to be low in diversity inclusivity except for Instructor C. In general, the data suggest that instructors with a minimization orientation although classified here as having low diversity inclusivity in their course, vary in their degree of inclusivity. This is possibly because there is a large range in the scores for the minimization orientation between 85 and 115 points. This range allows for a great deal of variability in how the individual perceives and engages in situations involving cultural differences and commonalities as well as consider including diversity for different elements of their course.

Notwithstanding these generally consistent findings, Instructor C represents a peculiar case which will be examined further along with Instructor H and Instructor K. Instructor C has the second lowest developmental orientation score but the highest degree of diversity inclusivity. In the next section I describe results of the analysis showing the relationships among variables from the students' perspective related to perceptions of the classroom climate, academic motivation, achievement and intercultural knowledge & competence development. This analysis was undertaken to a) examine the relationship between autonomy – support and cultural responsiveness, b) identify specific distinctions between the constructs and c) the relationship between autonomy – support and cultural responsiveness with different educational outcomes.

Section 1.1 Students' Perceptions Analysis and Results

The correlations in Table 11 show the relationships among student perceptions of the classroom climate/environment as culturally responsive and autonomy – supportive, their academic motivation, self – report GPA and intercultural knowledge and competence

development. The interpretation of the correlations was guided by Cohen (1977), where small r =.10, medium r= .30 and large r= .50 represented strength and effect of the relationship among the respective variables. Firstly, I focus specifically on the relationships among the measures of the classroom environment as autonomy – supportive (ASLC) and culturally responsive (CRLC) including the different aspects of cultural responsiveness namely: cultural inclusion (CRCI), inclusiveness (CRIN), diverse pedagogy (CRDP) and sociocritical consciousness (CRSC). Secondly, I summarize the relationships between perceived autonomy – support and intercultural knowledge competence development compared to the different aspects of cultural responsiveness. Thirdly, I focus on the relationship between the different aspects of cultural responsiveness and autonomous motivation. By examining the correlations, it was possible to gain insights into similarities and differences between the autonomy – supportiveness and cultural responsiveness of the classroom environment.

Autonomy – Supportive and Culturally Responsive

The results reveal a strong positive relationship (r=.81) between autonomy – support (ASLC,) and overall cultural responsiveness (CRLC). The results also show that sociopolitical consciousness (CRSC) and cultural inclusion (CRCI) which are explicit aspects of cultural responsiveness that differ conceptually and operationally from overall autonomy – support have different strength in relationship with ASLC (r=.62) and (r=.55) respectively compared to diverse pedagogy (CRDP, r=.78) and inclusiveness (CRIN, r=.89). Both CRSC and CRCI explicitly focus on aspects of the classroom environment that address cultural differences and similarities and how instructors facilitate students' thinking about social issues in the environment and around the world with respect to subject matter and students' lived experiences. Nevertheless, despite the difference in strength, there is a strong positive correlation between autonomy – support and different aspects of cultural responsiveness.

Autonomy Support, Cultural Responsiveness, Intercultural Development & Achievement

Students' perceptions of intercultural knowledge and competence development (IKC) had a weak positive correlation with perceived autonomy – support (r=.27) but a moderate positive correlation with the overall cultural responsiveness of the classroom environment (r=.45).

Regarding specific aspects of cultural responsiveness, the correlations between IKC were generally stronger for cultural inclusion (CRCI, $r=.41$) and sociocritical conscious (CRSC, $r=.52$) than for diverse pedagogy (CRDP, $r=.35$) and inclusiveness (CRIN, $r=.28$). While these results do not suggest the need to simply structure and organize classroom environments based on these aspects of cultural responsiveness (CRSC and CRCI); it does seem implicit that these aspects of cultural responsiveness add a separate but related element to the overall classroom environment which may not be accounted for in an exclusively autonomy – supportive classroom environment. Further analysis however would be needed. Overall, the correlations between students' perceptions of the classroom environment and their anticipated course grade were positive though weak to moderate in strength except for cultural inclusion which was not significantly correlated with students anticipated course grade. Interestingly, intercultural knowledge and competence was not significantly correlated with students anticipated final grade.

Cultural Responsiveness and Academic Motivation

The results reveal that overall cultural responsiveness (CRLC) has a strong positive correlation ($r = .58$) with autonomous motivation (ATOM) but no relationship with controlled motivation (CTMOT). Regarding specific aspects of cultural responsiveness and different motivational regulations the results show that perceptions of sociocritical consciousness (CRSC), diverse pedagogy (CRDP), cultural inclusion (CRCI) and inclusiveness (CRIN) have moderate to strong positive relationships with intrinsic (IM), integrated (INTEG) and identified (IDEN) regulations. Correlations were highest between Identified regulation (IDEN) and the different aspects of cultural responsiveness. There was no relationship between the different aspects of cultural responsiveness and the controlled regulations (introjected [INTRO], external [ER]) except for amotivation (AMOT) where there were weak to moderate negative correlations. In general, the results here show that students experience more autonomous forms of motivation compared to controlled forms of motivation when the classroom environment is culturally responsive. These results are generally as expected.

Overall, the results here provide some initial evidence where the conceptual and operational overlaps and distinctions are between autonomy – support and cultural responsiveness with respect to educational outcomes in university contexts. While the relationships were generally consistent and expected across both autonomy – support and cultural responsiveness (including

the different aspects), the relationships among sociopolitical consciousness and cultural inclusion with intercultural knowledge and competence development (.52 and .41 respectively) compared to autonomy – support (.27) reveal to some extent that while autonomy – support is good it is important to more explicitly consider social and cultural factors in the classroom environment in order to meet crucial societal outcomes. This is discussed further in chapter 5. The results from the correlations provided the basis to examine the extent to which students' perceptions of the classroom environment and educational outcomes was associated with instructors' degree of intercultural competence and diversity inclusivity in their course.

Table 11

Correlations Based on Students Perceptions

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	M	SD
1. GPA	1																	3.25	0.51
2. ASLC	-0.10	1																5.13	1.36
3. CRLC	-0.07	.81**	1															4.99	1.22
4. CRSC	-0.01	.62**	.88**	1														4.82	1.48
5. CRCI	-0.11	.55**	.85**	.69**	1													4.77	1.32
6. CRDP	-0.06	.78**	.89**	.70**	.64**	1												5.04	1.37
7. CRIN	-0.10	.89**	.89**	.66**	.65**	.79**	1											5.40	1.38
8. IM	0.07	.45**	.47**	.44**	.28**	.49**	.39**	1										3.65	1.64
9. INTEG	0.14	.45**	.47**	.42**	.36**	.46**	.39**	.54**	1									4.52	1.36
10. IDEN	0.06	.59**	.61**	.56**	.43**	.59**	.54**	.74**	.75**	1								4.65	1.35
11. INTRO	.18*	-0.03	-0.03	-0.06	-0.03	0.02	-0.01	0.05	.18*	.19*	1							3.73	1.67
12. ER	0.01	0.02	0.07	0.02	0.08	0.08	0.07	-.20*	-0.06	0.03	.42**	1						4.88	1.35
13. AM	0.02	-.43**	-0.33**	-.21**	-.21**	-.36**	-.38**	-.22**	-0.17*	-.32**	.28**	0.12	1					2.56	1.53
14. ATMOT	0.10	.56**	.58**	.54**	.40**	.58**	.50**	.88**	.85**	.93**	0.15	-0.09	-.26**	1				4.27	1.28
15. CTMOT	0.13	-0.01	0.02	-0.03	0.02	0.05	0.03	-0.07	0.09	0.14	.88**	.80**	.25**	0.05	1			4.31	1.28
16. IKC	0.07	.27**	.45**	.52**	.41**	.35**	.28**	.19*	.39**	.36**	-0.10	0.04	-0.08	.35**	-0.04	1		4.26	1.21
17. EFG	.35**	.28**	.24**	.23**	.11	.29**	.21**	.36**	.27**	.33**	.02	-.02	-.36**	.37**	.01	.13	1	3.23	0.85

Statistically significant *<.05 and ** <.01. GPA = Grade point average, ASLC = autonomy – supportive classroom climate/autonomy - supportiveness, CRLC= general culturally responsive classroom climate/cultural responsiveness, CRDP=culturally responsive diverse pedagogy, CRCI = culturally responsive cultural inclusion, CRIN = culturally responsive inclusiveness, CRSC = culturally responsive sociocritical consciousness, IM = Intrinsic Motivation/Regulation, INTEG = Extrinsic Motivation (Integrated Regulation), IDEN = Extrinsic Motivation (Identified Regulation), INTRO = Extrinsic Motivation (Introjected Regulation), ER = Extrinsic Motivation (External Regulation), AM = Amotivation, ATMOT = Autonomous Motivation, CTMOT = Controlled Motivation, IKC = Intercultural Knowledge and Competence, EFG = Expected Final Grade

Section 1.2 Research Questions 1 and 2

Intercultural Competence and Classroom Environment

A one – way analysis of variance was conducted to examine whether there were differences in students' perceptions of the classroom environment as culturally responsive and autonomy – supportive based on instructors' degree of intercultural competence. Additional analysis was also conducted for specific aspects of cultural responsiveness. The results are summarized in Table 13 for cultural responsiveness and the different aspects and Table 14 for autonomy – supportiveness. The test for homogeneity of variance was violated in examining differences in autonomy – support $p = .026$ (Levene Statistic p > .05 assumes homogeneity of variance) therefore, the Welch F which is a robust test for equality of means is reported for differences in perceived autonomy – support along with the Games – Howell post hoc follow – up comparisons. I used Tukey HSD post hoc follow – up comparisons for cultural responsiveness and the different aspects (inclusiveness, cultural inclusion, diverse pedagogy, sociocritical consciousness).

The results revealed a statistically significant difference in students' perceptions of autonomy – supportiveness of the classroom environment Welch F (2, 66.947) = 14.593, $p < .001$ and overall cultural responsiveness F (2, 132) = 5.54, p =.005 based on the instructors' degree of intercultural competence. The results also reveal a statistically significant difference in students' perceptions of all aspects of cultural responsiveness except for cultural inclusion based on instructors' degree of intercultural competence: inclusiveness F (2, 132) = 5.59, p =.005, diverse pedagogy F (2, 132) = 11.66, $p < .001$ and sociocritical consciousness F (2, 132) = 5.83, p =.004.

Follow – up post hoc comparisons revealed that there was a significant difference in perceived autonomy – support among students whose instructors' have more monocultural/ethnocentric orientation towards cultural differences (*M*= 4.46, *SD*= 1.28) and a more intercultural/ethnorelative orientation (*M*= 6.03, *SD*=.80) $p = .000$. A difference in perceived autonomy – support was also observed among students between instructors with a minimization orientation (*M*=5.23, *SD*=1.10) compared to ethnorelative/intercultural orientation (*M*=6.03, *SD*=.80) $p = .006$. No significant differences in perceived autonomy – support was observed between instructors with monocultural/ethnocentric orientation compared to minimization orientation. These results reveal that students perceive higher levels of autonomy – support with instructors who have greater degree of intercultural competence (i.e. more intercultural orientation and minimization) than with instructors who are less interculturally competent (i.e. more

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monocultural/ethnocentric orientations). It is also important to note the significant differences observed in students' perceived autonomy – support between instructors with a minimization orientation and those with more ethnorelative/intercultural orientation. This result highlights the fact that there are differences in the degree of intercultural competence that will facilitate greater perceived autonomy – support for students in the classroom.

Follow – up post hoc comparisons also revealed that there was a significant difference in perceived cultural responsiveness among students between instructors' with a more monocultural/ethnocentric orientation towards cultural differences (M= 4.86, SD= 1.09) and a more intercultural/ethnorelative orientation (M=5.63, SD=.86) p = .006. The difference in students perceived cultural responsiveness was also significant comparing instructors who had a minimization orientation (M=4.81, SD=1.09) than a more intercultural/ethnorelative orientation (M=5.63, SD=.85) p = .013. There was no significant difference between instructors with minimization orientation and ethnocentric/monocultural orientations. These results suggest that students perceive higher levels of cultural responsiveness with instructors who have greater degree of intercultural competence (i.e. more intercultural orientation) than with instructors who are less interculturally competent (i.e. more monocultural/ethnocentric orientations).

I also examined differences in students' perceptions of the different aspects of cultural responsiveness based on instructors' degree of intercultural competence. These results are also summarized in Table 13. Follow-up post hoc comparisons reveal significant differences between instructors with monocultural/ethnocentric orientation towards cultural differences (M= 5.24, SD= 1.26) and a more intercultural/ethnorelative orientation (M=6.17, SD=.89) p = .004 for perceived inclusiveness. There were also statistically significant differences between instructors with a minimization orientation towards cultural differences (M= 4.21, SD= 1.53) and a more intercultural/ethnorelative orientation (M=5.40, SD=1.13) p = .003 for perceived sociocritical consciousness. Additionally, for diverse pedagogy, there were statistically significant differences between instructors with a more monocultural/ethnocentric orientation towards cultural differences (M= 4.73, SD= 1.12) and the more intercultural/ethnorelative orientation (M=6.0, SD=.95) $p <$ .001. The difference in students' perceptions of diverse pedagogy was also significant between instructors with a minimization orientation towards cultural differences (M= 5.15, SD= 1.08) and the more intercultural/ethnorelative orientation (M=6.0, SD=.94) p = .016. The differences in students' perceptions of the classroom environment between instructors whose

degree of intercultural competence reflects a minimization orientation compared to the more ethnorelative/intercultural orientation presents an interesting point for further discussion and investigation when we understand the range in degree of intercultural competence for individuals who tend to have a minimization orientation (IDI$^®$ scores range between 85 – 115).

Although both orientations reflect more positive approaches towards cultural differences, there are qualitative differences between an instructor whose primary developmental orientation falls at the cusp of minimization (IDI$^®$ score 85) which is close to the scores for the monocultural orientations (polarization and denial) and someone whose developmental orientation falls at 115 which is closer to the more ethnorelative orientations (acceptance and adaptation) (see figure 6 for IDI$^®$ scores). Table 12 shows some qualitative differences in the behaviors and classroom practices as well as challenges that instructors with a minimization orientation display compared to instructors with more ethnorelative/intercultural orientations. It is evident that instructors with a minimization orientation while they may use strategies that facilitate autonomy – supportive and culturally responsive practices, instructors with more ethnorelative/intercultural orientations (acceptance and adaptation) use strategies that adapt to students experiences and incorporate students' perspective to cultivate classroom environments where students from different backgrounds can be active participants.

Table 12

Comparing Instructors with Minimization and Intercultural/Ethnorelative Orientations
Classroom Practices and Experiences

Minimization Orientation	Intercultural/Ethnorelative Orientations
1. Uses teaching strategies found to be successful in a variety of classroom situations to ensure everyone has an opportunity to participate in class discussions and learn.	1. Open to using different teaching strategies, recognizing that students participate in class discussions and learn through different methods depending on the cultural frameworks they have gained from their culture.
2. May not be as attentive to how cultural differences need to be recognized and adapted to in the classroom to help students learn more effectively.	2. Have some awareness and understanding that there are different, culturally learned ways students participate in classroom discussions.
3. May experience frustration when culturally diverse students do not participate in class discussions as often.	3. Uses a variety of teaching strategies to base on a recognition that students often participate in class discussions and learn through different methods depending on the cultural frameworks they have gained from their cultural community.
4. Lacks awareness about effective teaching strategies for students whose learning approach is culturally different.	4. Encourage mutual adaptation in the classroom. Has accurate sense of how to create inclusive environments.
	5. May have challenges identifying and implementing specific adaptive teaching strategies that facilitate cross-cultural learning.
	6. May have difficulty developing creative, mutually adaptive teaching and learning approaches.
	7. May have challenges code – switching among groups with less familiarity.

Characteristics adapted from IDI® Profile Descriptions (Hammer, 2020)

Table 13
Results of Analysis of Variance for Instructor Intercultural Competence on Students Perceptions of Classroom Environment and Academic Motivation

Measure	Monocultural/ Ethnocentric (n=76)		Minimization (n=34)		Intercultural/ Ethnorelative (n=25)		F (2, 132)	η^2
	M	*SD*	*M*	*SD*	*M*	*SD*		
Culturally Responsive	4.86$_a$	1.10	4.81$_a$	1.09	5.63$_b$	.86	5.54**	.08
Inclusiveness	5.24$_a$	1.26	5.37$_{ac}$	1.29	6.17$_b$	.89	5.59**	.08
Cultural Inclusion	4.78	1.13	4.52	1.34	4.96	.27	.987	.02
Diverse Pedagogy	4.73$_a$	1.23	5.15$_{ac}$	1.08	6.0$_b$	.94	11.66**	.15
Sociocritical Consciousness	4.83$_{ab}$	1.32	4.21$_a$	1.53	5.4$_b$	1.13	5.84**	.08
Autonomous Motivation	3.96$_a$	1.23	4.33$_a$	1.13	5.08$_b$	.96	8.79**	.12
Integrated Regulation	4.33	1.45	4.50	1.15	5.14	1.01	3.65	.05
Identified Regulation	4.36$_a$	1.26	4.70$_a$	1.29	5.45$_b$	1.01	7.68**	.10
Introjected Regulation	3.61	1.78	3.70	1.53	4.16	1.47	1.02	.02
External Regulation	4.81	1.46	4.87	1.17	5.20	1.19	.79	.01
Amotivation	2.64	1.57	2.31	1.38	2.59	1.69	.53	.01

**$p <.01$ Means with different subscripts differ significantly $p < /=.05$ using the Tukey HSD post hoc test for equal variances assumed

Table 14

ANOVA Table based on Welch F for Classroom Environment and Educational Outcomes

Measure	Monocultural/ Ethnocentric		Minimization		Intercultural/ Ethnorelative		Welch F	(df1, df2)	η^2
	M	SD	M	SD	M	SD			
Autonomy – Support	4.86_a	1.28	5.23_{ac}	1.10	6.03_b	.80	14.59**	2, 66.95	.13
Intrinsic Motivation	3.20_a	1.63	3.79_{ab}	1.39	4.61_b	1.23	10.45**	2, 63.23	.12
Intercultural Knowledge & Competence Development	4.41_a	1.01	3.53_b	1.46	4.45_a	.91	5.372**	2, 55.33	.11
Expected Final Grade	2.99_a	.77	3.35_a	.73	3.84_b	.37	27.18**	2, 70.91	.18

**p <.01 Means with different subscripts differ significantly p < .05 using the Games – Howell post hoc test for equal variances not assumed

Intercultural Competence and Educational Outcomes

In addition to examining students' perceptions of the classroom environment with respect to instructors' degree of intercultural competence, I also examined students' motivation to study for the course, their perceived development of intercultural knowledge and competence (IKC) as a result of taking the specific course as well as their expected final grade. The results summarized in Table 13 and Table 14 show there were statistically significant differences in students' autonomous motivation to study for the course F (2, 132) = 8.79, p <.001, perceived intercultural knowledge and competence development Welch F (2, 55.33) = 5.372, p = .007, and expected final course grade Welch F (2, 70.91) = 27.18, p < .001 based on instructors degree of intercultural competence. I also examined whether there were differences in the types of motivational regulation for students based on the instructors' degree of intercultural competence. The results revealed that there statistically significant differences for students with respect to identified regulation (extrinsic motivation) and intrinsic motivation F (2, 132) = 7.68, p =.001 and Welch F (2, 63.23) = 10.45, p < .001 respectively, which reflect more autonomous form of motivational regulation. However, there were no differences with respect to the more controlled forms of motivation (amotivation, external regulation and introjected regulation).

Post-hoc comparisons reveal that students were more autonomously motivated to study for the course with instructors who demonstrated more ethnorelative/intercultural orientations towards cultural differences (M=5.08, SD=.96) compared to instructors with more ethnocentric/monocultural orientations (M=3.96, SD=1.23) p<.001 or a minimization orientation (M=4.33, SD=1.13) p=.048. The results show that students display more autonomous forms of motivation in studying for the course when their instructors have greater degree of intercultural competence. More specifically, students report that they were motivated to study for the course mostly because they find value in the course (identified regulation) or enjoy learning the material (intrinsic motivation) with instructors who are more interculturally competent.

Regarding students perceived intercultural knowledge and competence development, in general I expected that students would report greater degree of intercultural development with more interculturally competent instructors compared to those who were less interculturally competent. The results reveal there were statistically significant differences in perceived IKC between students taught by instructors with more ethnocentric/monocultural orientations (M=4.41, SD=1.01) and a minimization orientation (M=3.53, SD=1.46) p =.008 but no differences between

students taught by instructors with more ethnorelative/intercultural orientations (M=4.45, SD=.91). However, there were differences in students perceived IKC with instructors having a primary minimization orientation and ethnorelative/intercultural orientations p=.012.

These results are mixed, revealing that instructors with more ethnocentric orientations facilitated greater degree of intercultural development for students compared to instructors with a minimization orientation but not for instructors with more ethnorelative/intercultural orientations. This means that students on average perceived that by the end of the course they were able to develop greater degree of value and preference for behaviors that reflect more positive attitudes as well as increased knowledge and awareness about themselves and relating with culturally different others. Instructors with a minimization orientation had the lowest mean. This may be because such instructors tend to focus more on similarities and there is a tendency to ignore differences while both ethnocentric/monocultural and ethnorelative/interculturally oriented instructors tend to acknowledge cultural differences albeit in qualitatively different ways.

