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A study on students' intercultural learning through short-term study abroad programs

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A STUDY ON STUDENTS' INTERCULTURAL LEARNING THROUGH SHORT-TERM
STUDY ABROAD PROGRAMS

A dissertation presented

By

Marissa Lombardi

To

The Faculty of the Department of Education in partial fulfillment of the requirements for the
degree of
Doctor of Education

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A STUDY ON STUDENTS' INTERCULTURAL LEARNING THROUGH SHORT-TERM
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Key Words: *Intercultural Competence, Short-term Study Abroad, Intercultural Sensitivity,*
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ABSTRACT OF DISSERTATION

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This quantitative study measured the extent to which short-term study abroad programs increase levels of intercultural competence and openness to diversity among undergraduate students, and found that all participants' levels of intercultural competence and openness to diversity increased after participating in these programs. As part of its mission, strategic plan, and internationalization initiatives, many higher education institutions claim to graduate students who are "interculturally competent" and/or "open to diversity", yet have no concrete way of demonstrating that these initiatives are being met. Through quantitative measurement, this study shows that short-term study abroad programs are one effective approach to reaching these institutional objectives. Moreover, the control group data show us that these research findings can be applied to a general undergraduate student population, not just to those who self-selected

to participate in short-term study abroad. Finally, this study found that students who have been exposed to diversity and cultural differences prior to their sojourns abroad, generally increase levels of intercultural competence in more areas than those students who have had little to no previous intercultural exposure. Therefore, in order for students to get the most out of their short-term study abroad experiences, the results of this study suggest institutions require students to enroll interculturally-focused courses and/or other cross-cultural experiences on campus prior to studying abroad.

Chapter 1: Introduction

Statement of the Problem

Higher education institutions are being held increasingly accountable for the quality of educational opportunities they provide (Vande Berg, 2001). Institutional governing boards, professional accrediting agencies, and educational consumers are demanding assurances that institutions will provide the necessary knowledge and tools for its graduates' success in today's changing global landscape (Williams, 2005; Black & Duhon, 2006). There is a growing trend in higher education towards "outcome assessment", a type of assessment that requires educators and administrators to evaluate what content and skills students are learning, and how this relates to the competencies necessary to succeed in today's competitive global job market (Williams, 2005).

International education is one key area within higher education with a growing need to identify, assess and measure learning outcomes of student experiences (Williams, 2005). In recent years, many education institutions are "internationalizing", which generally entails increasing diversity and/or attempting to raise intercultural awareness and competence among students (Leask, 2009; Suarez-Orozco & Sattin, 2007). Among internationalization initiatives, study abroad is generally considered one of the most effective means for increasing intercultural competence (Deadorff, 2006), yet there is little concrete evidence demonstrating this notion, particularly in short-term programs. While the typical duration of study abroad programs in higher education has traditionally been for a semester or longer, there has been a growing trend in the US towards offering shorter programs in order to meet changing student needs (Ogden, 2007). Short-term programs, generally between one and eight weeks, are becoming increasingly

popular for several reasons. First, they offer attractive topic-orientated programs usually taught by professors from the home institution (Ogden, 2007; Jurgens & McAuliffe, 2004). Second, they are often more affordable and flexible than longer programs, offering students the possibility to engage in meaningful, intercultural learning (Ogden, 2007).

Intercultural competence, generally defined as the “ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills, and attitudes (Deardorff, 2004)”, is a widespread objective of study abroad programs. Nevertheless, there has been little research on the assessment of the acquisition of intercultural competence in study abroad programs, particularly those that are short-term. Even if programs are designed with the express intention of increasing intercultural competence among students; they often fail to meet this objective (Deardorff, 2004). In order to offer the highest quality study abroad programs, that accurately reflect such institutional objectives as graduating “interculturally competent students” or “global citizens”, it is valuable to measure the acquisition of intercultural competence during international study abroad programs. While there have been modest efforts to assess traditional study abroad programs, there has been very little research done on assessing short-term programs. Measuring the acquisition of intercultural competence in these programs can help institutions demonstrate that the programs are aligned with internationalization initiatives at the institutional level.