For example, the focus on cultural differences among instructors with the more ethnocentric orientation may either reflect a denial or polarization orientation. The former, is an orientation that ignores or misses cultural difference while the latter reflects on cultural differences either in terms of preference for their own cultural values (emphasis on us) while undermining other cultures (them) or having a preference for other cultures (emphasis on them) while undermining their own (us). A closer look at the IDI® score reveal that instructors grouped in the monocultural orientation group scores ranged between 66 and 75 (DO score) which reflect a more polarization orientation than a denial orientation. This means students would have perhaps encountered content and experiences in the course that provided opportunities to reflect on cultural differences. While for instructors with a minimization orientation there would be more emphasis on how everyone is similar with less focus any differences. Instructors with more intercultural/ethnorelative orientations would be perhaps more explicit about cultural differences therefore students would likely have more experiences and opportunities to reflect on their attitudes and knowledge about cultural differences compared to in a classroom with an instructor who tends to deemphasize differences and mostly focus on similarities.

This would perhaps explain why there are differences between minimization orientation and ethnocentric/monocultural orientation as well as the intercultural/ethnorelative orientation but not between ethnocentric/monocultural orientation and intercultural/ethnorelative orientation.

Another possible explanation could by the nature of the course content which may lend itself to greater degree of diversity inclusivity which may account for differences. There is a great deal of range among instructors with a monocultural orientation on the degree to which they include diversity in their courses as well as among instructors with a minimization or ethnorelative/intercultural orientation. This range in diversity inclusivity could explain some of the differences since the degree to which different elements of the course are inclusive of diversity could shape students overall experience and subsequently their development of intercultural attitudes, skills and knowledge.

Instructors IC and Students Academic Achievement

The overall ANOVA revealed there was a significant difference among the groups with respect to the students anticipated final grade in the class. The follow – up comparisons reveal that there were no differences in students anticipated course grades for instructors with an ethnocentric orientation compared to those with a minimization orientation. However, there were differences in students' anticipated course grade for instructors with more ethnorelative/intercultural orientations (*M*=3.84, *SD*=.37) compared to students with instructors of more ethnocentric/monocultural orientations (*M*=2.99, *SD*=.77) $p < .001$ as well as a minimization orientation (*M*=3.35, *SD*=.73) *p=*.005. While the average anticipated course grade for students was a B, the results show that there is significant difference in students anticipated final course grades when their instructors are more interculturally competent (i.e. has more ethnorelative/intercultural orientation as opposed to more ethnocentric orientation or minimization orientation).

Diversity Inclusivity, Classroom Environment and Educational Outcomes

I conducted an independent samples *t-test* analysis to examine the differences between courses which were deemed high diversity inclusivity compared to low in diversity inclusivity with respect to students perceptions of the classroom environment, motivation to study for the course, intercultural knowledge and competence development and students anticipated final grade. Additionally, I examined whether there were differences in diversity inclusivity based on the different aspects of students' perceptions of cultural responsiveness. I expected that across tests, courses rated high in diversity inclusivity would be different than courses rated low in diversity inclusivity. I expected this to be the case since instructors who teach courses high in diversity inclusivity would be more inclusive of diversity across more elements of course design and implementation compared to instructor courses with low diversity inclusivity. Alpha was set at .01 for statistical significance based on Bonferroni correction for multiple tests.

The results of the independent samples t-test reveal that there were statistically no significant differences in students perceptions of autonomy – support, cultural responsiveness, autonomous motivation or anticipated final grade when comparing instructors whose course were rated as high in diversity inclusivity compared to those rated as low in diversity inclusivity. However, the results of the t-test reveal there was statistically significant difference in students perceived intercultural knowledge and competence development between instructors whose courses were high in diversity inclusivity (*M*=4.42, *SD*= 1.46) compared to instructors whose courses were low in diversity inclusivity (*M*=3.54, *SD*= .98) $t(43.51) = 3.28$, $p = .002$. Students perceived greater degree of intercultural knowledge and competence development when instructors' courses were high in diversity inclusivity compared to low in diversity inclusivity.

Examining specific aspects of cultural responsiveness, the t-test analysis revealed that there were no statistically significant differences except for sociocritical consciousness $t(133) = 2.85$, $p = .005$. The t-test revealed that students perceived the classroom environment to have greater degree of emphasis on sociocritical conscious in instructors' courses that were high in diversity inclusivity (*M*=4.97, *SD*=1.29) compared to low in diversity inclusivity (*M*=4.21, *SD*=1.53). These, results show that students perceive greater degree of intercultural knowledge and competence development when the instructors' course is more highly inclusive of diversity across the different elements of the course design and implementation. While the t-test did not reveal any other statistically significant findings, the present results suggest that higher degree of diversity

inclusivity has benefits for students developing intercultural knowledge and competence. This is also connected to the classroom environment that emphasizes students thinking about social inequalities in society and empowering them to make changes in society.

Section 1.3 Quantitative Results and Analysis Summary

The primary focus of this strand was to examine the first two research questions. I examined quantitative results from the instructors and students' perspectives exploring the extent to which instructors' degree of intercultural competence and diversity inclusivity is related to students' perceptions of the classroom environment and educational outcomes. A secondary purpose of this strand was to explore conceptual and operational distinctions between autonomy – supportive and culturally responsive classroom environments. First, the results show that on average instructors tend to overestimate their degree of intercultural competence. Instructors intercultural competence was more oriented towards identifying similarities and marginalize or trivialize the role of cultural differences in the classroom context. Regarding diversity inclusivity the results reveal that instructors are thinking about and including diversity into different elements of their courses to varying degrees.

Second, results from students' responses reveal strong positive correlations between autonomy – supportive and culturally – responsive classroom environments. Additionally, there are points of overlap between autonomy – support and aspects of cultural responsiveness particularly in relation to inclusiveness and diverse pedagogy. However, there are differences with respect to aspects of cultural responsiveness that involve cultural inclusion and sociocritical consciousness. This difference is seen in the relationship between autonomy – support and development of intercultural knowledge and competence which is an important educational outcome for college graduates. This result highlights the fact that simply focusing on facilitating autonomy – support while it is good and correlates with important educational outcomes, in order to facilitate greater degree of intercultural development, the classroom environments needs to be organized in ways that emphasize sociocritical consciousness which is specific to cultural responsiveness.

Third, the results show that students perceive greater degree of autonomy – support, culturally responsiveness, intercultural knowledge and competence development, autonomous forms of motivation and expect to perform better in a course when instructors are more

interculturally competent. The crucial finding, however, involves the qualitative differences between instructors with a minimization orientation and those with an ethnorelative /intercultural orientation in how students perceive the classroom environments and the different educational outcomes. Additionally, the qualitative differences in instructors' degree of intercultural competence with respect to students perceived intercultural knowledge and competence development particularly with respect to instructors who have more ethnocentric orientations versus a minimization orientation or the more ethnorelative/intercultural orientations. These results highlight the importance of a developmental approach to assessing intercultural competence and the implications for practices considering different instructors' primary developmental orientation. Fourth and lastly, the results show that instructors' degree of diversity inclusivity in the course design and implementation is crucial for aspects of the classroom environment related to cultural responsiveness specifically, sociopolitical consciousness. This has implications for students developing their intercultural knowledge and competence.

Section 2: Multiple Case Study Results

The previous section describes the results from the quantitative strand based on data gathered from 11 classrooms. In this section, I describe and summarize results from 3 of those classrooms integrating some of the quantitative data from students and instructors along with data gathered from classroom observations, [6]instructor interviews, course syllabi, student assignments and [7]Small Group Instructional Diagnosis (SGID) focus group and an [8]open – ended survey using the SGID questions. It must be noted that Case 3 (Instructor C) differs from Cases 1 (Instructor K) and 2 (Instructor H) because the class size is larger and has more components such as labs. Nevertheless, my analysis only focused on the main section of the course taught by the main instructor and not the labs. While some aspects of comparison may not be equivalent to cases 1 and 2 the insights from this case are meaningful to understand for large lecture courses which are still very much a part of many universities generally and the site of present investigation. Table 15 summarizes the quantitative results which were integrated as part of the analysis for each case.

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[6] Interview excerpts are cited in text and presented in tables based on responses to prompts – interview questions.
[7] Students' perspectives are presented in the form of consensus either in their groups or from the whole class only for Case 1
[8] Students' perspectives are presented based on individual responses to the specific prompts in the SGID questions for Cases 2 and 3. See Chapter 3 for description and analysis

From the data analysis described in Chapter 3 I developed four themes based on patterns observed in the data from the within case analysis and cross – case analysis which involved drawing from the main points of comparison of Multicultural Education (CRPTE) frameworks and SDT presented in Table 3 as well as the specific conceptual and theoretical frameworks used to inform the dynamic integrated conceptual framework presented in Figure 4. Together the themes describe the relationship between instructors' orientation and approach towards culture and diversity in creating their course and the classroom environment with respect to students' perceptions and experiences in the course and the classroom within and across these three cases.

The first theme is related to the research question: To what extent instructors address culture and diversity in creating their course and cultivating the classroom environment? The theme *Different Approaches to Varying Degrees* refers to different ways instructors address culture and diversity in creating their course and cultivating the classroom environment. This theme was developed by analyzing instructor responses from interviews and reviewing the course syllabi to gain insights into how the course policies and practices in the course addressed culture and diversity. The Diversity Inclusivity Framework (DIF: Nelson Laird, 2011) was also used to identify different elements of the course that instructors mentioned in their interview responses along with their responses to the Diversity Inclusivity Survey. Table 16 shows the different approaches developed to describe the different approaches instructors take to address culture and diversity in their course and classroom environment based on interview responses, and aspects of diversity identified from the DIF (Nelson Laird, 2011). The instructor's degree of intercultural competence was also considered as a factor in developing these descriptions of each instructor. This was done looking at the instructors perceived orientation and developmental orientation score along with the matching qualitative descriptions for the respective orientations summarized in Table 1. In this way I was able to integrate the quantitative and qualitative data for each instructor and triangulate across the different sources to develop the theme and the descriptions for each approach.

The approaches are: 1) *Proactive Somewhat Explicit and Intentional*, 2) *Proactive, Very Explicit and Intentional* and 3) *Reactive, Somewhat Explicit and Pragmatic*. Being classified as proactive versus reactive refers to whether addressing culture and diversity was primary factor the instructor stated they considered versus culture and diversity being unconscious. The degree of explicitness and intentionality was based how they went about addressing culture and diversity in

their course and the classroom environment, did they intentionally do specific things in their course to address culture and diversity with respect to different elements of the course identified on the DIF.

Table 15

Summary of Quantitative Means and Descriptive Statistics Across Cases

Variables	Case 1 (Instructor K)	Case 2 (Instructor H)	Case 3 (Instructor C)
Intercultural Competence	133.35 Adaptation (PO score) 123.46 Acceptance (DO score)	147.14 Adaptation (PO score) 147.14 Adaptation (DO score)	111.59 Acceptance (PO score) 68.51 Polarization (DO score)
Diversity Inclusivity	3.33 (High)	3.25 (High)	3.58 (High)
Autonomy – Support	4.9 (1.62)	6.16 (1.21)	4.75 (1.37)
Culturally Responsive	4.75 (1.63)	5.68 (.94)	4.75 (1.25)
Inclusiveness	4.87 (1.88)	6.31 (.99)	5.10 (1.41)
Cultural Inclusion	4.17 (1.59)	5.12 (1.22)	4.69 (1.27)
Sociocritical Consciousness	4.79 (1.84)	5.36 (1.03)	4.72 (1.43)
Diverse Pedagogy	5.08 (1.84)	5.93 (1.21)	4.62 (1.37)
Autonomous	4.86 (1.37)	4.88 (.94)	3.92 (1.29)
Intrinsic	4.47 (1.52)	4.42 (1.15)	3.91 (1.66)
Integrated	5 (1.44)	4.89 (.95)	4.28 (1.50)
Identified	5.11 (1.4)	5.31 (1.09)	4.28 (1.34)
Controlled	4.69 (1.45)	4.42 (.89)	4.21(1.41)
Amotivation	3.53 (1.95)	2.02 (1.16)	2.70 (1.58)
External	4.72 (1.61)	5.14 (1.23)	4.76 (1.46)
Introjected	4.66 (1.55)	3.70 (1.29)	3.65 (1.79)
Intercultural Attitudes (Openness & Curiosity)	4.72 (.82)	4.60 (.95)	4.43 (1.37)
Intercultural Skills (Empathy & Communication	4.43 (1.06)	4.39 (1.09)	4.26(1.21)
Intercultural Knowledge (Self -awareness & Other awareness)	4.56 (.71)	4.68 (1.05)	4.40 (1.22)
Expected Course Grade	10 – A, 1 – B	13 – A, 3 – B	24 – A, 31 – B, 24 – C, 2 – D

Table 16

Interview Responses Instructors 'Approach to Culture and Diversity Creating Courses and Classroom Environment

Cases	Response	Aspects/Approach
Case 1 (Instructor K) Introductory English Course	Some of their curriculum is already set so I cannot kind of change some of the things even if maybe I want to. But I'm thinking about my students. What cultures my students might be from, and if I don't have a very diverse class let's say ninety-nine percent for example are from Asian countries and I don't have anyone else so how can I still kind of challenge them a little differently. So still find the differences even when they're from the same country. I am also thinking about how to motivate them to be in class. Not just. I mean we have strict attendance policies but at the same time so they would like to be in this class. Because they think in general all their other classes I really large kind of group classes and they think most of them are looking forward to be a very small environment and then you really can make these connections. **- Instructor K Interview**	Students cultural backgrounds and motivation Proactive and Somewhat Explicit Intentionality
Case 2 (Instructor H) Introductory Communication Course	There are a few different angles I think about this. In my discipline, I think about who is represented, because there is a long tradition of not representing a whole lot of people. So, it is very important to me that different people are represented… I also think it's important when we are reading work by scholars to think about who the scholars are, which is also representation but not just that but of scholarship. Especially not just limiting it to people who write about women we need to go further than that. I start with what are the broad types of outcomes, I start by asking how do I want students to think and what does it mean to think in this discipline and then I go to what does it look like to do that and what types of products might they make that would reflect that way of thinking. And then consider what are the tools – ideally this is all done with students so they can help – and when I talk about products, I don't mean just write one paper, give presentation, take one exam. But that does not mean if students say I think a video would be good, I won't let them do that all the time but the idea is to start with giving them some inputs, choices, what interests and the types of ways to present that to represent their knowledge.– **Instructor H Interview**	Diverse cultural backgrounds (course content) Course goals and Outcomes Assessments Proactive, Very Explicit Intentional
Case 3 (Instructor C) Introductory Economics Course	It is not a preoccupation with me, not that I consciously think about every day or before every class. My focus is much more on the content and the economics. To the extent that those things can be instrumental to teaching economics then yes, they are definitely considerations. But most of the time it's sort of an implicit thing that I am not consciously thinking about very much… I don't think about it a lot on a day to day basis. But like if something came up that was calling attention to it, then that might warrant some more attention. One of the dominant things is assessments, I think about whether the assessments are equally, like accessible. I don't have a component in the grade formula for class participation, so I don't expect a student to raise their hand x number of times per week or for the semester, because I don't want a built in advantage for someone who is like gregarious and outgoing, good at verbal English making that an explicit part of the grade formulae seems a little unfair. **- Instructor C Interview**	Assessments, Content, Students cultural backgrounds Reactive, Somewhat Explicit and Pragmatic

Section 2.1: Addressing Culture and Diversity: Different Approaches to Varying Degrees

Each instructor addressed culture and diversity in creating their course in different ways, focusing on different elements of their course with varying degrees of intentionality and proactivity. The quotes from the instructor interviews (see Table 16) summarize responses from the instructors about what they thought about when designing their course and preparing their syllabi and the extent to which they considered culture and diversity. Across all cases the instructors were considering diversity and culture in some way in relation to the assessments, course content and goals as well as students cultural backgrounds. Generally, this corresponds with what was seen on the diversity inclusivity survey which is consistent with their High Diversity Inclusivity classification. From Instructor K (Case 1) and Instructor H (Case 2) responses, it is somewhat evident that they are more intentional and proactive about addressing diversity in their courses generally compared to Instructor C (Case 3). Instructor C takes a somewhat reactive approach, is less intentional but could also be described as a pragmatic. However, the responses also show that Instructor C is proactive and explicit in how he considers diversity and culture in the assessments ensuring they are equitable.

A review and analysis of the course syllabi revealed some insights about how intentional and explicit the instructors were in addressing culture and diversity in their course and cultivating the classroom environment. All courses included policies and information about discrimination, mental health, and accommodations for students with disabilities. While this is standard for all course syllabi, there were clear differences in how the policies were described. Instructor K and Instructors C used the policies that were very general and taken exclusively from the university handbook. The language used to describe the policies was not reflected in the instructor's voice but as general university policy. For example,

> [The] university is committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members… - **Excerpt from Nondiscrimination Statement Case 1 and 3 Course Syllabus**

> [The] university strives to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let the instructor know… **- Excerpt from Disability Statement Case 3 Course Syllabus**

These statements can be contrasted with those described in Instructor H's course syllabus where both the universities policies are described as well as the instructors' approach.

> In our discussions, structured and unstructured, we will explore a variety of difficult issues, which can help us to enhance our understanding of different experiences and perspectives. This can be challenging, but in overcoming these challenges we find the greatest rewards. While we will design guidelines as a group, everyone should remember the following points:
> - We are all in the process of learning about others and their experiences. Please speak with me, anonymously if needed, if something has made you uncomfortable.
> - Intention and Impact are not always aligned, and we should respect the impact something may have on someone, even if it was not the speaker's intention.
> - We all come to the class with a variety of experiences and a range of expertise, and we should respect these in others while critically examining them in ourselves. - **Excerpt from Diversity & Inclusion Statement Case 2 Course Syllabus**

> Accessible Teaching: In addition to the formal channels described above, please discuss with me any challenges you perceive to your learning, documented or otherwise. Often, in finding a way to help you succeed, we will enhance the opportunities for other students to learn in the class as well - **Excerpt from Disability Statement Case 2 Course Syllabus**

Of the three instructors only Instructor C has complete control over the content of the course and design of the syllabus. Instructor K works with a team of other instructors and administrators to develop the course syllabus, so the policies tend to be more inclusive of all sections of the course taught by different instructors. Similarly, Instructor H was teaching a course taught by several other instructors and did not have control over the full design per se but on the classroom environment and facilitating instruction just like Instructor K. However, he chose to add those policies to the general syllabus for his class.

Instructor K's course syllabus also included a policy about speaking in different languages in class,

> **Use English in class (even with friends).** We are not banning you from speaking in languages other than English, but we expect you to use English as much as possible in class for two reasons: (1) to push yourself to use English even when it is not comfortable, and (2) to create a sense of community and an inclusive environment in the class. **– Excerpt from Course Syllabus Case 1**

Since it is an English course and a key outcome of the course is for students to improve their English speaking and writing, it was quite interesting instructors included this in the syllabus affirming other languages besides English while encouraging students to develop competence to meet course outcomes and build relationships with other students. This also provides some insights into how the classroom environment was structured and organized in a way that is autonomy – supportive where students are provided with rationales for course policies and culturally responsive in affirming students' cultural background. However, it also points to a potential tension that may emerge between being culturally responsive by addressing cultural inclusion and developing students' academic competence in using the English Language which is the goal of the course. The course policy reveals what appears to be a middle way which affirms students' cultural backgrounds but establishes norms that ensures they are developing academic competence. There was no such policy in the other course syllabi.

The previous examples from the syllabi reflect more explicit examples of how the instructors address culture and diversity in the course and the classroom environment. However, a more implicit or rather subtle form is shown in the use gender pronouns on Instructor H's course syllabus – He/Him/His. None of the other instructors included their gender pronouns on their course syllabus or discussed it in their course to my knowledge. Reviewing Instructor H's syllabus and his responses presented in Table 16, shows a more proactive and explicit approach which is similar in some ways to Instructor K but also different. Instructor K's approach to addressing culture and diversity in the course and classroom environment could be classified as proactive and somewhat intentional and explicit. These two approaches are in contrasts with Instructor C. The following excerpt from the interview with Instructor C provides some insights into his reactive approach towards addressing culture and diversity in his course and classroom environment which in some ways is also a pragmatic approach.

Instructor C talking about addressing culture and diversity in his course design and classroom environment,

> I might sit here and contemplate about it a little bit at the beginning of a semester, as I design the syllabus, thinking about how I want the class to run day to day. But then once you get started and you get embroiled into we got this chapter to do and then the next chapter these things kinda fade to the background while you're actually delivering the class.

However, his considerations of culture and diversity in assessments reflects how he is also aware of cultural differences and takes steps to address them in his course,

> When I write questions I keep an eye out for colloquial language, reference to a phrase or an idiom that is only used in the US or certain parts of the US, questions about sports you don't want to use a metaphor that most of the American students would get because they watch American football and most international students won't get because they don't care about American football or may not understand.

His response in Table 16 shows that Instructor C mentioned that his considerations for culture and diversity in his course and classroom would be if something came up. In the excerpt below he describes a conversation he has with a student who came to his office to discuss an issue with an example in the textbook for the course.

> Last semester I had a long conversation with a student about one of the applications in my text book and ahh one of the applications was a policy, I don't even know if we can call it a policy, this humanitarian effort to try to liberate slaves, and there is this anecdote in my text book about this about a guy who, a Harvard student who went to sub-Saharan Africa and tried to buy back slaves out of captivity, and just like release them from captivity and we analyze this uh from the text book through a supply and demand market to try to pay slave holders to take back slaves and take them out of captivity and what unintended consequences that might have for legitimizing the slave trading, and how it might depending on the elasticity of supply and demand and how it might either increase or decrease the number of people held in slavery. Which I thought from the very beginning it was a little edgy application for an economics, but there is academic literature on this and the authors in my text book thought it was interesting enough that they including it in their book but I had a student that did not like the idea of studying slavery and applying economics to the market for slaves.

> I think I probably had an hour long conversation with him where we both walked out much more informed about the issue that was raised by this application but it started off as kind of a hostile reaction on his part, where the student thought, this should be totally off limits. And I am honestly not sure he read the entire paragraph to learn that the goal here was the liberation of slaves. I think he have initially read this and thought oh this is a horrible, it's like one of the questions they talk about on the news where there is like a math problem involving like slave beatings. I think he might have thought this was one of those like sensational things. But then I kind of explained it to him that the point they were getting at was remove the conditions of slavery.

> It was a very delicate conversation that needed to be had between us and one of my take always was that although this was an interesting application it might not be the type of thing we need to talk about at like an undergrad level of teaching so I have censored that part from the text book now starting this semester just because

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> I can teach the subject perfectly well without that kind of edgy application, and it was not worth the, I don't want to say it wasn't worth the risk, because that's not how we should be looking at this. But It was just not a necessary thing to teach what I was trying to teach. That was probably one of the most significant flares of intercultural conversations that...

The instructors' response to this situation was to censor that aspect of the textbook even though he was aware of the example in text at the start of the course considering he has been using the text since 2012. This excerpt shows a reactive approach to addressing culture and diversity in the course and overall classroom environment.

The next three themes describe what the classroom environments of these instructors looked like with respect to being autonomy – supportive and culturally responsive considering both the instructors' perspectives and their students. These themes address the research question: To what extent is the classroom environment instructors cultivate similar or different than students' perceptions and experiences in the class? The three themes represent an amalgam of specific conceptualizations of the classroom from SDT as being autonomy – supportive (i.e. satisfying psychological needs autonomy, competence and relatedness) and CRPTE, cultural responsiveness (i.e. different aspects related cultural inclusion, inclusiveness, diverse pedagogy and sociocritical consciousness). The themes were developed from integrating instructor responses from the interviews, and surveys, classroom observations, and students' responses to the surveys and participation in the focus group and short answer survey which included the SGID focus group questions. While the content of some excerpts used do not specifically relate the present course the instructor is teaching, the excerpts are used as means to gain a more holistic picture of the instructors orientation towards cultivating the classroom environment and how their approach relates to the different aspects of autonomy – support and cultural responsiveness.

Fostering Community and Relationships

This theme describes the ways in which equitable, respectful relationships and bonds were developed and maintained between instructors and students as well as among students. It represents aspects of autonomy – support related to satisfying psychological need for relatedness and aspects of cultural responsiveness related to inclusiveness and diverse pedagogy. From the review in chapter 2 these aspects represent points of overlap between autonomy – support and cultural responsiveness. Across all three cases the theme was evident but was facilitated by the

instructor in different ways. Additionally, each case had unique challenges highlighting points of tension and divergence between instructors and students' perspectives which provides insights into distinctions between conceptualization of autonomy – support and cultural responsiveness. Table 17 presents a comparison between the three cases for this theme across perspectives and data sources.

Table 17

Comparing Instructors and Students Perspective on Fostering Community & Relationships Within and Across Cases

Instructor Perspective	Students Perspective	Observation Summary
I tried to kind of make them feel that they are actually community here. [But] Sometimes I see that students seem to just talk to certain students', but they avoid others. So I'm trying to make them be able to talk with everyone in this class but they tend to talk to just a few people that they feel very comfortable and kind of ignore everyone else. Sometimes I just say ok for this activity you cannot choose the same partner that you have just before, you have to choose someone else. Then sometimes when we have groups of three for example then I say OK now as a group decide which person you will send to another group. – **Interview Instructor K**	Data from the survey showed that 75% of the students in the class rated positively that they got along well with people in the course and their overall perception of inclusiveness was also somewhat positive (M=4.87, SD=1.88) – **Case 1** From the SGID there was consensus among students that sitting together in class facing each other and working in groups helped their learning by getting everyone involved. – **Case 1**	Generally welcoming atmosphere most students interacted well with each other and their instructor. Some students even in groups would not contribute as much to discussions, go through the entire class period without saying much. Students who were mostly active in participating and responding to questions or working in groups tend to mostly work together usually those who seemed to have a better command of spoken English. Instructor sometimes ask different students who were not as active what they thought or talk with them while working in groups. Student often approached the instructor after class with different questions.
I hesitate to say I have succeeded in doing that, I try to do that, and I think some students feel that but I don't know all students feel that. My personality is not very gregarious, I am not great at small talk, I try to tell stories and share myself, be open and transparent and I think that has had an impact, I hope. – **Interview Instructor H**	Data from the survey showed that 95% of the students who completed the survey rated positively that they got along well with people in the course and their overall perception of inclusiveness was also highly positive (*M*=6.31, *SD*=.99). – **Case 2**	Students used name tags during the first few weeks of classes and often worked in groups. Instructor also shares about personal fears with making presentations and stories. In some groups however, students mostly females and those who spoke English as second language did not engage as much in group discussions or when they had to present as a group in front of class. Instructor walked around to different groups and asked students how they were doing and brought snacks for them on some occasions.
Consciously? I don't know how much I do consciously. I try to be approachable and friendly and outgoing, welcoming. Like my door is always open, whether, if you have like a straight forward question it's something related to course content or something more complex and harder to talk about, I have tried to be open about students coming to ask me even when it's like a difficult question. Maybe I don't say that stuff explicitly!? – **Interview Instructor C**	Data from the survey showed that 68% of students reported getting along well with people in the course. Overall perception of inclusiveness (M=5.10, SD=1.41). – **Case 3** 9 out of 11 students mentioned hotseat questions in class and group activities in recitation helped their learning and also suggested changing the course to help their learning by having more hotseat questions in lecture and group work in recitations. – **Case 3**	Instructor always lectured from the front of the class. Not much interaction with students except administering hotseat questions. Some students worked together during hotseat questions. Many students completing other assignments or engaged in social media. Little to no student to student interaction. Students often went to speak to instructor after class. Sometimes students would raise their hand for a question but would not be acknowledged by instructor.

Case 1: Introductory English Course

Instructor K was very explicit about students feeling like they are a part of a community in the class. All her students are international but from different cultural backgrounds. She tries to build this community from the first day of class which seems to be accepted by some students as she reflects on what she did the first day of her class,

> We played a few games. That's what I'm remember kind of icebreaker things. But I remember from the previous semester we played kind of a very simple game I guess just from trying to remember each other's names so we all sit in a circle and let's say I'm sitting and I have to say my name and also have to say something I like or dislike that starts with the same letter as my first name. And then the second person has to repeat my name and what I like and then add their name. I was the last who had to repeat everyone else. So hopefully I will remember [all their names]. And I mean it's not a big deal I guess. But one of my students who said she didn't really want to be in this class but her advisor kind of made her and she said that after this activity she actually felt that she's really part of the class. It made her feel that she belongs here.

Establishing a community in the classroom reflects both aspects of an autonomy – supportive and culturally responsive classroom environment as represented by satisfying the need for relatedness and establishing inclusiveness respectively. However, as shown displayed in the quote in Table 17 students in her course did not always behave in ways that reflect being part of a community. Her response, in this case was to implement strategies that would allow the goals she had set to be reflected in classroom environment. Since I observed her class at different points throughout this semester, I observed this was the case and how she went over to different groups and asked them to rotate. Students initially would seem hesitant, but overtime it was clear they adjusted to this norm and would use different ways to rotate themselves whether voting, volunteering or just sending one person which they would laugh about.

Although the instructor uses what could be deemed controlling language and not autonomy – supportive (e.g. must, have to) she provides a structure in which students still have autonomy where they choose who goes to the next group when they rotate and through this process students get to connect with other students in the class. From the students' perspective as reflected in the survey, majority of the students perceived the classroom environment to be a place where they were connected to one another and their instructor to some extent (Table 17). My observation reflection also summarized in Table 17 provide some insights into what the classroom environment was like in fostering community and relationships between the instructor and the students and

among students. The syllabus also describes instances where each student would have individual conferences with the instructor and talk about their progress in the course which reflects a specific way to establish the relationship between her and each student.

Instructor K in her interview highlight what I would describe as tensions and challenges in the classroom that impact students' feelings of belonging in the class and overall engagement in the course that could be attributed to cultural differences.

> I think one of the difficulties that the students have to face is different accents because they're not trained to recognize different accents. Maybe they were taught British English or maybe American English but they were not understanding Spanish speakers speaking in English or Chinese speakers speaking in English so that might be the reason why sometimes they don't understand especially it's evident during the presentation time when someone is asking the question the student is answering completely different question than they are trying to clarify what they actually were asking, and they are like oh okay that's what you asking.

Relatedly she also describes how beyond language, culture generally plays a role in how students relate with her as the instructors and with other students stating that,

> Culture might play a role especially [in the] interactions. Some students who are I guess more familiar with their American classroom discussion type based environment or just maybe they're very easy going and really want to communicate mostly my Spanish speakers or Indian [students] because for them English was actually, they are bilingual, and so in some ways so of course for them it's probably easier to communicate and ask questions and ask their peers questions as opposed to more traditional conservative teacher center environments that some of my Asian students came from, for them [her Asian students] it's kind of hard to be engaged in conversation both with other students and with the instructor. So I think it's more like because of the way they were taught how they should communicate in class.

The challenges and tensions described in this classroom arguably are not unique and apply to other classrooms that have students from culturally and linguistically diverse backgrounds. This highlights not only the importance of cultural responsiveness, specifically inclusiveness but satisfying the psychological need for relatedness as well in being autonomy – supportive. Based on students' perceptions of autonomy – support and cultural responsiveness it was only somewhat positive reflected in the mean for the class (See Table 15).

Case 2: Introductory Communication Course

Table 17 summarizes Instructor H's response to how he tried to foster community among students and between himself and the students compared to students' perceptions of the classroom environment. Instructor H thought that perhaps he was not having the impact he intended. However, the students' perceptions were very high, the highest compared to the other cases. In my observations, I also saw that there were clear attempts to incorporate everyone into the class. Most activities involved both working in groups and individually. However, there were some instances where female students and international students were not as engaged even when they were in groups with another. Most of the students who completed the survey were native born to the US or lived in the US for more than 5 years. Therefore, simply taking the mean does not reveal the fact that all students perceived the environment to be fully inclusive.

The challenges and tensions which emerge in this course regarding fostering community and relationships are primarily centered around what the instructor intends and how students respond. Instructor H describes how he tried to also foster community and relationships among students by working together to develop rules for the class which is supported by his Diversity and Inclusion Statement in the syllabus.

> On the first day we had a conversation together about how we would engage with another, I don't think it was as effective as how I hope those activities will always be. A part of it is that many of these students are first year students so this was kind of weird for them because they may be like 'what kind of rules do we need'. For me I am like what if this happens, what if this? But I think the rules we came up with are fine but nothing particularly interesting. I think when the rules were being created I don't think anyone perceived that there would be a conflict. I mean there has not been a conflict mostly. But to me the interesting rules come with uncertainty so what happens when there is actually a conflict. What happens when someone says something and someone else interprets it whether intended or unintended? Those moments are when rules are important. So this is something I have to think about as I do this how to get the conversations towards where we discuss those kinds of rules and the other thing is by this point in the semester they may have forgotten about these rules so how do I sort of make sure it comes up all the time which may not be necessary because things are running relatively smoothly.

The instructor took steps to ensure students understood how they would relate with one another in the classroom respectfully and appropriately. However, as the instructor reflects on this experience, it is likely as he suggests that students did not anticipate anything going wrong. In general, while majority of the students seemed to perceive the classroom environment as being inclusive and felt like got along well with people in the class, there were few who did not perceive

a similar experience or as I observed perhaps did not have the same experience. Instructor H, it appears he also observed that as well hence his hesitation in saying he succeeded in fostering the community he anticipated between himself and his students and among students. Reflecting specifically on fostering community among the students he stated, "Yeah I think that's one of the things I have to improve on." The tension for Instructor H emerges between what he considers his ideal class and the way his current class was going. Elaborating on his need to improve he states,

> One thing that bugs me, that I wish I had better ways of doing, is that there are still moments where I open the floor for anyone to talk, like who wants to comment. In my ideal class that would never happen. There would always be some type of structure in place, which does not mean overly controlling but there is some way that allows the opportunity for every voice to be heard even if that person does not feel comfortable commenting in front of the whole class and maybe that just means having a detailed discussion about commenting in front of the class because I am very clear about the fact that no grade is associated with how willing they are to raise their hand because it is not my goal to train them to raise their hand it's to train them to talk in a presentation which does not mean it is not feasible to make it one of the goals and that's why I think coming up with goals with students may help because for some students that maybe something important for them to get out of the class.

This reflection by the instructor reveals a tension among satisfying psychological needs for relatedness, cultivating an inclusive classroom environment and being autonomy – supportive. The classroom environment the instructor attempts to cultivate for and with students is one where they have choices but also feel related to one another and interact with one another in respectful ways. The instructor must find effective and appropriate ways to foster a community between himself and among students while allowing students to have autonomy. This tension is seen both in Instructor K and Instructor H class. Despite different approaches both were trying to achieve the goal of fostering community and relationships within the class between themselves and their students and among students. This was done in an intentional and proactive way. However, as instructors who aim to be autonomy – supportive and satisfy students psychological needs for relatedness and being inclusive they also find themselves at odds with what students want and how they choose to engage in the class.

Case 3: Introductory Economics Course

The fact that Case 3 was a large lecture course meant that many things were structured differently compare to Case 1 and 2, which also revealed different challenges and tensions. Table 17 shows Instructor C's initial response to how he goes about fostering a community in his course. This is contrasted with students' perceptions of the classroom environment and my observations in his class. His response reveals even further that he takes a less intentional approach. As the instructor responds to the question, he realizes that perhaps the ways in which he was saying he tries to build relationships between himself and his students is not something he says explicitly to them. In regards to the difficult question he would address with students if it came up he provided the example of a student who perhaps had a mental illness issue or something pressuring that would prevent them from completing the course or assignment.

Responding to my follow-up question regarding him not being explicit he described how he went about fostering respect and connectedness in his course.

> I hope that I am... That's tough. I just try to give off a vibe, like a personality, like I will make an occasional joke or talk about something that, like not anything too personal, like an anecdote, that will convey to them that like I am a human being, you know an average guy that is approachable, not like up on a pedestal so out of touch that you can't talk to him. A lot of little subtle things I try to do just be like a bit more conversational in the way I lecture about things. It's not all completely calculated just to that end. But you know, I try not to be like in the movies the evil professor that's like ruining your life. I try not to be that guy.

When it came to fostering relationships among students in the course he responded,

> Yeah, that's good. It's probably not calculated to try and do this, but I do try to encourage collaboration when I ask these hot seat questions during lecture. I have occasionally reminded them that it is okay to collaborate with their neighbor or work it out separately with classmates it's not like an exam where everyone turns in their own work. We do have a few units each semester where in their Friday recitation, the students do group work and we randomize the groups so that they won't do it with their friends so they have to talk to people they would not have otherwise talked to. But we only do that twice per semester. For a large class, I think we are doing fairly well based on the amount of group work we are able to work in. I can do more of that in my smaller upper level classes than I do in the big lecture. They don't have a lot of peer to peer interaction because this is more of an instructor centered class.

The hot seat questions involve students responding to questions based on the lecture for which they receive points. I observed the use of hotseat in his class and while some students

collaborated, the majority did not. Additionally, most of the students seemed to be doing other activities while in the class (e.g. homework assignments, and social media). Despite also having labs which are smaller sections of students, fostering community did not seem to be intentionally apart of the course and how the classroom environment was structured except for a few instances as he states. The major tension for Instructor C is the size of his class even in his lab sections that are taught by Teaching Assistants. He states,

> These days in our recitation sessions the classes are like 70 people per section. We use to have a few more TAs in our department that made it easier to have smaller class sizes which meant we could get our sections down to like 40 or 50 and then once you're on that small scale then you can expect some more TA and student interaction to get a discussion going in the class. With 70, it's tough in a 50-minute class, there is almost no way you're going to be able to interact with each student (chuckles) what that's like giving 45 secs for each student.

Despite not being intentional or consciously trying to foster community and relationships among students and between himself and students, the survey results suggest that many of the students reported that they felt like they got along well with people in the course. Additionally, in inclusiveness students also perceived somewhat high degree of inclusiveness (See table 15). Additionally, some of the students who completed the SGID focus group questions in the form of a short answer survey reported that being able to collaborate with other students during the hotseat questions and working in groups during the recitation section helped their learning. However, some of them also thought there were not enough opportunities to interact with each other and the instructor. They suggested having more opportunities with each other and the instructor as one of the primary changes they would make to the course and classroom environment to help their learning and learning about other students. The following excerpts are direct responses from students about aspects of the classroom environment, structure and activities in the course that helped their learning along with suggestions for change that are related to relationships and community being formed in the classroom.

Helped Learning	Suggested Changes
I think Hotseat is useful but would be more beneficial if we have more questions on Hotseat during class, instead of just one or two questions.	More hotseat questions for interaction between students and professor
Allowing us to work together on hotseat questions was also helpful.	I would recommend engaging students more. We didn't have the opportunity to connect with the professor, and there was not a designated question time.
The occasional group activity in recitation was helpful	I believe having more work in recitation that involves talking to the people around you would enhance learning. Instead of lectures constantly, having students answer and talk would involve more learning and new platforms.
The environment of the class was comfortable and inviting. We would complete hot seat questions in class to receive points, which was a really big help	I think to learn better, we should have recitation groups so we could study more together and feel more comfortable with other people in the course

There was also one student who reflected on the fact that the way the course was delivered without much student interaction was detrimental to their learning.

> The environment of this class: specially the way the professor delivered his information (without much student interaction) was detrimental to my learning during this class. Attending class became going to sit down and do other work while we waited for the HotSeat questions. Change the presentations to make them more interesting and interactive for the students.

From the student responses it seemed that students to some degree thought the hotseat questions and group activities during the recitation sections helped their learning and getting to know others. However, overwhelmingly they thought the course could be improved by involving more student interaction in recitations by working in groups and during the lecture sessions by having more hotseat questions.

The results show different ways instructors attempt to foster community and relationships between themselves and students and among their students. Cases 1 and 2 reflect intentional approaches which generally align with students' perceptions and experiences except for few students. However, Case 3 represents a less intentional approach but with structures in place that students see as beneficial but lacking generally in the course. Challenges and tensions with fostering community and relationships in the course and overall classroom environment emerge as

instructors and students navigate factors such as linguistic diversity, class size and aligning the goals for fostering a community in terms of inclusiveness and relatedness.

Incorporating Voices and Choices

This theme describes how diverse perspectives are considered in the classroom in relation to students having choice and exercising agency in the teaching and learning process with explicit considerations for diverse cultural backgrounds and autonomy in completing assignments and engagement in the classroom. It integrates aspects of autonomy – support related to psychological need for autonomy and competence and aspects of cultural responsiveness, specifically cultural inclusion and diverse pedagogy. Voices refers to ways that students and others lived experiences cultural or otherwise were addressed in the course, while choice refers to students' inputs about course work.

Case 1: Introductory English Course

Students voices and choices were incorporated by allowing them to choose how they wanted to complete different assignments. The course was designed in such a way that although the units and topic for what students would cover were predetermined for the students, the instructor allowed students to choose how they completed and present the assignment. Students set goals for themselves and state how they accomplish their goals. The following excerpts from the interview with Instructor K shows how this was done in the class. She states,

> The biggest assessments are the projects, and I think it really caters for individuality. It was very open so if a person wants to increase his or her vocabulary size that's fine if you want to read a book by the end of the semester that's fine if you want to make five American friends that's fine too. Since the task is so open they can choose whatever they find more important for them.

> Then the second project was go find some place somewhere it can be on campus can be off campus and can be somewhere else in the United States and plan a field trip to this place. Then go back and record a PowerPoint presenting your results like what you observed like how was American culture different similar to your culture…it's not like all everyone is going to a Cultural Center, everyone is going somewhere else. It was very open.

Despite providing students a voice and choices in showing their competence, there was a consensus among students based on the SGID that the second project assignment was not helpful to them so they suggested removing it from the course and replacing it with another assignment since it did not allow them to develop knowledge about American society. In this instance it was evident that there was a misalignment between what the instructor intended for students to gain from the activity both in competence development and agency and students actual experience. Another instance of misalignment between the instructor and students was with respect to incorporating students cultural background. Instructor K mentioned the fact that being from an indirect culture through her intercultural development in the U.S. has helped her to understand her students better. Describing how being more purposeful about reflection in her intercultural development translated into her classroom she stated,

> …a lot of my students are also from indirect cultures. Like, I can understand them more when they are not asking like direct questions but kind of going around. So I'm kind of read[ing] between lines. But I am also I think making them aware that American culture is more direct than their culture. So they have to be very clear on what they ask and requesting otherwise they will not be understood or they pick even an answer they did not understand themselves.

Considering her degree of intercultural competence which primarily reflects an Acceptance orientation towards cultural differences, one might expect that would also translate into how she facilitated her course particularly in the area of cultural inclusion. Most of the students in her class were from Asian backgrounds, however, based on the group consensus in the SGID, students thought there was too much emphasis on Asian culture in the course. This highlights the importance of diversity inclusivity in the course and how the classroom environment is structured, not simply focused on adding a diverse cultural perspective but ensuring this is done in equitable and inclusive ways. While Instructor K may not have realized this in the examples she provided, students in her course realized this blind spot. From the sessions I observed, lack of rationales for different activities was a consistent factor. The fact that there were not clear rationales for certain activities perhaps also contributed to misalignment between instructors' intentions and what students perceived and experience.

The results from the survey reveal that students' perceptions of cultural responsiveness and autonomy – support were somewhat positive but not reflecting high levels of autonomy – support and cultural responsiveness overall (See Table 15). Specific aspects of cultural responsiveness

related to inclusiveness and diverse pedagogy were generally higher compared to cultural inclusion and sociocritical consciousness. Below I describe a situation I observed in the class which provides some insights into why this might be the case and further reinforces the need for the classroom environment to be autonomy – supportive, in the relation to providing strong rationales and culturally responsive with respect to cultural inclusion and sociocritical consciousness. This excerpt also captures my reactions and thoughts in the moment as I observed the lesson and the students' response to the situation.

> Instructor K arrives at class before the official start time. She sets up her PowerPoint and writes the objectives for the day on the board. As students come in they can see the objectives on the board. Students come in and find a seat. Instructor reviews the course objectives for the day and proceeds to address some problems that students were having with word "analogy" based on a reading assignment from a previous class session. The class starts officially with a video showing aspects of the Wizard of Oz. Some students arrive late as they get ready for the next activity, Instructor asks students to shuffle the groups and work with other classmates for the next activity. Instructor K shows two more videos, one from an American guy who is living in Ireland and another from a female who was married with children living in Canada sharing about her experience living in the Philippines The videos were captioned but some jargons were used "Putting roots in the ground" which may have been confusing for some students. After watching the videos students completed their worksheet and then discuss in their groups. As the class comes together to discuss one student clearly frustrated vents his frustration, he seems not to understand the purpose of the video he states, "She was just a home lady, how does that relate to our experience here, she talks too much." The instructor slightly put off tries to steer the conversation back towards the topic. The instructor responds by saying the purpose of the video was to communicate about the life of an expat and that was the best she could come up with. The conversation shifts to the weather and snow and how students were doing. -Session 1 11/9/18 Observation Notes

In many ways the overall class session reflected some principles of autonomy – support in relation having students working together in groups sharing their experiences as they reflect on questions, the objectives for the day were written on the board so students knew the topic they would be discussing and the instructor occasionally walked around the room and talked with students as they worked in groups. In relation to autonomy – support however, this activity lacked meaningful rationales. This also reveals a missed opportunity to incorporate students own lived experiences as expats rather than having them reflect on the experiences of others who though

different than them culturally, did not connect with them in age, life experiences beyond living in a different place. [9]My reflections in the moment also reflected to some extent what the student was experiencing and decided to voice. As I observed the students in the room during this class session, many students seemed disengaged and seemed to simply go through the motions of completing their worksheets.

The class consensus from the SGID further reveals how students felt generally throughout the course in relation to the voices that were represented and those that they would have preferred in order to help them learn. These included: *more interactions/speakers with students in their age group e.g. domestic students*, *watching less videos, many long videos were confusing and boring* (like those described in the observation) '*it would be more helpful if the instructor said what was on the video.'* These examples reveal the fact that although a class or course involve different facets of autonomy – support and cultural responsiveness, other facets may be ignored which may undermine students' engagement and perceptions of the classroom environment.

Case 2 Introductory Communication Course

Incorporating students voice and giving them choices in their work is an important aspect of Instructor H's approach to teaching and learning. Students perceptions of the classroom environment as generally culturally responsive and autonomy – supportive were the highest compared to the other two cases (See Table 15). Instructor H describes how he incorporates students to help them learn in his course,

> I think giving them some sense of control over what they're doing and fortunately the class as it was structured does provide that when they're doing their presentations, they get to pick what it's on. We give them a structure and a framework so you know we'll say okay you need to give a presentation explaining how to do something with a video or you need to deliver a presentation where you're persuading someone to sort of join a cause or contribute to a cause. So there is structure but they get to pick what interests them…
> …it allows them to sort of bring their own values into that class and to share those values with the classroom which I don't think students get to do that often. You know this is something that's important to you. This was an event in my life and I'm going to tell you about what happened that day. It was really great or really

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[9] Fieldnotes in the moment reflections. [I wondered to myself why this clip? Was there any way to find a clip that would relate to students' backgrounds or experience?]. [I thought it was strange that all the videos that were shown did not seem to represent the diversity in US population or anyone from the students backgrounds or had any direct connection to their experiences. I was also slightly confused about the purpose of these videos in relation to the days objectives].

embarrassing. I think it recognizes that most people have lives outside of the classroom. So I think that's really important. Both because by doing this that is giving them connections to each other. But it's also autonomy at their choosing as well what to share.

Student inputs was also a major part of this course and overall classroom environment in that when students came to class although there were specific objectives for the day, the instructor would ask either what aspects of the task for the day students wanted to work on in the class and specifically what aspects they needed his help. Students often worked in groups and different groups were working on different tasks at the same time. The instructor also conducted his own SGID in the middle of the semester which students provided anonymous feedback about what was helping them learn and what suggestions they had to change in order to help them better. There was consensus among the students that they wanted more opportunities to practice speaking in the class in order to become more comfortable. The instructor took that information and incorporated specific points during the class session for the remainder of the semester when students would do impromptu presentations that were low stakes and opportunities for students to give their peers feedback and for them to get feedback. The following excerpts below reveal how students thought having that type of structure in the course and the classroom environment helped their learning,

> The environment in this class was very open to people's input and what we as a class wanted to do

> Practicing in small groups or pairs because it allows you to get instant feedback. Going to present topics in front of the class that are humorous and not expected to be perfect presentations because this makes the entire class much more comfortable speaking in front of each other.

Another way in which Instructor K incorporated students voices and choices was using a pre – survey at the beginning of the course. In the excerpt below he describes how he uses the information gathered from the survey to facilitate organize the course and the classroom environment to meet what students want to get out of the course.

> At the beginning of the semester I sent out a survey to students and I ask them to tell me:
> - What type of presentations do you expect to give?
> - What type of presentations do you want to make?
> - What do you think is an effective presentation?
> - What do you think is a less effective presentation?

So then the aim is how to help you make presentations that would be maximally effective for your goals, your ideals and for your personality. Because some people can be comfortable getting up and talking for 50 mins in front of a room and it's not that they have done any, they are just comfortable but others may not be as comfortable. But we know you will need to do this at some point in your life so how do we work to find ways that help you feel comfortable and produce something that you are proud of so you know going forward this is the type of presentation that works for me and is effective. That does not mean we are not going to push you and challenge you to go beyond your limits, and provide some reflection to compare so why isn't this as comfortable as the other and try to bridge that gap by exploring the boundaries and the limits.

Despite having little control over the course content, or creating the course itself, Instructor H provides opportunities for students to make inputs and uses their input to further facilitate instruction. Additionally, there are opportunities in the different assignments for students' personal values to be incorporated as part of their assignments. Cultural Inclusion however, was an aspect that was not frequently observed in the course, but in general students perceived the classroom environment allowed them to incorporate their cultural perspectives and from the interview Instructor H described how based on the topic students could incorporate their personal values into the assignments.

Case 3: Introductory Economics Course

Students' voices and choices were incorporated in this course and the classroom environment in two ways: choosing how they presented their work as well as inputting their preferences related to learning about specific economic concepts as part of in class activities. Instructor C describes how he provided students with options to turn in their assignments. This excerpt is in keeping with Instructor C's pragmatic approach to addressing culture and diversity in his course and organizing the course and classroom environment in ways that addresses students' preferences.

> A couple weeks ago, I had them do a reflection on the forecasting tournament and gave them two options for how to submit their essay either on Microsoft word or a multimedia video. They can edit their essay and that's partially intended to give students an option to communicate with me on that assignment. Hopefully they can find one or the other that fits their communication… I still think only about 1% of them made the video they mostly used the traditional way and write the essay. I still think it's kinda neat to have that option at least.

While students did not mention this specifically as an aspect of how the course or classroom environment was structured that helped their learning, the results from the student perceptions survey reveal that with respect to diverse pedagogical use which involves using multiple forms of assessments students perceptions were somewhat positive (*M*=4.62, *SD*=1.37). This provides some insights into to the fact that in general perhaps students may not see the instructor's effort of providing this choice as useful. However, on the other hand the 1% of students who used it may have found it beneficial to their learning. Student voices and perspectives were also incorporated in the course and classroom activities as means of establishing relevance of the economic concepts to their own experiences.

> [Some] activities [in lab] are usually open - ended and there is not really a right answer to that exercise so it's up to them to like take a prompt that we give them and come up with a response. A good example of this, I was talking about measures of social welfare and well-being and there is something that the OECD has created called the better life index, which is kind of like the personality test, with like a weighted average of all of these different things that we think enter into our well-being. So like income, jobs, education, work life balance a bunch of things that go beyond income and economic well-being. So what we did yesterday, I used hot seat and we voted on the categories that go into the index and I used hot seat to calculate their votes and assign weights to each category and we created our own aggregated better life index in the class. So I think that's kind of like a neat thing to do, and it's an example of this inputting of their preferences into something that we make in class.

These results reveal that while student choices were considered in different ways the classroom environment was structured and the instruction was facilitated, students' voices with respect their own cultural backgrounds was not evident. Figures E.1 and E.2 show the number of different autonomy – supportive practices that I observed in the class as well as the quality of autonomy – support and cultural responsiveness.

Developing Academic and Cultural Competencies

This theme describes the academic and cultural competencies students developed and the strategies the instructors used to facilitate students understanding of course concepts and principles in relation to students' lives and society. Although the outcomes of the courses were different, there were similarities in how instructors structured and organized the classroom environment as well as facilitate instruction to meet the specific outcomes. The excerpts presented in relation to

this highlight what the instructors intended that students learned by the end of the semester after taking the course in comparison to what students perceived they learned or report that they learned.

Case 1: Introductory English Course

The specific objectives outlined in the syllabus for this course stated:

> *By the end of the semester, students will be able to . . .*
> - Speak English more fluently
> - Read English more fluently
> - Communicate in English with increased clarity
> - Develop and apply a process for cross-cultural comparison and reflection

These objectives reflect the development of both academic skills which were relevant to students to succeed not just in this course but their other courses as well, in addition to developing the capacity to communicate across cultures. The different activities in the course also provided the means whereby students would develop academic, professional and intercultural competence. To facilitate competence development in these specific areas Instructor K primarily used pedagogical strategies that focused on cooperative, collaborative, experiential and reflective learning. Different forms of technology were also used. Students were often in groups working on tasks together and then reflecting on the different activities and recording their reflections on worksheets in class, using video blogs and writing journal reflections as well as doing interactive quizzes.

The following excerpt from the interview describes what Instructor K expects that her students will be able to do by the end of the course.

> I would like them to have some at least basic well better than not just a basic understanding of what the American classroom Environment is and how to interact with their other instructors not just me but in their content area and majors. How to work with a partner or partners doing some group work or partner work. Be able to understand Academic integrity is, what is actually plagiarism and what is not, when collaboration is okay And when collaboration is not okay, and being able to kind of be cultural ambassadors from their own countries. So they will be able not just kind of oh we're just waiting for Americans to interact with us. But being able to make the first step you know being able to introduce themselves and kind of make this connections not just to wait for someone to talk to you, make them I guess culturally aware of who they are.

She further talked about the specific skills that her students would be able to transfer from the course,

[In the class] we talk a lot about like time management skills and why is it important. They've been doing like short time management presentations in small groups like this is how I manage my time I use this app or I use paper pencil things or whatever. So they were sharing these ideas and some I think some of them got interested in one some of the apps that another student was using. And I mean this is definitely transferable so they can use this. Also action planning right, like smart goals [for example] how to make an action plan based on a smart goal. They can definitely transfer that to whatever they are doing in their other classes…And then I guess even being able to like group working like what it means different roles in doing so of course we did this I think a very cool activity but I think it also teaches them a lot - the marshmallow challenge. **Instructor K Interview transcript**

After hearing this response I asked her whether she explicitly provided rationales to students for the activities and perhaps how students would be able to use them. But, just as I observed in the class where sometimes few or no rationales were given explicitly, Instructor K stated, "Well I guess I am kindof hoping that it will transfer." Nonetheless she further explains how she knows students are in fact developing the skills she hopes they transfer by meeting with individual students.

The "Marshmallow Challenge" seemed to be a very impactful activity for students. From the SGID there was consensus among different groups of students that the "Marshmallow Challenge" activity helped their learning. They wrote, "some in class activities like the marshmallow challenge do help us learn about [how to] communicate with other international students." After completing the activity students also completed a journal reflection responding to the prompts,

> I. Marshmallow Challenge: Was there a leader on your team? Who was it and who decided who the leader would be? Did you feel everyone's ideas were well received during the activity? How did you deal with frustration? What did you learn about yourself throughout this activity?
> II. Marshmallow Challenge: If you had to do it again, what changes would you make to the way you approach the task? Think about your own personal experience in the activity, what would you do differently next time? Looking back on the activity, what two things stand out to you the most and why? What did you learn through this experience and how can you use it in the future? Before moving on to the next challenge, I would like you to identify one area where you feel you could have contributed more.
> It was quite interesting to observe students completing the activity.

While it was low stakes, the fact that it was timed seemed to put some pressure on students which may have affected how some of them performed during the task. Additionally, because of the nature of the activity some students seemed to focus more on winning which undermined the purpose of the activity. Additionally, Instructor K did not provide rationales for the activity and

was basically a time – keeper during the activity, although this seemed to be intentional. At the end of the activity she shared the video describing the activity but did not really provide the reason why the activity was done. From the video students were able to gain insights for how they should have approached the task.

However, the overall goal of the activity as Instructor K suggest was to help students develop capabilities on how to function well in a team. This activity coupled with the reflection despite its competitive nature provided students with an opportunity understand themselves and others when working in teams which was crucial for many of them develop since majority of the students were in majors that primarily focused on team assignments and activities. The reflections from students below show how the activity helped develop their skills in collaboration. But the reflections also highlight the challenges with such activities which may work well for some students but not for others.

In hindsight we too should have focused more on each step, carefully checking whether the tower was strong enough to support the marshmallow before continuing on with the structure. Our team's competitive nature got the best of us as instead of trying new ideas and discussing unique ideas within the team we were looking over at the other team and just trying to "beat them". So the two areas where I feel like we could have improved were, employing an iterative process to fix our flaws side by side and focusing more on our ideas and project rather than competing with others. These lessons are not just limited to this marshmallow challenge but can be applied to any team project. As one continues in the adult world, many teaming opportunities arise and this is where I hope to showcase my improved teaming strategies. – Apurva

From this challenge, I learned that teamwork is never a easy task. It needs every individual's effort and support to work effectively. A poorly organized and communicated team could make easy tasks tough to deal with. A well collaborated team can make the impossible just possible. I think I usually have a clear structure in my mind when facing a challenge. I would like to be more confident to lead the group when there is misunderstanding or conflict. – Logan

This challenge was really functional because it teched [taught] me some very important things, for example: you will be able to do more things in a functional team, you need to try everything before you present it and that participation is the most helpfully thing in achieving anything. I liked this challenge because it teched [taught] me some improvement zones (like more participation), but also some good things (like working under pressure). – Marko

The assessment practices in the course combined formative, summative, collaborative methods and strategies as well as incorporated different media. For example, technology was integrated in the form of using vlogs (video blogs) and Kahoot! Formative assessments using Kahoot! to help students understand general concepts in the form of interactive quizzes which involved students working in groups to respond to questions. There were also more individualized summative assessments in the form of projects which involved presentations. Students also wrote reflections and completed worksheets. There was consensus among students in the class that the interactive quizzes and video blogs helped in their learning, but they did not think the worksheets were useful in helping them learn the concepts for the course.

Beyond developing academic and professional skills, developing cultural awareness and competence was also stated as student outcomes. There was also consensus from the entire class based on the SGID that using video blogs in the course was one way that they got to learn about other cultures specifically their classmates. The following statements reflect consensus from the SGID responses among students in the specific groups about the environment, activities and structure of this course that helped them develop cultural awareness about themselves and others from different cultural backgrounds,

> The course involves using story from people from different culture, almost all the materials are related to international topics which help us to understand and adapt to cultural differences better

> The environment is already diverse and the way the class is structured, the activities they all focus on people from diverse backgrounds adapting to American culture. Talking to people, interacting with them and group projects helped me comprehend aspects of their culture

> The class activities help us keep an open mind when we hear about other cultures

> We have met people from various walks of life and we have had detailed discussions on topics like culture-shock

The quantitative results also revealed that as a result of taking the course students generally perceived that they consider behaviors related to intercultural, attitudes, skills and knowledge to be a value and priority for them. The overall structure and organization of the course and classroom environment evidently align with the expected outcomes. Additionally, the results reveal to some extent that students met the objectives of the course, developing their academic and cultural competence based on the expected course grade of those who chose to complete the survey,

reflections on the activities and the SGID responses. However, the results reveal that the structure and organization of the classroom environment seem emphasize facilitating competence in ways that do not reflect quality forms of autonomy – support and specific aspects of cultural responsiveness related to cultural inclusion and sociocritical consciousness that have stronger correlation with intercultural development as seen in the quantitative results.

The quantitative results show that in general student motivation were somewhat positive and reflected more autonomous forms of motivation. However, the excerpts from students about the "Marshmallow Challenge" coupled with my observation regarding number and quality of autonomy – supportive practices (see Figures E.1 and E.2) I observed provides further insights about the motivational climate of the classroom representing more controlled forms of motivation. Regarding the cultural responsiveness, much of the content as well as how the class was facilitated did not take a critical approach to understanding aspects of society (e.g. social or racial injustice or inequality) either within students' own lives or countries or others. Sociocritical consciousness and cultural inclusion had the lowest average among the different aspects of cultural responsiveness on the student survey responses 4.79 (1.85) and 4.12 (1.6) respectively and the lowest number of related practices I observed in the classroom representing these aspects of cultural responsiveness (see Figures E.1 and E.2).

Case 2 Introductory Communication Course

The excerpts below are the learning outcomes and objectives that students are expected to accomplish by the end of the course based on the course syllabus. These outcomes and objectives reflect academic and professional competencies that students are expected to develop when they complete the course. While there are no explicit outcomes or objectives for intercultural knowledge competence (i.e. cultural awareness), there are certain outcomes which may imply that students will be able to develop some aspects of intercultural competence for example group communications.

> **Learning Outcomes: At the end of [this course] students will be able to:**
> **1)** Employ effective verbal and nonverbal delivery techniques while delivering a presentation. **2)** Conduct an audience analysis and use the information to adapt messages delivered during a formal presentation. **3)** Utilize effective organizational strategies for informational and persuasive presentations by drafting and delivering presentations. **4)** Find and

incorporate supporting evidence to increase the effectiveness and credibility of the messages delivered in informational and persuasive presentations.

Course Objectives
1)As a result of classroom learning and speaking experience, you will be expected to demonstrate knowledge and skill in the following areas: Audience analysis, Topic analysis, Organizational skills, Support and evidence, Persuasive and informative strategies, Verbal and non-verbal delivery skills and Group communication skills
2) When creating and delivering a presentation, you should be able to: select an appropriate topic, outline a presentation, provide appropriate transitions and summaries, develop effective introductions and conclusions, use an appropriate organizational pattern, use supporting material properly and effectively, create effective presentational aids, use presentational aids effectively, display appropriate verbal and nonverbal behaviors, create effective asynchronous and synchronous presentations and tell a story extemporaneously

Additionally, Instructor H also presented his teaching philosophy in the syllabus which shows that although the course outcomes and objectives are more explicit about academic and professional competence, the instructor's philosophy and approach to teaching articulates the development of these competencies in ways that also facilitate developing intercultural competence (i.e. attitudes, skills, knowledge about self and others for effective and appropriate interactions across cultures). The following excerpt is Instructor H's teaching philosophy from the course syllabus.

> As an instructor, it is my responsibility to maximize the opportunities for every student in the class to learn, grow, and succeed in reaching both my own outcomes for the course and their personal goals related to the class. To meet this responsibility, I draw on theory, frameworks, and practices rooted in principles of collaborative learning and student-faculty partnership. For some students, this may feel awkward. Much of our society's discussions about teaching focus on a banking system, in which an instructor deposits knowledge into a student's mind, and students receive, file, store, and ultimately return that information in the same format in which it was deposited. Instead, I focus on student learning, which I define as a process of individual change. This means developing skills to view the world in new ways, and engaging in different types of debates, discussions, and dialogues. Thus, I have only succeeded in teaching when those I work with have learned, and through that learning they see and engage with the world in new and different ways.

Instructor H's teaching philosophy was reflected in how he structured and organized his lessons and assessments in the course to meet the student learning outcomes and objectives. The following excerpt from the interview describes how he tried to ensure that students felt what they were learning was relevant and valuable. He stated,

> I think I was fortunate because when I did the survey at the beginning of the semester that to get at this no one challenged the idea that they're going to need to do presentations throughout their life. They all had some sense of the value that would be in the class. I try to remind them and I try to give examples and I've talked about my experiences of like this is when I had to give a presentation like this and I think as we go further in sort of increasingly more common types of presentation…The last presentation that is individual is about persuading someone. Basically whatever you do in your job or life like you're going to need to try to persuade people of something. Does it mean that you need to like totally change them from this side to this side. But you might need to move them along a little or persuade them that this is the time that this project is important right or that you know companies should invest some money…

However, he also describes tensions he experiences when it comes to teaching this course to meet student outcomes and objectives listed on the syllabus in ways that align to with his overall teaching philosophy. Continuing his response about ensuring relevance of the course topics and content to students' lives, he states,

> …So it gets to a broader issue. Something I keep thinking about is that like a lot of the examples and how we talk about it as all the context of like work what you like persuasion we get into the politics and personal values but largely we still sort of in justified context work which reinforces this idea that school is sort of a mode of social work production for work in the capitalist system which is a system that I would like to take down but would not want to do that at the expense of my students ability to thrive within the system that they're given, I hope that they'll view it critically. Also this isn't necessarily the course for that although I'd hope it would be.

I followed up by asking whether he thought aspects of those topics could not be addressed in a communications course. He stated,

> It's not that I don't think we can. It's that because the goals have been set out and the assessments have been set out for me so strictly that I have no say in those so I hesitate to spend. And that's something that first year student at this stage of their career sort of a complex issue to start to grapple with. I hope that it's there since anytime I am talking I am sharing myself, I am not being fake. But at the same time I realize that like we have very clearly defined goals for this class and I don't want to get in the way of students accomplishing those goals with my personal values.

This is where you know and I feel in an ideal world we could construct goals for each student individually, [then] I get to know them in those discussions we could sort of talk about the system and why is this your goal? But because the goals are set outside. I don't think I have the same ability to sort of transgress that structure. Maybe if I teach it more times I'll feel more comfortable, part of it, this is also my first time teaching this class and it's not in my discipline… I am trying to do right by them. I don't want to harm them so I maybe hedging more towards the structure than I might otherwise do.

Despite hedging more towards the structure, Instructor H has found ways to provide students with academic, professional as well thinking critically about structures in society integrating aspects of both autonomy – support and cultural responsiveness by allowing students the option of either meeting with him to review their assignments and grade it together or simply having him grade it and return it with a score and comments. Instructor H describes how he uses this opportunity to have discussions with students about aspects of learning they would not otherwise be able to in the context of the course because of the structure.

…That's the idea of like a grade together and in those discussions I've talked with students about why I don't think we should be using our current grading systems and they look at me like I'm crazy because they're like but your GPA is so important. And I'll say I have no idea what my undergrad GPA was because of that matter once I got into grad school no one asked for it right.
So that's where I try to have those discussions. But it's more on the individual level when it seems appropriate than trying to build it into that class where I feel like I do have a responsibility as much as I don't like the system. I have a responsibility within this system and it would be wrong of me to sort of try to go against that system to the point where it might be detrimental to them.

These excerpts address tensions between his teaching philosophy towards meeting student learning outcomes and objectives and the overall education system in the context of the course he is presently teaching. His tension is in relation to explicitly engaging in sociopolitical discourses and engaging in critical analysis of social systems that students will be working in and applying the competencies. The data from the classroom observations in relation to the number and quality of autonomy – supportive and culturally responsive practices (See figures E.1 and E.2) show that Instructor H frequently used different forms of autonomy – supportive practices with greater degree of quality compared to culturally responsive practices specifically in relation to cultural inclusion and sociocritical consciousness. The quantitative results based on students' perceptions of autonomy – support and cultural responsiveness however, show that students perceived high

levels of autonomy – support and aspects of cultural responsiveness related to inclusiveness and diverse pedagogy (which are highly related to autonomy – support) as well as aspects of cultural responsiveness related to cultural inclusion and sociocritical consciousness (See Table 15). Additionally, students' motivation also revealed more autonomous forms of motivation particularly identified regulation which suggest that student motivation to study for the course was based on the fact that they perceived high sense of value. This suggests that although the instructor was not as explicit about addressing aspects related to sociocritical consciousness and cultural inclusion particularly in the objectives and content of the course, students perceived somewhat high levels of these aspects of cultural responsiveness. The quantitative results showed that these aspects of cultural responsiveness (sociocritical consciousness and cultural inclusion) are more highly correlated with intercultural knowledge and competence development.

Students' responses to the SGID questions in the form of the short answer survey also provided some insights about student experiences in the classroom in relation to developing cultural awareness about themselves and others. Majority of the students stated that working on the different assignments in groups in class helped them develop cultural awareness about themselves and others. The following excerpts represent student responses about the aspects of the classroom environment, activities and structure of the course helped developed cultural awareness,

> In the activities, we were always paired in with people from different backgrounds. It helped everyone work together despite being different in certain ways.
>
> The environment of this class developed mine and other's cultural awareness by listening and interacting with people of different culture.
>
> The structure of this class helped improve everyone's cultural awareness by frequently working on group activities.
>
> I didn't really feel culturally aware from this class. There were some international students in the class but they were just like any other classmate to me. Activities didn't really pertain to this either.
>
> Being forced to work in groups
>
> Activities needed to be done in groups or it wouldn't be done right
>
> The initial "this is who I am" presentation

These responses from students reveal mixed perspectives, while some students thought working in groups was helpful, and that a specific assignment was also helpful, the responses also show that one student did not perceive that the class facilitated any form of cultural awareness, and pointed to the presence of international students in the class as well as the fact that there were no activities that they thought specifically related to cultural awareness development. From the students who completed the survey all students expected to finish with passing grade of A or B. This would point to the fact that to some extent students met the outcomes and objectives of the course. In relation to the intercultural knowledge and competence development, based on perceptions of attitudes, skills and knowledge as a result of taking the course, on average students' responses show they the developed value for behaviors associated with different components of intercultural knowledge and competence (See means Table 15).

Considering the results from the different sources (instructor interviews, classroom observations, student surveys, and short answer responses), all together, the results point to the fact that the classroom environment, structure and organization of the course were more explicitly focused on students' academic and professional skill development in giving presentations and communication and less on aspect of intercultural knowledge and competence development. The reasons stated by the instructor described in the interview excerpts provide some insights into why this was case. This also provide insights into the fact that even the most interculturally competent instructor who is explicit about including diversity in the course and class, may not be as explicit about aspects of the course and classroom environment that foster the development competencies beyond directly related to academic and professional skill development. However, while the outcomes, content and assignments may not directly reflect developing intercultural knowledge and competence, the instructors use of diverse pedagogical practices that facilitate interactions with other students and the instructor, even with regards to grading, contribute to students perceiving some development in intercultural knowledge and competence in conjunction with academic competencies.

The excerpt below shows what Instructor H hoped his students would be able to take away from the course by the end of the semester and the tension he has with being more explicit and balanced between fostering academic and professional competencies as well as specifically address factors related to cultural inclusion and sociocritical consciousness.

That this is where I had the struggle of being a transgressive educator and having that sort of experience of freedom in the course. But I also know that realistically that's that the goal that I had do but that's not what I'm teaching toward and I hope in the future I will. Realistically I think what I want them to get is to feel comfortable giving a presentation in various context. And you know it doesn't sound like a lot but like if they leave this class and then when they need to give a class presentation or a job interview, they feel more comfortable than they would have otherwise, I think that's a great success. The degree to which they are achieving that, it's hard to know because it's personal. I got to have those discussions. My impression is that they are getting more comfortable, but they also need to then sort of perceived that in themselves.

The following excerpts were taken from students' responses to the short answer survey SGID questions about the aspects of the classroom environment, assignments and activities that helped their learning. The instructor hoped that students would develop comfort in giving presentations in various contexts. These responses suggest that some students in the class felt that the way Instructor H facilitated the course allowed them to feel comfortable and develop the necessary presentation skills. The diverse forms of pedagogical practices with respect to group work, diverse forms of assessments as well allowing students to have input and integrate their personal values were the key aspect of the classroom environment that contributed to students developing different competencies.

I liked the activities that put us out of our comfort zone like talking in front of the class as well as talking to the class in groups or pairs. Watching videos of what not to do and what not to do for our presentations was also helpful.

The activities related to what we were supposed to learn today and also led to the right proper way to think and present the right way. Or rather, it was designed to tell me what I was to improve. For example, some of the quick improvisation activities helped try to critique where I should've went or think of an alternative approach to solve a problem.

Didn't feel like I was constantly graded everyday even though I was

Practicing in small groups or pairs because it allows you to get instant feedback.

Going to present topics in front of the class that are humorous and not expected to be perfect presentations because this makes the entire class much more comfortable speaking in front of each other.

Case 3: Introductory Economics Course

The goals and learning outcomes presented below from the course syllabus show that Instructor C's aim in designing the course and the classroom environment was not only to foster students' academic competence regarding their knowledge and skills about economic concepts and principles but specifically how those concepts and principles applied to their daily lives and current events.

> **Course Goals:** The general goal of the course is that, after its completion, students are able to describe economic theories with factual correctness and apply them to discussions of current events and decisions in their professional and personal lives. Additionally the course aims to: a) increase students' literacy of Economics vocabulary, phenomena, and institutions, b) exercise analytical skills that will help students in any challenging future career and c) motivate students to continue studying Economics and practicing the "Economic Way of Thinking."

> **Learning Outcomes:** In this course, students will learn to: 1. Identify costs and benefits involved in economic decision making. 2. Predict market equilibrium and changes in equilibrium. 3. Evaluate the efficiency of market equilibrium. 4. Express and interpret economic theory and data using various visual representations (e.g., graphs, tables, charts). 5. Calculate basic measures of macroeconomic performance and the forces that influence those measures.

Instructor C also reiterated these outcomes in the interview. The excerpt below is his response about what he expected students to get out of the course by the end of the semester and whether he thought students meeting the outcomes. He stated,

> I want to foster into student what is called the 'Economic Way of Thinking' a problem solving technique, that's the dominant skill I want them to have, is that when they look at a social problem or something in the news they look at it and are like who are the people that are involved creating this problem, who are those in a position to resolve the problem and then ask what kind of incentives are they being given is this a set of institutions that is giving us altruistic socially responsible incentives, or are the rules set up in such a way to give people bad incentives. Because usually if you can uncover those things you can diagnose the problem pretty quickly and come up with an idealized solution. Then there is also the problem of implementing and getting popular support.

> That's the kind of skill that I want them to have, this is not just a class for economic majors, so for many this is the last econ class they are ever going to take so they are going to go out into the real world after this and that is what I want them to be able to do is to apply some of these basic principles to reading the news to being informed about public policy debate, being good citizens and maybe applying some

these economic principles to their personal finance and labor market prospects to their own household decision making.

In meeting these outcomes Instructor C describes how he uses different examples from his personal experiences as well as from different contexts to illustrate the economic concept to students in order to help students make direct connections to not only their lives but in a broader sense how economic concepts operate at an institutional level. He stated,

> I give them examples from like my personal experience, like shopping for goods, for instance to buying stuff at the store, just daily life experiences as consumers. To the extent that those can be used to backup a point that I am trying to make about the text book content, stories in the news, I have got this extremely long list of news stories that I have tagged that are applications of something that I am teaching in the class and I have some...when I started out teaching I had none of these and now I have been teaching so long that I have more stories than I could ever hope to share with them. Now it's just a matter of selecting the ones that are the best examples and sharing those with the class.

Although Instructor C uses primarily a direct instructional approach (lecture style), the classroom environment in organized in such a way that as he lectures not only does he draw on examples from everyday life to illustrate the concept he also conducts real time assessments to get feedback from students about whether they understand the concept. This is facilitated through Hotseat where the instructor presents a concept, provides some examples to explain the concept then give students a question during the lecture based on the concept he lectured about. This way he got direct feedback about generally how many students understood the concept and where he needed to provide more explanations. In one class session I observed, Instructor C was teaching about supply and demand. After explaining the concept with different examples incorporating what types of frozen pizzas students liked and example drawn from famous restaurants (e.g. Red Lobster) and buying food items in the grocery store, he gave students a Hotseat question. Students had approximately 3 minutes to complete their response and 88 percent of the students got the question correct. Instructor C then proceeded to clarify different ways to interpret the question and further explained the concept using different graphs.

Despite having a class of more than 200 students Instructor C created structures to check students understanding in real time and offer feedback as well as provide further information to guide student thinking about the concepts. The practices reflect some degree of autonomy – support and cultural responsiveness – specifically using diverse pedagogy, scaffolding students,

giving feedback, using feedback from students to inform instruction. Although not all students enrolled in the course completed the survey, of the 81 students who completed the survey majority (> 50%) of them reported that they expected to get an A or B which meant they would pass the class, but quite a few students expected to get a C (approx.. 30%) which is minimum grade to pass the course while the remainder expected to get a failing grade. While the present data does not represent all the students in the course, it does raise the question as to whether these students achieved the learning goals and objectives or perceive that they did?

Although developing cultural competencies was not outcome of the course, the examples Instructor C used often came from cultural contexts different from that of the students. However, for Instructor C considerations for culture and diversity is secondary when selecting examples. This is illustrated in the following excerpt.

> I think at best it's maybe a secondary consideration. I am really looking for the best illustration of the theoretical concept and if the best illustration of that happens to be across the river in Lafayette, great, if it happens to be in Venezuela, Venezuela is a good example of some of the institutional problems an economy can have. I'll use an example from elsewhere. But my first loyalty is to quality of the example.

While the quality of the example is crucial to students understanding the concept, when these examples are situated within specific cultural contexts it is important to be culturally aware and sensitive. However, since this is a secondary consideration for Instructor C, he ignores some of the implicit assumptions students may have or develop about these different cultures. This point is illustrated in the following quotes from the interview where Instructor C was describing how he used Peru as an example to describe economic concepts in his class.

> The lesson is putting that country under a microscope and then trying to extrapolate what you learn from Peru's experience to other undeveloped countries, less developed countries…in terms of how that really helps you with your [students'] cultural awareness. We are not delving into the culture of Peru for it's own sake I don't think you necessarily learn anything about what it is like to live in Peru other than you know it has some of these malfunctioning institutions that prevent people from investing into things that will grow its economy, kind of like holding it back. I don't think you necessarily learn anything about the people of Peru and their values in studying this but that part of it I think is tougher.

I followed up by asking whether he provided any sort of pre-text with this example to be culturally sensitive that would ensure students do not develop negative views about Peru and different assumptions about the people he stated,

I guess I am not trying explicitly to create that…I talk about the institutions that seem to be associated with faster rates of economic growth. Then Peru becomes an example of one of those that is lacking some of those key institutions. It's not like, we're not like picking on Peru and saying you are defined by your poverty and bad government. Maybe the optimistic way of looking at it is not, the reason that a country is underdeveloped does not have anything to do with it's values, or the peoples work ethic or their religion, it's like the way economic institutions make rules. Do you have credit worthy banks that aren't going to steal your money when you deposit it there or that the govt is not going to come in and seize your business if it wants to, or if you piss of the wrong person like a bureaucrat there are going to come and take away your stuff. It's these kinds of conditions irrespective of whatever other aspects of cultural identity has, that you need to improve upon and poverty is not something that is related even to the national culture.

From his response it is clear that his goal was that students will simply take away the understanding of the economic reasons why countries like Peru lag behind in their economic development and not as result of the people per se. However, this was not a point he made in his class to his students. I asked whether that was something he shared with his students during the lesson he responded,

Maybe it's something I should say?! I don't know if I say that what I just told you. No but maybe I should emphasize that a little bit more. No I haven't really made that point in the past.

Although intercultural knowledge and competence development was not an explicit goal of the class, the quantitative results show that on average students report that as a result of taking the course they value and prefer behaviors associated with different intercultural attitudes, skills and knowledge (See Table 15). Responses from the students who completed the short answer survey with the SGID questions about how the structure, environment, and activities helped them in developing their cultural awareness, the responses were mixed. Some students thought it helped while others thought that it did not. Those who thought the course structure, activities and environment helped them developing cultural awareness referenced the ability to collaborate during Hotseat, the examples from different cultures, the demographics of the classroom, the following excerpts are some their responses:

In econ we learn about the US and the rest of the world, so we do learn how economics can be different in other countries and areas.

Cultural awareness was prevalent through the entire course, the professor brought an extensive list of samples and information about economics in other countries

that made us think about how they were managing productions and what placed them economically above or below the US. Different cultural backgrounds were also present in the class as students from a multitude of cultures were present in class and interacted together when trying to answer the hotseat questions.

This class helped develop cultural awareness through Hotseat and just being able to sit with whoever we wanted during class.

Having to work in groups of people close to us that were all different cultures helped me learn about others.

Examples of different economic stances in different countries helped understand different cultures. Another thing would be examples given in class helped

I was able to meet and talk with people from several different cultures. I was also able to collaborate with these students in recitation sessions

When in recitation sometimes we were put in groups to work with one another. This allowed me to get to know other people and work amongst my peers to enhance my cultural awareness.

In a large lecture it can be difficult to get to know others around you. Having hotseat questions where students would input answers allowed for a more interactive setting.

Responses from students who did not think the course helped in developing cultural awareness stated:

I would not say the environment of the course helped me develop cultural awareness completely, but there is a diverse amount of people i the class and it is interesting learning their inputs on the topics also.

No cultural awareness involved

I learned a lot about stocks, bonds, and how each country/government deals with them. I learned more about others and the more strategic way to consume or sell certain items. I learned more about businesses.

Nothing really helped me develop cultural awareness about myself or others. I did not really find this the class to be doing such.

Honestly, I don't think I learned much about different cultural backgrounds from Economics. The only thing I could say towards this is that if I were to learn underlying things about other cultures it would be from the people sitting around me during lecture and recitation. However, the course didn't involve much

interaction between peers, so I'd say I didn't learn much about other cultural backgrounds.

On the one hand the students who reported that they did not learn anything related to cultural awareness align with the instructors' perspective since this was not an explicit outcome of the course and the instructor did not explicit try to develop their cultural awareness. However, on the other hand, taking the perspectives from students who said they developed some cultural awareness in the class suggests they may have internalized the examples used and their interactions with peers as merely a part of developing their knowledge of economics as the instructor intended but their knowledge of others as well.

Section 2.2: Qualitative Analysis and Results Summary

The purpose of the qualitative strand was to gain further insights into how instructors addressed culture and diversity in designing their course and cultivating the classroom environment, as well as compare instructors' and students' perspective on the extent to which there were similarities and differences between them on how the structure and organization of the classroom environment in meeting educational outcomes. A secondary but related purpose was also to gain some insights on the distinctions between autonomy – support and cultural responsiveness and what such practices looked like in the context of the classroom. I integrated data from the quantitative strand with qualitative data from multiple sources (observations, interviews, focus groups and open-ended survey responses) within the context of three classrooms which were also a part of the quantitative strand.

The results revealed three qualitatively different ways in which instructors addressed culture and diversity in their courses and cultivating the classroom environment: 1) *proactive, somewhat explicit and intentional* (Case 1, Instructor K), 2) *proactive very explicit and intentional* (Case 2, Instructor H) and 3) *reactive somewhat explicit and pragmatic* (Case 3, Instructor C). The different approaches instructors take were developed based on instructors' descriptions of what they thought about in designing and teaching their courses and from the policies and contents related to culture and diversity in their respective course syllabus. Examining the different approaches instructors take to address culture and diversity also revealed where tensions may emerge in cultivating a culturally responsive and autonomy – supportive classroom environment. The tension emerges between fostering cultural inclusion which is an aspect of cultural

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responsiveness while supporting students' psychological needs of competence, autonomy and relatedness. In the context of Case 1 there was a course policy related to students using languages other than English. No such policy was in syllabi of the other two Cases which might suggest either this was not a concern for the instructors, or they simply ignored this as part of the reality of their classroom.

Although students were encouraged to use English as a means of building what could be seen as relatedness and inclusiveness among their peers, as well as increasing competence in English language which was an outcome of course, they were not restricted from using their native language. Practically, this course policy reflects the integration of autonomy – support and cultural responsiveness by affirms students' cultural identity as non-native English speakers and providing rationales for the policy which reflects autonomy – support in satisfying psychological needs for autonomy, competence and relatedness. However, conceptually it raises questions as to whether the psychological needs and aspects of cultural responsiveness could be at odds, and if so how to resolve the tensions both conceptually and in practice. I also saw this tension in my analysis of the three additional themes.

Integrating the results on instructors' degree of intercultural competence and diversity inclusivity with the different categories developed for the instructors' approach to culture and diversity also revealed some parallels. Although the three instructors were all high in diversity inclusivity, they had qualitatively different degrees of intercultural competence. Although Instructor K and Instructor H were grouped as being in the Intercultural group based on their developmental orientation scores, they were qualitatively different in their degree of intercultural competence based on the IDC®. Instructor K's developmental orientation (DO) places her in *Acceptance* while Instructor H's DO places him in *Adaptation* on the IDC®. This aligns with the categories used to describe their approach to culture and diversity in their course and classroom environment. Both are proactive and vary in degree of explicitness and intentionality. Similarly, both reflect more intercultural orientations (*Acceptance* and *Adaptation)* as opposed to monocultural orientations (*Denial* and *Polarization*) or *Minimization*, but they vary in their degree of intercultural orientation.

Instructor K and H degree of intercultural competence contrasts with Instructor C, who was grouped in the monocultural orientation group and based on his DO reflects a *Polarization* orientation. However, based on his perceived orientation (PO), Instructor C orientation towards

cultural differences and similarities is in *Minimization* at the cusp of *Acceptance* which reflects evidence of increasing degrees of more intercultural orientations. Based on the qualitative analysis Instructor C's approach to addressing culture and diversity in his course, I describe as *reactive, somewhat explicit and pragmatic.* Considering both his PO and DO provides some explanations for him taking this approach since in some ways he recognizes differences but ignores those differences in some respects. In the case of his course, he recognizes how cultural differences plays a role in his assessments and students' participation in his class but ignores these differences in the context of teaching the content of his course taking a more reactive approach.

Taken together, the results from the quantitative and qualitative analysis show that instructors' degree of intercultural competence despite similar degree of diversity inclusivity reflect the variability in how they address culture and diversity in their course and cultivating the classroom environment. The remaining three themes describe what the classroom environment of these instructors looked like from their perspective and what their students' experienced as it relates to aspects of autonomy – support and cultural responsiveness and meeting educational outcomes.

The theme *Foster Community and Relationships* described how instructors developed and maintained equitable and respectful relationships between themselves and the students and among students. The results reveal that Instructors K and H incorporated specific structures in their course to foster the relationships among students such as using games, having discussions about how to relate to one another respectfully and having students work in groups. They also incorporated specific ways in the course for students to meet with them individually which were described in the course syllabus. These instructors were intentional about fostering a sense of belonging among the students and between themselves and students from the first day of class. While generally students reported that the classroom environment was inclusive and they felt a sense of belonging in their classroom, there were a few points of tension and divergence between what instructors were doing to cultivate the relationships among students and what students wanted, perceived and experienced. Some divergence was seen comparing what was observed in the classroom and the overall perceptions on the survey for Case 2 (Instructor H) where although the student surveys reveal generally students thought the classroom environment was inclusive and they felt a sense of belonging, from the classroom observation it showed that some students were less engaged in the activities in the classroom even while in groups primarily female students and international

students. The interview with the instructor provided meaningful insights which provided clarity in understanding what was happening in the class as the instructor described how building relationship among students was something, he wanted to improve in order get students more engaged.

The tensions between the instructors and students' perspectives emerged as a result of students wanting to only interact with some students (Case 1) leading the instructor to use what might be considered controlling language and practices requiring that students rotate groups in order to facilitate inclusiveness. This highlight potential conflict between needs students' autonomy or their understanding of the need for rules for relating with one another (Case 2) and instructors' intentions for fostering a sense of belonging and community among the students. Cultural differences between instructor and students and among students also emerged as factors to consider in fostering relationships and community in the classroom environment.

Cases 1 and 2 reveal intentional efforts by the instructor to foster relationships among students and between themselves and students but Case 3 (Instructor C) shows less intentional approach with some structures in place that inadvertently results in students developing relationships and a sense of belonging among students. The challenge for Instructor C, however, is the size of the class. Although he does not intentionally or explicitly attempt to address the need for relatedness and foster inclusiveness among students, there are specific activities and structures built into the course that students point to that contribute to them feeling connected to one another and to the instructors specific collaborating in groups and collaborating on some in class activities using Hotseat. However, the point out that this was not enough which shows how lack of intentionality even with structures may undermine students desire to feel a sense of belonging among themselves and with their instructor which they highlight as something that helped and would help their learning. The results all the different sources converged to show how the overall classroom environment of Instructor C did not reflecting high levels of satisfaction in the need for relatedness and fostering respectful and equitable relationships among students and between instructor and students.

The theme *Incorporating Voices and Choices* described how the classroom environment and course were structured and organized in ways to incorporate students' preferences and supporting their autonomy as well as incorporating voices from diverse cultural backgrounds and students lived experiences. All cases had instances where students' choices and voices were

incorporated in relation to assignments, assessments and activities. However, only in Case 2 were students' personal values which may imply cultural inclusion were explicitly addressed. In Case 1 this was undermined and ignored and in Case 3 it was nonexistent. The theme also highlighted instances where instructors' perspectives on giving students choices was not aligned with what students experienced. This theme highlighted the importance of triangulating not only the methods and sources of data collection but the perspectives as well. This means not only looking at what was done, but how and why. This theme also further highlighted the fact that while the classroom environment may reflect different aspects of autonomy – support, it may not always have all aspects of cultural responsiveness. The analysis also revealed the fact which cultural inclusion may be observed in the classroom environment it may not be done in ways that are responsive and relevant to students.

The final theme *Developing Academic and Cultural Competencies* described the competencies students developed and the strategies and practices instructors used to ground students understanding of concepts in real world experiences which are beneficial to academic, professional and intercultural development and competence. This theme incorporated aspects of cultural responsiveness related to *diverse pedagogy*, *sociocritical consciousness*, *cultural inclusion* and autonomy – support related to the psychological need for *competence.* The results across the three cases highlighted the fact that course outcomes primarily emphasized students developing academic and professional competencies and to a lesser extent cultural awareness except in Case 1. However, the results also point to the fact that even when the course outcomes or the instructors intent is not focused on students developing cultural awareness, the nature of the course content, the types of examples, pedagogical strategies such as collaborative and cooperative learning used to facilitate students learning communicate information to students about different cultures which they interpret as part of their developing cultural awareness. Finally, the results from the cases also reveal that while the classroom environment may involve practices that facilitate students development and transfer of academic and professional knowledge and skills, there are less explicit considerations for students applying their knowledge and skills as they engage with cultural differences, or being critical of structures within society. Some factors that contribute this involve instructors not having complete control over the outcomes or objectives (e.g. seen in Case 1 and 2) and lack of intentionality by the instructors (e.g. Case 1 and 3).

Section 3: Data Integration and Interpretation

The overall goal of this investigation was to use an integrated methodological and theoretical approach to explore the extent to which instructors' degree of intercultural competence and diversity inclusivity in the courses was related to students' perceptions of autonomy – support and cultural responsiveness in the classroom environment as well as students' academic motivation, course grade and developing intercultural attitudes, skills and knowledge. Considering the results from both the quantitative and qualitative strands there are four specific findings. First, although all instructors were inclusive of diversity in their courses the more interculturally competent instructors were more proactive and explicit about addressing culture and diversity in their courses and cultivating the classroom environment for students. The results also point to the fact that it is not simply about including diversity in courses but instructors having the degree of intercultural development necessary to cultivate classroom environment using effective pedagogical strategies to facilitate students motivation and developing intellectual knowledge and skills as well intercultural attitudes, skills and knowledge. Second, regardless of instructors' degree of intercultural competence all used autonomy – supportive and culturally responsive practices in their classroom. However, instructors with greater degree of intercultural competence were more explicit about fostering a motivation through more non – controlling and external incentives and were more explicit about students developing knowledge and skills beyond professional and academic competence.

Third, the results reveal that students are developing intercultural attitudes, skills and knowledge (i.e. cultural awareness) whether instructors are explicit in their course outcomes or explicitly try to facilitate their development. Finally, autonomy – supportive and culturally responsive classrooms share some similarities but even highly autonomy – supportive classrooms and with interculturally competent instructors, the structure and organization of the classroom environment and outcomes addressed may not address aspects of cultural responsiveness related to sociocritical consciousness and cultural inclusion which are more highly correlated with developing educational outcomes beyond intellectual and professional knowledge and skills such intercultural attitudes, skills and knowledge. These results are discussed further in Chapter 5 in addition to implications for motivational and multicultural education theory and practice in higher education.

Limitations

The results and findings presented must be considered with following limitations. First, I acknowledge that the present investigation is limited its scope to generalize across campuses in the US, global higher education or more broadly postsecondary institutions. The sample of participants were drawn from a single four-year university campus in mid – western US. Additionally, the size of the sample is not fully representative of the university population or universities in general. However, the demographic makeup of the sample in some ways reflects the range in the general population of students in classrooms at this university. Second, due to the nested structure of the quantitative data, it would have been more appropriate to conduct a multi-level analysis, however due to the limited number of participants from both students and instructors the assumptions necessary to conduct the analysis would not be satisfied. Third, the interpretation of the integrated quantitative and qualitative results is also limited only to the specific classrooms examined. A larger sample of classrooms for the quantitative strand complemented by a separate sample of cases is required to further validate the interpretation of quantitative and qualitative results. In addition, the demographic makeup of the sample makes it difficult to generalize the findings. Additionally, the fact that cases used were based on self – selection could potentially contribute to bias in results. However, efforts were made to control this potential bias using multiple sources of data as well as ensuring the initial sampling pool was diverse based on discipline and subject matter.

Finally, social desirability is always a major challenge when using self – report measures particularly when examining social issues related cultural differences. Consequently, several steps were taken to ensure that the measures used were sensitive to such issues. Additionally, when cleaning the data, I was diligent in examining the response patterns for the student data and efforts were made to reassure both students and instructors about the confidentiality of the responses. Despite these limitations, the fact that the findings were gathered from different perspectives in actual classroom environments using a variety of methods provides ecological validity and therefore the overall findings can be interpreted in with respect to the context of the study as well provide considerations for future research and practice which I discuss in the subsequent chapter.

The exploratory and descriptive nature of the present investigation based on the quantitative and qualitative methods employed makes it difficult to make any strong claims of causation and magnitude of effects. However, based on the results across both strands the

following findings provide the basis for some substantive conclusions about the extent to which instructors' degree of intercultural competence and diversity inclusivity in their courses relates to students' perceptions of the autonomy – supportiveness and cultural responsiveness of the classroom environment, academic motivation as well as intercultural knowledge and competence development.

CHAPTER 5. DISCUSSION & CONCLUSION

Considering the results and findings described in the previous chapter, finally we can discuss what does this mean? Not only what these results mean, but what could these results mean? I begin by summarizing the overall findings from each strand followed by a subsequent interpretation of the integrated findings across both strands. Next, I discuss the theoretical and methodological implications of the present investigation as well as how the findings can be used to inform educational research and practice in higher education.

Degree of Intercultural Competence and Diversity Inclusivity Matters, But How Much?

The overall results described here regarding instructors' degree of intercultural competence with respect to students' perceptions of the classroom environment are generally consistent with what was expected and discussed in previous research. The results point to the fact that students perceive greater degree of autonomy – supportiveness and cultural responsiveness with instructors who have a greater degree of intercultural competence. The same is true for different aspects of cultural responsiveness except for cultural inclusion. This is a particularly interesting finding because it points to the fact that regardless of instructors' degree of cultural competence there is no difference in students' perception of cultural inclusion. But this result must be taken in the context of the present sample since majority of the students in the present study are from the domestic majority cultural group, as well as most of the instructors based on the demographic diversity of the faculty in the research context. This means the classroom diversity is more homogenous than multicultural. This would suggest that perceptions of no difference in cultural inclusion could be because many of the students are from the same cultural backgrounds of their instructors, and therefore perceptions of cultural inclusion would be similar. Other factors such as the nature of the courses etc. could also play a role which were not fully addressed in the present investigation. Additionally, it raises the question as to what extent students perceive their classroom environments and the course as being inclusive of people from different backgrounds and just not representing people from a specific cultural background.

However, this finding also points to the ways in which culture and diversity are addressed in university courses and classrooms environment. Evidently, although instructors vary in their

degree of diversity inclusivity across different elements of the course, there is a lack of emphasis on elements of the course related to the purpose/goals, instructor(s) biases and assumptions, content and assessments. This is consistent with what Laird (2011, 2014) found examining the extent to which instructors were including diversity in their courses. Laird (2011, 2014) found that instructors were more likely to be inclusive of diversity in elements of their course related to characteristics of learners, adjusting the course to meet students' needs, using multiple pedagogical approaches to ensure students active participation, using different forms of assessment to evaluate student learning and covering a range of topics from different theoretical perspectives; but have less focus on elements related to the purpose and goals of the course connecting learning to societal issues and problems and working with people from different cultural backgrounds, the course content reflecting people from different cultural backgrounds and assessing their own scholarly, cultural and course – related biases and limitations.

Another, finding which was also interesting is the differences in students' perceptions of the classroom environment with respect to instructors who have a minimization orientation versus a more intercultural/ethnorelative orientation. While both orientations reflect greater degree of intercultural competence compared to the monocultural orientations, the behaviors associated with a primarily minimization developmental orientation and the more intercultural orientations (acceptance and adaptation) are qualitatively different. For example, individuals whose primary orientation towards cultural diversity is minimization tend to focus on similarities among people and sometimes ignores cultural differences whereas individuals with a more intercultural orientation affirms cultural differences. This is important for faculty to consider as they make more conscious and intentional attempts to be inclusive of diversity in their course even though all or majority their students may have similar cultural backgrounds or shared lived experiences.

The present findings challenge researchers, administrators, faculty and instructional developers to take a more expansive approach and consider not only the instructors' degree of intercultural competence but the degree to which they are including diversity in their course design and teaching. The results suggest it is not that instructors are not including culture and diversity in their course; they may be more explicit and intentional in some aspects of their course than others. Instructors in the present sample reported less inclusivity in elements of the course related to the purpose and goals for the course, course content and assessing their biases related course related issues and their discipline. Consequently, as researchers begin to further examine the relationships

between aspects of culture and diversity and educational outcomes for students, we do well to not only consider intercultural competence or cultural awareness but the different elements of the course where diversity are being included and how intentional or explicit. Instructional and faculty developers and consultants as well as administrators need to find ways to assist faculty and instructors using a developmental and incremental approach to addressing the issues associated with diversity, equity and inclusion to fulfill the teaching and learning mission of the university.

Autonomy – Support is Good but Perhaps Not Enough?

The findings from this investigation reveal conceptually and to some extent operationally and practically the distinctions between autonomy – supportive and culturally responsive classrooms in relation to educational outcomes. Considering, the strength of autonomy – support with respect to students motivation for learning and engagement in the classroom, doing so in ways that are culturally responsive, it appears could provide some added value with respect to not only students motivation and engagement in the classroom but students development in knowledge, skills and attitudes necessary to live and work in a multicultural and global society. The traditional approach to conceptualizing and operationalizing autonomy – support does not explicitly address cultural responsiveness (especially factors related to sociocritical consciousness and cultural inclusion) which I would argue is crucial in the context of 21st century university classrooms. I submit that it is necessary to not only cultivate autonomy – supportive classroom environments but also culturally responsive classroom environments to provide the learning experience students need in order to address the global challenges facing the world today. The results show that autonomy – support has a strong relationship with aspects of cultural responsiveness related to using diverse pedagogy and cultivating inclusiveness and respect among students and between instructors and students in the classroom. The three cases provided examples of instructors who were autonomy – supportive but also being explicitly culturally responsive for example in the course policies about language, making sure that rationales are provided in situations where autonomy may seem to be undermined or controlling in order to explicitly address factors related to cultural responsiveness such as making sure there is representation from a diverse array of backgrounds not just who students know.

There is an implicit assumption in autonomy – support that relegates aspects of culture and diversity to merely being a factor to be addressed in the content of the course or the nature of the

subject matter. But if the tenets of SDT are to be taken as proposed with respect to the motivation being inherently cultural and the universality of the psychological needs; it stands to reason that the ways in which autonomy – support is conceptualized, operationalized and practiced would also reflect principles of cultural responsiveness regardless of the course or subject matter. However, this is often not the case. Although students may perceive the classroom environment to be autonomy – supportive, this does not equal cultural responsiveness – at least not in its totality. Explicit considerations for addressing culture and diversity in the course and the classroom environment are necessary to facilitate not just students capacities for intercultural competence but academic competence as well as the paradigms continue to shift from teacher centered teaching and learning classroom environments and teaching to more student – centered teaching and learning environments. But it is important to also take note that explicit considerations for culture and diversity, need not only be in multicultural classrooms but in culturally homogenous classrooms as well. Students, who may share similar backgrounds and common lived experiences also need to experience cultural differences. The present investigation highlights this in the context of a classroom with primarily a group of international students. However, I submit that perhaps greater considerations need to be given particularly in the university classroom even among students from the same cultural background; there is a heightened level of curiosity and interest for understanding and engaging with cultural differences in meaningful ways. Could it be inherent or a just merely a factor of the increasingly culturally pluralistic world? While the subject matter and content maybe one way to address this in a course and classroom environment that is structured and organized to be autonomy – supportive; university instructors, administrators, instructional and faculty developers would do well to consider the fact that course content is only one element of the course which culture and diversity needs to be addressed. Considerations for culture and diversity across all elements of the course design and implementation opens the door for not simply being autonomy – supportive but doing so in ways that are culturally responsive and relevant. It challenges instructors to become more culturally aware and therefore develop more enriching teaching and learning experiences for themselves and their students.

Cultural Responsiveness is Good But is it Sufficient?

In general, the results reveal that perceived cultural responsiveness as well as the different aspects are significantly associated with more quality forms of motivation for students, the

development of intercultural knowledge and competence and expected course grade (except for cultural inclusion). Specifically, students' perception of cultural inclusion was not significantly associated with expected final grade. One explanation of this could be that the courses in the present investigation did not explicitly address this aspect of cultural responsiveness in their courses and therefore this aspect of cultural responsiveness was rated lower than the others. Reviewing the three cases provided some insights for this explanation. Based on the observations across cases aspects of cultural inclusion were less frequently observed in the classroom than other aspects of cultural responsiveness. Additionally, most of the instructors in the sample primary orientation towards cultural differences and similarities was minimization which emphasizes similarities across cultures and often ignoring or minimizing differences could also be an explanation. The extent to which majority of the instructors considered diversity as part of their course was also low particularly in course content, purpose and goals. This reveals the fact that while generally students may perceive a course to be culturally responsive, it is important to consider in what ways. Cultural inclusion and sociocritical consciousness are crucial aspects of cultural responsiveness and are the primary aspects that are associated with intercultural knowledge and competence development. If these aspects are not explicitly addressed, then it is likely that students' development of this key educational outcome will be undermined. However, as much as cultural responsiveness and in particular cultural inclusion and sociocritical consciousness add to the autonomy – support to make the course and classroom environment a more enriching teaching and learning experience, it is crucial to consider the psychological needs and as such the practices that support these needs – autonomy – supportive.

The way cultural responsiveness has been conceptualized, previously operationalized and practiced despite the claims of inclusivity for all, can seem exclusive or tend to offer only critique about the aspects of culture and diversity related to those who may not be a part of the minoritized populations. Additionally, including culture and diversity for its own sake is also not beneficial to instructors or students since the potential for confusion and misinterpretation without strong rationales increases as with case of the economics course. Additionally, despite being culturally responsive, explicit considerations for a quality motivational classroom must be considered to ensure the strategies and activities used to achieve the outcomes of the course or the instructors aims for an inclusive classroom environment do not exclude students whose motivational orientation, preferred ways of learning or other individual differences whether culturally related

or not do not feel alienated or undermine their engagement. In other words, by not explicitly integrating the principles of motivational theory about what constitutes a quality motivational classroom environment, the conceptual and operational definitions as well as practice of cultural responsiveness may turn out to be not as holistic and inclusive. The present investigation provides some insights which both motivation and multicultural education researchers can consider as we move towards clearer conceptual and operational definitions of what it means for classroom environments to be inclusive, responsive, supportive or positive for students and instructors. Consequently, educators and practitioners from both perspectives can begin to consider how we cultivate classroom environments that are socially and culturally empowering while satisfying the inherent psychological needs for all (Kumar et al., 2018).

Theoretical and Methodological Implications

Regarding theory, the present investigation highlights how despite the differences in epistemological and ideological underpinnings in which the assumptions of ME and PMT, specifically SDT are grounded, it is possible to integrate these perspectives to gain a deeper understanding of the teaching and learning process in university settings. There are both independent theoretical contributions of this work and integrated as well. First, with respect the SDT and more broadly PMT, it shows how by examining aspects of culture and diversity with respect to both students and instructors, we understand to a greater extent how classrooms can be organized and structured in ways to meet educational outcomes aside from motivation and academic achievement. Autonomy – support although significantly related to perceived intercultural knowledge and competence development (IKC), the relationship between aspects of cultural responsiveness and IKC was stronger. This challenges researchers to not only think about autonomy – support or the social climate of the classroom divorced from the cultural and sociopolitical factors at play, especially considering the student outcomes for university graduates including global competencies and democratic outcomes.

By considering the latter, investigators will be challenged to consider different research designs and methods to understand the relationships among constructs in more innovative ways. Subsequently, the recommendations for fostering autonomy – support will move beyond primarily addressing psychosocial factors but cultural and sociopolitical as well. This challenges educators and practitioners to think about cultivating autonomy – supportive environments in ways that are

culturally responsive and relevant. The contribution of the present work is to show how explicit considerations of culture and diversity serves to bolster the arguments of SDT and challenge researchers and educators to more explicitly examine these claims in multicultural/heterogeneous classroom spaces. Additionally, it calls further attention to explicit considerations of culture and diversity with respect to educational outcomes even within the context of homogenous classrooms where all students are arguably from the same cultural background. The tenets of cultural responsiveness applied even in demographically homogenous university classrooms ensures a more explicit alignment with educational outcomes for living in a global multicultural society. Furthermore, when aligned with quality forms of autonomy – support, there is added value in addressing the psychological and emotional factors needed to energize students' motivation for academic tasks.

The theoretical framing of this investigation with the different conceptual frameworks provide a conceptual model which can be used to examine the relationships among variables associated with culture, diversity and educational outcomes considering instructors and students perspectives. Figure 4 shows this conceptual model and describes the relationships among different aspects. Explicitly accounting for culture, diversity and psychosocial factors attempts to provide a more holistic understanding of the teaching and learning process. In this model culture and diversity are not included as a control variable or added after the fact neither are psychosocial factors ignored or added, it is integrated and considered explicitly. Returning to Pintrich (2003) questions for a motivational science approach, the question what is the role of context and culture in motivational processes? is central. I would argue this as the basic question which drives and fuels the other six questions. Across motivational frameworks if this becomes the fundamental question then we can move toward an integrated theoretical framing of a motivational science. This pushes motivation research theoretical boundaries and subsequently methodology which would ultimately lead to the transformation in research, practice and subsequently policy in education (Kaplan et al, 2012; Kumar et al, 2018).

Sleeter (2012) in her call to provide further empirical evidence to support the implications of culturally responsive teaching in classrooms to further the case of this type of pedagogy politically is also relevant. The role of motivational processes is not explicit in this call, but no doubt is implied as understood in the theoretical and conceptual frameworks of multicultural education. However, as advocates (i.e. researchers, educators, practitioners) of CRPTE and ME

more broadly consider this call, the fundamental questions which guides this work should explicitly consider the relationship between CRPTE and motivational mechanisms that guide both instructors and students as they engage in the teaching and learning process. I agree that indeed it is difficult to make a case politically without empirical evidence for CRPTE (Sleeter, 2012) which has significant implications for educational policy and practice. It is evident both approaches start at different places. ME scholars start with cultural diversity while motivation researchers start with reasons and goals. ME researchers start with students' cultural assets prioritizing the instructors' cultural knowledge and competence while motivation researchers start with students' psychological needs, their psychosocial capacities and to some extent the instructors' motivational orientation. The theoretical contribution of this investigation is to challenge researchers across these perspectives to start with both and not simply examine students' perspectives but instructors as well. Only recently, research examining the differences across cultures (African American, Latino/a/x, Hispanic, Native American/Indigenous peoples and Asian American etc.) based on motivational principles have become more frequent. As Pintrich (2003) challenge to motivation researchers investigating role of culture and context in motivation maintain,

> It will not be sufficient for future research to just note that the generalizations do not hold for these different groups or different cultures, but rather to grapple with when, why, and how they do or do not hold for the different groups.

SDT research will need to more explicitly examine its tenets and principles across these populations to further substantiate the claims not only of universal psychological needs but move towards how autonomy – support applies to developing global competencies. In the higher education context there is some evidence that shows service – learning as a pedagogical tool that facilitate the development of these competencies in autonomy – supportive classrooms (Levesque – Bristol & Stanek, 2009; Levesque – Bristol et al., 2010) but it is also necessary to consider these outcomes in classrooms not using service – learning. While the pedagogical approach is important, equally important is whether it is applied in ways that are autonomy – supportive in culturally appropriate ways. Scholars in ME specifically applying the principles of CRPTE will also need to grapple with the questions of when, why and how the principles of CRPTE not only apply across all levels of education for all students but explicitly address different motivational principles across levels of education for all students. Taking a dynamic integrated approach ultimately will require a shift for both ME and motivation researchers in the methodologies and designs they employ to

investigate the specific research problems and subsequently the recommendations made for practice and policy across disciplines.

I explicitly chose to use a mixed methods approach in anticipation that perhaps there may be divergent findings which would be more adequately explained by examining an additional source of data. Quite often many quantitative studies include recommendations and future directions for research to involve using qualitative data to further explain quantitative findings or provide additional evidence to support or disconfirm the quantitative conclusions. Alternatively, qualitative studies often offer recommendations for future research to use quantitative methods to make findings more generalizable. Applying a mixed methods design in this investigation allowed me to see the results from different perspectives, triangulate data to formulate substantive conclusions as well as gain a more ecologically valid perspective. By doing this, I was able to see the nuances in terms of how instructors with varying degrees of intercultural development and diversity inclusivity cultivate their classroom environments comparing differences and similarities across classrooms generally and more specifically.

Moving forward, as our fundamental questions change in how we approach educational research across different disciplines and domains, it will require researchers to begin to use not only different theoretical perspectives but methodological approaches as well in order to gain greater understanding about the topic or issue we are investigating. In motivation and multicultural research, integrating these two perspectives intentionally call for applications of multimethod and mixed methods approaches. This means clearer conceptual and operational definitions of the constructs which will allow researchers to make more practical recommendations which can be used to direct policies and reforms in education. This is particularly important in higher education classrooms when looking at factors related to motivation, diversity and culture because there can be a lot of variability across course/classes, instructors and pupils and even university contexts. Conducting the classroom observations for example provided meaningful insights about cultural responsiveness looked like in practice in a university and what aspects may be more evident and what aspects might not be. This raises further questions as to why certain aspects of cultural responsiveness are more evident than others which future research will need to address. Further insights are also needed on how to operationalize the construct for surveys and other measures to be used in university settings. Similarly, for autonomy – support. In this investigation I have provided both an observation protocol looking at both cultural responsiveness and autonomy –

support as well as a measure which operationalizes cultural responsiveness. However, much more work is needed in this area.

Future Directions

The next frontier of interdisciplinary research across multicultural education and motivation research not just in relation to classroom environment will require more intentional applications of mixed methods and multimethod approaches as well as more valid and reliable measures. To further substantiate the claims of culturally relevant teaching and the role of intercultural competence and diversity inclusivity in teaching and learning, larger quantitative studies are needed which can be followed up with more qualitative analysis and vice versa. Some crucial questions about the relationship between motivational orientation and intercultural orientation for both instructors and students will warrant the use of not only an integrated theoretical approach but a methodological one as well. Just as we accept that students and instructors do not check their culture at the door and enter the classroom, which impacts the teaching and learning process in some positive and some negative ways. Similarly, the ways that students and instructors have been socialized within their own cultures and the overall educational system as well as disciplinary cultures for faculty, we also develop motivational orientations which also have implications in the teaching and learning process.

Orientations whether cultural or motivational can be changed and developed using various interventions and strategies. However, this requires valid and accurate measures to first evaluate one's orientation and the impact such orientations may have on teaching and learning practices and outcomes. This is followed by ways to facilitate incremental changes that align with individual levels of development and goals while evaluating impacts. The MCRT framework which combines principles of intrinsic motivation and culturally responsive teaching has been used to train faculty in how to cultivate high quality culturally and motivationally empowering classroom environments (Ginsberg & Wldowski, 2009). However, operationalizing the different facets to assess students' experiences of the environments remains lacking. The conceptual model developed from the review of the conceptual frameworks provides a way to begin examining these relationships more explicitly. The first step, however, involves further validation of measures of cultural responsiveness and perhaps expanding our conceptual and operational definitions of autonomy – support. The present investigation only partially examined the different forms of autonomy –

support (procedural, organizational and cognitive) which some researchers found to have different effects on student learning and engagement (e.g. Furtak & Kunter, 2012; Stephanou, Perencevich, DiCintio & Turner, 2004). However, these examples are exclusive in K – 12 classrooms. The present research provided some insights into the autonomy – supportive practices and aspects of cultural responsiveness that were salient in these university classrooms. Future research can further operationalize the different aspects autonomy – support to examine overlap with aspects of cultural responsiveness and examine the impact on student outcomes – quality of academic motivation, academic performance/achievement, as well as professional and cultural competence. Even further, a move towards a more integrated measure of cultural responsiveness and autonomy – supportiveness as it relates to inclusive teaching – not only in relation to culture but motivation as well. This will perhaps yield clearer conceptualizations of what it means to cultivate a holistic classroom environment thereby expanding or perhaps subsuming our current conceptual and operational definitions of inclusive or positive classroom environment.

Beginning with valid and reliable measures which are comprehensive will provide greater possibilities to quantitatively and qualitatively examine the full conceptual model as opposed to just sections as I have done here. Because the model addresses both instructors and students' perspectives, this means the application of multilevel structural equation models for example across both culturally homogenous and multicultural classrooms in higher education which will yield greater insights. Additionally, multiple case study approach can be applied across different universities nationally and internationally to further examine these relationships. A mixed method case study design (Creswell & Plano – Clarke, 2018; Smith et al., 2016) facilitates the examination of different classrooms across different universities affords the opportunity to examine how instructors with different range in intercultural development and diversity cultivate their classroom environments to meet student outcomes, the extent to which classroom environments are structured and organized in autonomy – supportive and culturally responsive ways to meet not only course outcomes but larger university outcomes with respect to global competencies and citizens.

Finally, as university classrooms both online and face to face continue to become more diverse to include all forms of diversity; concerted efforts are needed to help university instructors align their course outcomes as well as structure and organize their classroom environment in ways that meet educational outcomes for all college graduates. Efforts are also needed to help students develop knowledge, skills and attitudes that will not only help them do well in their careers but

develop competencies associated with local, national, regional and global citizenship. This would mean reforms in curriculum and some academic policies to allow for integrating rather than simply adding diversity in the curriculum. The classroom and by extension the university at large whether face to face or online can be viewed as a training work environment for students. Therefore, it is the responsibility of the faculty and administrators of universities to ensure they themselves are developing the requisite pedagogical and cultural competencies needed to cultivate classroom environments. By developing their own competencies then they will be able to cultivate for and with students authentic learning experiences that prepares them to live and work in a global multicultural society (Deardorff, 2009a, Deardorff, 2009b).

Recommendations for Change in Practices and Polices

The results and findings from the present investigation reveal that to some extent instructors' orientations towards culture and diversity is associated with students' experiences in the classroom environment as well as educational outcomes. The previous sections describe what the results mean, now we can consider the potential implications of not just the findings, but the dynamic conceptual model developed from taking the integrated theoretical approach with multicultural education and psychological motivation theory. The following recommendations assume that an integrated motivational and multicultural education approach will facilitate changes towards more holistic and inclusive practices and policies in higher education institutions with respect to teaching and learning, research and service/engagement. Holistic and inclusive policies and practices refers to explicit considerations of psychosocial, sociocultural as well as academic and professional factors that relate to students and instructors.

First, changing disciplinary and departmental cultures around the three fundamental aspects of higher education, research, teaching and learning, and service/engagement. This change can be facilitated by adopting policies that encourage disciplines and departments to explicitly document and evaluate the extent to which the courses offered reflect outcomes that emphasize intellectual and professional outcomes (e.g. critical thinking, quantitative reasoning and team work) as well as outcomes related to social and personal responsibility (e.g. intercultural knowledge and competence, ethical reasoning, civic engagement) (Rhodes, 2010). Additionally, in relation, to faculty research and service/engagement, adopt policies and hire personnel whose research agenda involves components that address issues related to diversity and equity in various

sectors of society that the university conducts innovative research for example in technology, healthcare, education and environment.

Second, incentivizing faculty and instructors who take steps transform their course to be more holistic and inclusive in pedagogy and outcomes is one way to facilitate change in the orientations and pedagogical practices of instructors which will ultimately impact student experiences and outcomes in the classroom. Incentives need not only be financial but adopting policies in tenure and promotion to reflect tenets of holistic and inclusive practices and hiring individuals committed to those practices while having support for them to continue their development in teaching and research. Administrators and staff who provide instructional support to faculty and instructors in general, should be trained and equipped to assist instructors with developing intercultural and motivational orientations that contribute to cultivating high quality autonomy – supportive and culturally responsive classroom environments.

This involves first helping instructors become self – aware of their own intercultural and motivational orientation through assessments. As instructors are able to reflect not just on what they teach but how and why they teach the way they do, efforts can be made in course design and implementation as well as pedagogical practices. In addition to assessing instructors' orientations, incorporating student perspectives in course design through mid and end of semester feedback about different elements of the classroom environment and outcomes will further facilitate changes towards more holistic and inclusive educational practices. Intervention studies as well course evaluations using instructor and student perspective about the motivational and cultural climate of the classroom environment can provide meaningful insights for faculty and instructional developers doing course transformation.

Finally, as higher education administrators adopt holistic and inclusive policies and practices in the areas of research, service/engagement as well as teaching and learning, they will be able to cultivate an institutional climate that attracts students, faculty and staff from diverse backgrounds. Additionally, by intentionally providing support and incentives for the faculty, staff and students they recruit, the overall institutional mission and goals for promoting inclusive excellence and graduating global citizens will be realized.

Conclusion

The goal of this investigation was to use a mixed methods design and integrated motivational and multicultural theoretical perspective to explore the extent to which university instructors' *intercultural competence* and degree of course *diversity inclusivity* relates to students' perceptions of the classroom environment as *culturally responsive* and *autonomy – supportive* and associated educational outcomes related to *academic motivation*, perceived *achievement* and *intercultural knowledge and competence* development. My primary reasons for undertaking this investigation were to: 1) provide a synthesis of the range of frameworks in ME that can be integrated with SDT and potentially other motivational theories to explicitly examine the relationship between motivational principles, culture, diversity and student outcomes in higher education contexts, 2) provide clear conceptual and operational definitions of constructs related to CRPTE to more accurately assess the relationship with motivational constructs related to SDT and potentially other motivational theories and 3) to explore relationships among key constructs associated with multicultural education research (i.e. intercultural/cultural competence, diversity inclusivity, and culturally responsive classrooms) and motivational constructs autonomy – support and academic motivation from instructors and students perspectives. The synthesis of ME frameworks and different mini – theories of SDT provided the basis for the dynamic integrated conceptual model with explicit considerations for cultural and motivational factors from instructors and students perspectives in relation to educational outcomes for college students. This conceptual model is a pragmatic approach that does not add culture and diversity or motivational principles but integrates both giving explicit attention to role these factors play in the teaching and learning process from both instructors and students' perspectives and how improvements can be made.

Examining the differences and similarities conceptually and operationally between autonomy – support and cultural responsiveness as well as the relationship with different outcomes provided insights about the range and limits of both constructs. Additionally, I described how by considering both enriches the teaching and learning experience and ensures explicit alignment to educational outcomes for students to succeed in the classroom and as members of a global multicultural society. The specific relationships I examined among the variables revealed the following conclusions based on the sample of students at this mid – western research university:

1) Generally, students perceive greater degrees of autonomy – support and culturally responsiveness, experience more positive forms of motivation to study, and greater degree of intercultural knowledge and competence development with instructors who are more interculturally competent instructors and are more inclusive of diversity in different elements of their course,

2) Instructors at different degrees of intercultural competence are more explicit and intentional about addressing diversity in different elements of their course,

3) The classroom environment instructors aim to cultivate for and with students do not always align with what students perceive or experience regardless of the instructors' intercultural orientation towards cultural differences and intentionality about diversity inclusivity.

The results of this investigation contribute to theoretical advancements in SDT research in terms of expanding conceptual and operational definition of autonomy – support as well as points of overlap between autonomy – support and cultural responsiveness. Additionally, the results contribute to ME research and practice with considerations for applications of CRPTE in higher education classrooms as well as connecting principles of ME with motivational constructs to expand conceptual and operational definitions and well as practice of CRPTE. The practical implications of this investigation relate to assessing students' perceptions of the classroom environment and educational outcomes and ways for faculty and instructional developers to explicitly consider the intersection of culture, diversity and motivation in training and development. Finally, practical implications for faculty and university administrators to consider embedding outcomes associated with culture and diversity into curriculum as well as course design in intentional ways. This is imperative to facilitate inclusive and enriching teaching and learning experiences for instructors and students as well as develop professionals and citizens within our global multicultural society who are not only practically and intellectually competent but socially and culturally as well.

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APPENDIX A

Interview questions for Semi – structured Interview.
1. To what extent do you think diversity and culture are important to consider in teaching and learning?
2. What are the main things you think about when you sit down to design or create your course syllabus?
3. To what extent do you think about diversity and culture when you sit down to prepare your course syllabus and design your course?
4. How does diversity and culture factor into your style of teaching and how you organize the classroom environment in the course?
5. How does diversity and culture factor into how you design and implement your assessments?
6. Describe your first day of class? What do you do, what do you say?
7. How would you describe your classroom environment?
8. What type of environment you try to create and what do you actually see?
9. What do you do to create an environment of respect and connectedness to one another in the classroom?
10. How do you use relevance and volition to create favorable dispositions towards learning?
11. How do you incorporate student's perspective and experiences to create challenging and engaging learning opportunities?
12. How do you create the understanding that the course content is valuable and relevant to the real-world applications?

Group Form
for
SGID FOCUS GROUP

_____   _____

Instructor   **Course**

_____   _____

Number of Students in Group   **Date**

1. What about the <u>environment</u>, <u>activities</u>, and <u>structure</u> of this course are helping your learning?

2. What about the <u>environment</u>, <u>activities</u> and <u>structure</u> support your development of cultural awareness as well as understanding <u>yourself</u> and <u>others</u> from different cultural backgrounds?

3. What specific suggestions do you have for changing the <u>environment</u>, <u>activities</u>, or <u>structure</u> of the course to better help your learning?

4. What specific suggestions do you have for changing the <u>activities</u>, <u>environment</u> or <u>structure</u> to support your development of cultural awareness as well as understanding <u>yourself</u> and <u>others</u> from different cultural backgrounds?

APPENDIX C

Autonomy – Support and Cultural Responsiveness Observation Sheet

INSTRUCTOR:_____ COURSE TITLE/SECTION:_____ _____

AUTONOMY SUPPORTIVE	RATING					NOTES
PROCEDURAL & ORGANIZATIONAL	1	2	3	4	5	
Provides students with choices and options						
Provides students with rationale for activities and rules.						
Conveys confidence in students' ability to do well in the course.						
Handles students' emotions very well						
Ensure students understand the class goals and what they need to do						
Allows students to make decisions on how to demonstrate competence						
Uses autonomy – supportive language (non – controlling language)						
COGNITIVE						
Scafffolds students during activites						
Encourage students to ask questions.						
Answers students' questions fully and carefully.						
Listens and tries to understand how students would like to do things before suggesting their own way						
Encourage students to think about solutions to problems from different perspectives						
CULTURALLY RESPONSIVE						
CULTURAL INCLUSION & SOCIOCRITICAL CONSCIOUSNESS						
Openness to different languages in the classroom.						
Explains/Uses words and expressions students from different cultural backgrounds can understand						
Incorporate examples from different cultural backgrounds						
Encourages students apply material to their own experiences						
Awareness of differences in students' cultural background						
Asks students about their cultural background						
Relates course content to issues related to inequity and systemic problems in society						
DIVERSE PEDAGOGY						
Different forms of instructional techniques and assessments						
Opportunities for students to learn from one another						
Provides time for students to respond to questions						
INCLUSIVENESS						
Encourages students to be mindful of other students' perspectives						
Fosters community and belongingness among students						
Express care towards students						
Creates a welcoming environment for all students						

CONSTRUCT	ITEM	DESCRIPTION
PROCEDURAL & ORGANIZATIONAL AUTONOMY SUPPORT	Provides students with choices and options	Allowing students to choose seating, group members, evaluation procedure, due dates for assignments, classroom rules,
	Provides students with rationale for activities and rules.	Explanatory statements as to why a particular course of action might be useful
	Conveys confidence in students' ability to do well in the course.	Empathic statements to acknowledge the student's perspective or experience, such as "Yes, this one is difficult" and "I know it is a sort of difficult one." suggestions about how to make progress when the student seemed to be stuck
	Handles students' emotions very well	
	Ensure students understand the class goals and what they need to do	Outcomes or objectives were communicated. What students will be able to do at the end of the course/class
	Allows students to make decisions on how to demonstrate competence	Offering students choice of media to present ideas, materials to use in class projects, Display work in an individual manner, Handle materials
	Uses autonomy – supportive language (non – controlling language)	Consider, suggest, encourage, invite, this will help you by, the reason for this is, and thank you for sharing your concern NOT must, should, have to, and required
COGNITIVE AUTONOMY – SUPPORT	Scaffolds students during activities	Allows students to work independently and ask probing questions and scaffolding as needed.
	Encourage students to ask questions.	
	Answers students' questions fully and carefully.	Contingent replies to a student-generated comment or question, such as "Yes, you have a good point" and "Yes, right, that was the second one."
	Listens and tries to understand how students would like to do things before suggesting their own way	Giving students time to work on a problem in their own way, the teacher allows students' interests and preferences to guide their classroom activity
	Encourage students to think about solutions to problems from different perspectives	Asking students to justify or argue for their point, asking students to generate their own solution paths, or asking students to evaluate their own and others' solutions or ideas
CULTURALLY RESPONSIVE – LANGUAGE	Openness to different languages in the classroom.	Posts some content words or phrases in students' heritage Languages. Uses some words or phrases from students' heritage language in the classroom. Allow other languages besides English in small group discussions or other conversations.
	Explains/Uses words and expressions students from different cultural backgrounds can understand	Explains colloquial language, expressions, or cultural jargon related or unrelated to course content or instruction. Awareness of students linguistic backgrounds and adapts language accordingly.
CULTURALLY RESPONSIVE – CULTURAL INCLUSION	Incorporate examples from different cultural backgrounds	Displays and uses materials that reflect all students' racial, ethnic, and cultural backgrounds year round. Uses multiethnic photos, pictures, and props to illustrate concepts and content.
	Encourages students apply material to their own experiences	Allow students to reflect on how course content relates to their cultural background and experiences. Uses whole class and small group brainstorming and webbing to illustrate prior knowledge before instruction: Uses a variety of methods to assess students' knowledge before instruction such as Word splash, K-W-L, Anticipation Guide, Brainstorming, Webbing. Asks students to reflect upon and discuss the following questions at the start and throughout a unit of study
	Awareness of differences in students' cultural background	Uses language that is inclusive and non – discriminatory towards students of different backgrounds. Avoids micro – aggressions. Makes culturally appropriate eye contact with all students.
	Asks students about their cultural background	Asks students for correct pronunciation of their names. Correctly pronounces students' names.
	Relates course content to issues related to inequity and systemic problems in society	Instructor uses examples that applicable outside the academic or school context. Uses examples from current issues in media and society in general. Shows how course content can be transferred and applied in students' occupations, lives and society. Explicitly identify how content relates to issues related social justice, equity, sustainability

CULTURALLY RESPONSIVE – DIVERSE PEDAGOGY	Different forms of instructional techniques and assessments	Uses a variety of graphic organizers during instruction. Encourages students to identify and use the task appropriate graphic organizer by modeling. Rephrases the question. Asks a related question. Gives the student a hint, clue, or prompt. Uses scaffolded questions. Asks analysis questions. Asks synthesis questions. Asks evaluation questions. Poses higher order questions and uses a random method for calling on students . Uses a variety of approaches to monitor students' understanding throughout instruction, Thumbs up, Unison response, One question quiz, Envelope please. Evaluates student work by providing performance criteria (i.e. rubrics, exemplars, anchor papers). Develops rubrics with students. Confers with students to provide feedback to improve Performance. Provides written feedback that allows students to revise and improve their work. Allows students to revise work based on teacher feedback. Circulates around student work areas to be close to all Students.
	Opportunities for students to learn from one another	Structures academic and social interactions between students. Structures opportunities for students to learn with and from their peers, Think-Pair-Share, Teammates consult, Jigsaw, Pairs check, Partner A and B, Boggle, Last Word. Uses random grouping methods to form small groups. Explicitly teaches collaborative learning skills to students. Provides opportunities for cooperative groups to process/ reflect on how well they accomplished the task and maintained effective group learning. Encourages and structures opportunities for students to provide feedback to peers based on an established standard. Provides opportunities for students to use peer reviews.
	Provides time for students to respond to questions	Silently waits at least 3–5 seconds for a student's response after posing a question. Silently pauses at least 3 seconds to consider the student's response before affirming, correcting, or probing. Pauses silently following a student's response to allow other students to consider their reactions, responses and extensions. Structures silent think time before expecting students to respond. Provides think time for all students before asking for Responses.
CULTURALLY RESPONSIVE- INCLUSIVENESS	Encourages students to be mindful of other students' perspectives	Validates all perspectives with responses such as: "That's one idea. Does anyone else have another?" "That was one way to solve the problem. Who did it another Way?" "Who has an alternative view?"
	Fosters community and belongingness among students	Smiles, Nods head in affirmation, leans toward the student, turns toward students who are speaking to express interest. Arranges seating to facilitate student to student discussion, Arranges seating to facilitate teacher to student discussion. Welcomes students as they come in class, say bye when they leave, interact with students beyond direct instruction in class. Ask students appropriate information about their lives and allows time for students to share with each other.
	Express care towards students	Welcomes students as they come in class, say bye when they leave, interact with students beyond direct instruction in class. Ask students appropriate information about their lives and allows time for students to share with each other.
	Creates a welcoming environment for all students	Asks students for correct pronunciation of their names. Correctly pronounces students' names.

APPENDIX D

INSTRUCTOR MEASURES

Intercultural Competence: Intercultural Development Inventory (IDI®) copy right instrument.

The following items are sample items from the Intercultural Development Inventory (IDI®) which will be administered to instructors. The IDI® assesses intercultural competence—the capability to shift cultural perspective and appropriately adapt behavior to cultural differences and commonalities. The Intercultural Development Inventory is a 50-item questionnaire available online that can be completed in 15–20 minutes. The IDI® includes up to six (6) customized questions that can be added to the 50-item questionnaire. In addition, the IDI® includes contexting questions. These questions allow individuals to reflect on how their IDI® results relate to their cross-cultural goals and challenges, increasing cultural self-understanding, and enabling improved accomplishment of key cross-cultural goals. After individuals complete the IDI®, each person's responses to the 50 items are analyzed and reports are prepared that include the person's written responses to the contexting questions. Because the IDI Assessment is a proprietary instrument, the items are not available for viewing by others. However, IDI, LLC has provided sample items which can be viewed here IDI Validation and Sample Items

The following items are sample items about Diversity Inclusivity in university courses. Instructors were asked to rate how much the following happened in their course. Diversity inclusivity refers to the extent to which a course is organized, structured and taught in a way that values and highlights diversity from multiple perspectives.

Please respond to the following items using the 4-point scale to rate how much the following happened in your course:

very little (1)   some (2)   quite a bit (3)   very much (4)

1. Students gain an understanding of how course topics connect to societal problems or issues
2. You learn about student characteristics in order to improve class instruction
3. Students develop skills necessary to work effectively with people from various backgrounds
4. The course content covers contributions to the field by people from multiple cultures
5. You vary your teaching methods to allow for the multiple ways students learn
6. The classroom atmosphere encourages the active participation of all students
7. The course emphasizes multiple approaches to analyzing issues or solving problems
8. Students feel empowered in their learning
9. You explore your own cultural and scholarly biases as part of class preparation
10. You evaluate student learning using multiple techniques
11. You address your potential biases about course-related issues during class
12. You adjust aspects of the course based on students learning needs.

The following items assess your perceived engagement and support received for incorporating diversity in your courses. Please respond using assigned scale in bold.

1. Trying to be more inclusive of diversity makes me feel uncomfortable **(True or False)**
2. I change things in my courses every year to be more inclusive of diversity **(True or False)**
3. I do not feel supported by others in the work I do to be more inclusive of diversity **(True or False)**
4. I work regularly with my colleagues to find ways for my courses to be more inclusive of diversity **(True or False)**
5. How important to you is it to improve how diversity is included in your selected course?

   Very important (1) Somewhat important (2) Important (3) Not Important (4)

6. In the past year, how often have you participated in activities (workshops, campus programs, conference sessions, etc.) to improve the inclusion of diversity in your selected course section?
   Very Often (1) Sometimes (2) Often (3) Never (4)

STUDENT MEASURES

Students complete surveys after reviewing Study Overview and Consent.

Dear Student

My name is Horane Holgate, I am a PhD candidate in the College of Education. I am conducting a study to examine your perceptions about your classroom climate, your motivation while taking this course and degree of development in intercultural attitudes, skills and knowledge. Your professor has agreed to allow me to recruit students from this course to volunteer to participate in this study. Thank you for considering participating in this study.

Risks and Benefits

This survey is completely confidential, no directly identifiable information will be required therefore you may respond freely and honestly. The results will also be analyzed as an aggregate. This is completely voluntary and is in no way related to your performance in the course. You may choose to opt out at any time. However, if you choose to participate you will be entered for a chance to win 1 of 10 $25 Electronic Gift cards from Amazon. Your chances of getting one of the gift cards is 1/10. If your professor has agreed to provide extra credit for completing this survey, instructions will be given at the end of the survey after submitting your responses to ensure you receive credit.

You will also be asked to indicate whether you are willing to participate in a 15 - 20-minute focus group with your fellow classmates to discuss your experiences in the course. This will in no way relate to your course grade. This will be conducted at the end of the semester and will NOT be anonymous. The researchers cannot guarantee that information discussed in the group will not be shared outside the group. The primary purpose of this exercise is to give your instructor feedback for improving the course, therefore, your instructor will receive a summary of the responses based on overall responses for the class and not based on individual responses. No directly identifiable information will be associated with your responses and there is no penalty if you refuse to participate.

There is no penalty for withdrawing from participating in the study. The risks involved in this study are minimal and are related to those one would encounter in normal day to day activities using a computer. For the focus group all communications will be facilitated in a respectful way as in a classroom setting. You may also request a copy of the results of the study upon completion.

If you choose to participate please click on the link below to continue with the survey. This survey will take on average about 15-20 minutes to complete. You must be 18 years old or older to participate. Thank you for your participation, your assistance is greatly appreciated!

If you have any questions or concerns you may contact me at hholgate@purdue.edu.

Demographics:

Please indicate the following information:

1. Ethnic Identity: _____
2. Gender: _____
3. Nationality/Country of origin: _____
4. Major/Field of study:_____
5. Grade level:

○ Freshman

○ Sophomore

○ Junior

○ Senior

6. Length of time studying in the U.S.:

○ Less than 1 year (1)

○ 1-2 years (2)

○ 2-3 years (3)

○ 3-4 years (4)

○ 4-5 years (5)

○ 5 years and above (6)

○ Native Born (7)

7. Is English the official/national language in your country of origin?

○ Yes (1)

○ No (2)

8. About how many students are in your class

○ 2-9 students (1)

○ 10-14 students (2)

○ 15-34 students (3)

○ 35-49 students (4)

○ 50-99 students (5)

○ Over 100 students (6)

9. Which of the following represents the highest level of education attainment for at least one parent or guardian:

○ High School Diploma

○ Bachelor's degree (BA, B.Sc.)

○ Associates Degree

○ Master's Degree

○ Doctorate (PhD)

○ Master of Business Administration (MBA)

○ Other

○ Below High School

10. Expected Final Grade in the Course

○ A

○ B

○ C

○ D

○ F

11. Overall GPA at the end of the Semester _____
12. First Generation College Student (first person in your immediate family including parents, grandparents and siblings to attend university)

○ Yes (1)

○ No (2)

Learning Climate Questionnaire (LCQ: Black & Deci, 2000) and Revised Culturally Responsive Classroom Climate Scale (CRCS: Holgate, 2016). This questionnaire contains items that are related to your experience with your instructor in this class and your perceptions about the classroom environment. Instructors have different styles in dealing with students, and we would like to know more about how you have felt about your encounters with your instructor and the overall classroom environment. Your responses are confidential. Please be honest and candid.

Please select the option on the 7-point rating scale which best represents your perception of the statement based on your experiences in the class.

1 Strongly disagree	**2**	3	4 Neutral	5	6	7 Strongly agree

13. I feel that my instructor provided me choices and options.
14. I felt understood by my instructor.
15. I was able to be open with my instructor during class.
16. My instructor conveyed confidence in my ability to do well in the course.
17. I feel that my instructor accepted me.
18. My instructor made sure I really understood the goals of the course and what I need to do.
19. My instructor encouraged me to ask questions.
20. I feel a lot of trust in my instructor
21. My Instructor answered my questions fully and carefully.
22. My instructor listens to how I would like to do things.
23. My instructor handled people's emotions very well
24. I feel that my instructor cares about me as a person
25. I did NOT feel very well about the way my instructor talked me
26. My instructor tried to understand how I see things before suggesting a new way to do things.
27. I feel I was able to share my feelings with my instructor
28. My instructor was open to students expressing themselves in their native language. (not only English)

29. My instructor used examples from different cultures to explain concepts in the course
30. My instructor seemed to have an understanding of my culture.
31. My instructor used different forms of instruction to help students understand content.
32. My instructor provided opportunities for students to learn from one another.
33. My instructor used multiple forms of assessments for students to demonstrate understanding of course content.
34. My instructor created a welcoming environment for all students.
35. My instructor talks about inequalities in society when teaching.
36. My instructor provides answers to questions about global issues.
37. My instructor helps students think about ways to make changes in society.
38. I feel like I can apply what my instructor talks about to everyday life.
39. My instructor seemed to be aware of cultural differences among the students
40. My instructor treated all student with respect.
41. I feel like my instructor made it easy for me to share my opinions in class.
42. I felt comfortable sharing my beliefs in class.
43. My instructor allows students to use their native language in class during small group discussions.
44. I felt comfortable responding when my instructor asked questions.
45. I feel that my instructor treated everyone fairly.
46. My instructor made me feel like I belong in the class
47. I get along with people in this class.
48. I feel like I can make a lot of inputs in deciding how my coursework gets done.
49. Most days I feel a sense of accomplishment in the class.

Situational Motivation Scale (SIMS: Guay, Vallerand & Blanchard, 2000) These questions ask about your motivation for studying for the course.

1	2	3	4	5	6	7
Strongly						Strongly
disagree						agree

I study for the class because:

50. Because it allows me to develop skills that are important to me.
51. Because I would feel bad if I didn't.
52. Because learning all I can about academic work is really essential for me.
53. I don't know. I have the impression I'm wasting my time.
54. Because acquiring all kinds of knowledge is fundamental for me.
55. Because I feel I have to.
56. I'm not sure. I often thought that maybe I should quit (drop the class).
57. Because I really enjoy it.
58. Because it's a sensible way to get a meaningful experience.
59. Because I would feel guilty if I didn't.

60. Because it's a practical way to acquire new knowledge.
61. Because I really like it.
62. Because experiencing new things is a part of who I am.
63. Because that's what I'm supposed to do.
64. I don't know. I wonder if I should continue.
65. Because I would feel awful about myself if I didn't.
66. Because it's really fun.
67. Because that's what I was told to do.

Intercultural Attitudes Skills and Knowledge Shorts Scale (ASKS v2: Holgate, Parker, Calahan, 2016) One important outcome for college students today is that they development the ability to communicate across cultures. The statements below will allow you to reflect on your experience in this course and rate the extent to which you think you have developed the knowledge, attitudes and skills for you to interact with culturally different others.

Respond to the following statements using the scale to indicate the degree to you have developed the behaviors described.

Not at all: I am not aware of or do not recognize this behavior. (1)	**Low Degree: I am only aware of and recognize this behavior. (2)**	**Somewhat Low Degree: I cooperate or comply with this behavior especially if required by others. (3)**	**Somewhat High Degree: I recognize the value of and prefer this behavior. (4)**	**High Degree: This behavior is an important priority to me. (5)**	**Very High Degree: This behavior is natural to me, is habitual to me, and embodies who I am. (6)**

As a result of taking this course:

68. I act in a supportive way that recognizes the feelings of other cultural groups
69. I understand the importance of politics, history, beliefs, values, economics and communication styles to members of different cultural groups
70. I am aware of my own cultural rules and biases
71. I can describe my personal cultural rules and biases
72. I actively seek to improve my understanding of the complicated differences among cultures
73. I am aware of how my own experiences have shaped my personal rules or biases about cultural differences
74. I differentiate the complex beliefs, values, communication styles, customs, politics, history and economics among cultural groups. I welcome interactions with people who are culturally different from me
75. I reserve judgment during interactions with people culturally different from me
76. I ask questions about other cultures different than my own

77. I seek answers to questions about cultural differences
78. I understand differences in forms of verbal communication in different cultures
79. I understand differences in forms of non-verbal communication in different cultures
80. I use a world view different from my own to interpret the views and actions of persons from different cultures

At the end of the survey the following questions will be presented using the skip logic method provided by Qualtrics.

Q30 Would you like to participate in a 15 - 20-minute focus group at the end of the semester?

○ Yes (1)

○ No (2)

Q26 I would like to participate in drawing for a gift card

Yes (1)

No (2)

Display This Question:
If I would like to participate in drawing for a gift card = Yes

Q27 Thank you very much for participating in the survey!   Please follow the link below if you would like to participate in the drawing for a $25 Egift card. 10 winners will be selected. https://goo.gl/forms/pWymmJeyhAhCRSen2
Q27 My Instructor is providing extra credit for participating.

Yes (1)

No (2)
Display This Question:
If My Instructor is providing extra credit for participating. = Yes
Q29 Please follow Link to fill in contact information to receive extra credit. https://goo.gl/forms/pWymmJey
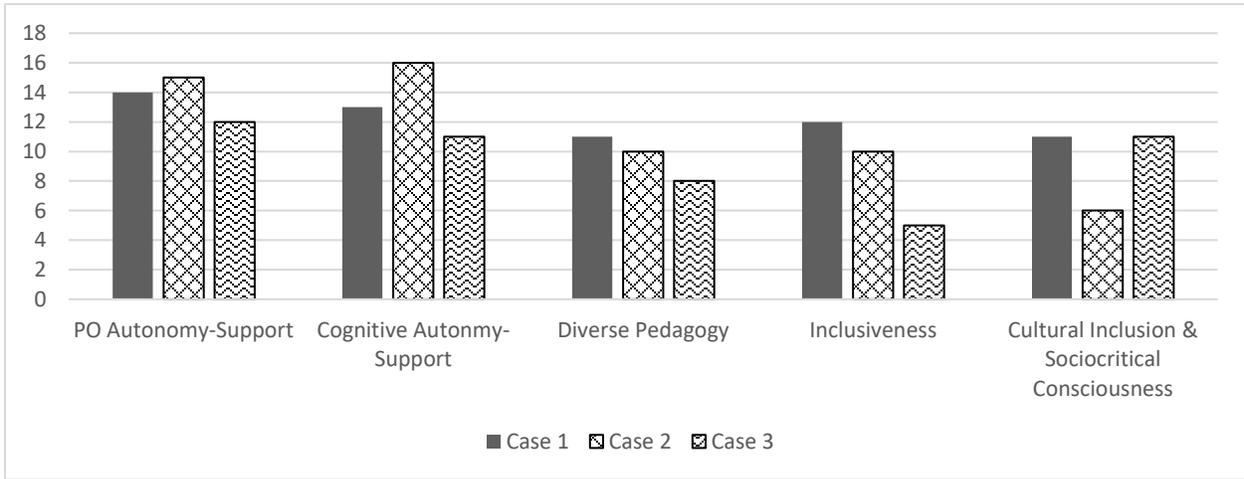
Figure E.1
Comparing Number of Autonomy - Supportive and Culturally Responsive Practices Observed
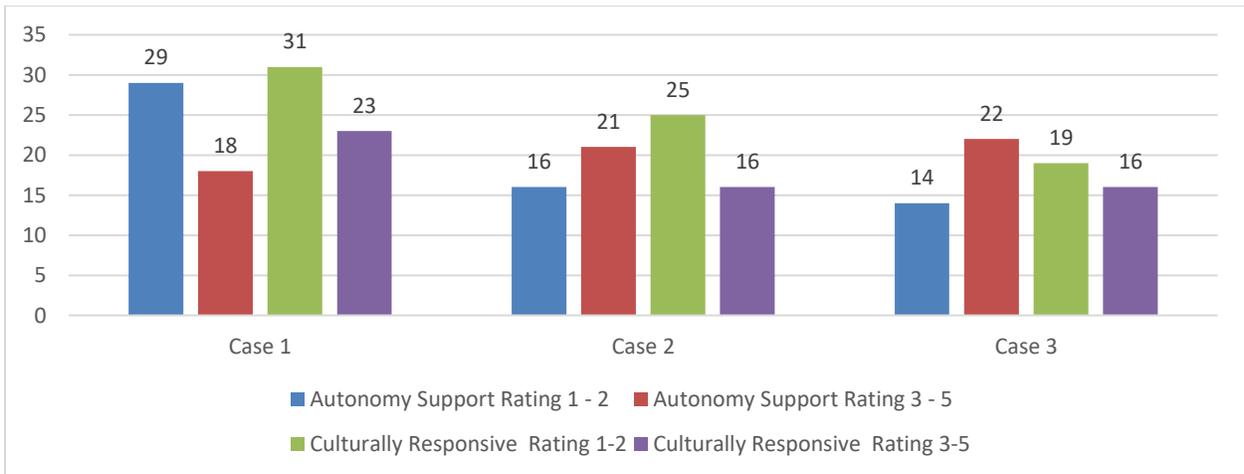
Figure E.2
Comparing Degree of Quality in Autonomy - Supportive and Culturally Responsive Practices Observed