Significance of the Problem

Improving students’ awareness and understanding of cultural differences is critical to the education of students at the higher education level. Employers are increasingly demanding an interculturally competent workforce (Suarez-Orozco & Qin-Hilliard, 2004), and many

educational institutions have responded to this demand for global citizens through the internationalization of curricula and graduation outcomes (Deardorff, 2004). Despite the growing diversity initiatives among universities, students and educators continue to be challenged by cultural differences (Barna, 1998). Colby, Ehrlich, Beaumont, and Stephens (2003) argue:

The growing racial, ethnic, and religious diversity of the United States and its college students and the increasingly evident globalism of the world present important opportunities, indeed imperatives, for undergraduate education. Educators in all kinds of institutions stress that in a world of multiple and conflicting perspectives, experiencing and learning from differences is a crucial part of educational process. (pp. 43-44)

In order to create study abroad programs that reflect broader institutional internationalization initiatives, educators must have an understanding of *which* programs are effective (in terms of increasing intercultural competence), and to *which degree* they are effective. This study investigated to what degree Bentley University's internationalization initiatives, particularly in the short-term study abroad arena, increase students' level of intercultural competence

Practical and Intellectual Goals

Maxwell (2005) argues that researchers should understand and distinguish various types of goals when organizing a research study. "Practical goals" and "intellectual goals" are two key categories of such goals. Maxwell (2005) defines of these two types of goals following way:

Practical goals are focused on *accomplishing* something—meeting some need, changing some situation, or achieving some objective. Intellectual goals, in contrast, are focused on *understanding* something—gaining insight into what is going on and why it is happening, or answering some question that previous research has not adequately addressed (p 21).

The central practical goal of this study was to evaluate whether undergraduate short-term faculty led programs are aligned with larger institutional internationalization initiatives. The main intellectual goal of this study was to understand to what extent undergraduate short term study abroad programs, which are associated with Bentley University's internationalization initiatives, increased students' level of intercultural competence.

Research Questions

There was one overarching research question guiding this study: *To what extent, if any, are Bentley University's internationalization initiatives, specifically in the undergraduate short-term study abroad arena, increasing intercultural competence among its students?* The research question was intended to elucidate how, if at all, Bentley University's internationalization initiatives, as they relate to short-term study abroad programs, are helping students acquire intercultural competence. Using the Intercultural Sensitivity Scale and the Openness to Diversity Scale (which will be discussed at length in the Research Design section of this paper), the study quantitatively measured the extent to which undergraduate students who participating in short-term study abroad programs scored higher on the Intercultural Sensitivity Scale and Openness to Diversity scale after having studied abroad.

Organization of the Paper

Chapter one provides an overview of the critical issues, statement of the problem, purpose and goals of the study, and outlines research question. Chapter two discusses the Developmental Model of Intercultural Sensitivity, which was the theoretical framework guiding this study. Chapter three reviews the intercultural competence literature. Three key literature streams are explored: definitions and conceptualizations of intercultural competence,

intercultural competence in education, and intercultural competence assessment and measurement tools. Chapter four describes the research design, including the research questions, the research methodology, the site and participants, data collection, and data analysis. It also discusses information on validity and credibility. Finally, chapter five includes a discussion of the research, implications for practice, limitations of the study, areas for future research, and conclusions.

Theoretical Framework

The Developmental Model of Intercultural Sensitivity (DMIS), created by intercultural communication scholar Milton J. Bennett (1993), is among the most prevalent intercultural sensitivity frameworks discussed in the literature. The DMIS is a culture-general and developmental model of intercultural competence that was created as a framework “to explain the observed and reported experiences of people in intercultural situations (Bennett & Bennett, 2004, p. 162)”. It is a framework for understanding reactions of people towards cultural difference, and is based on “meaning-making” models of cognitive psychology and radical constructivism. The DMIS is not a model that measures changes in attitudes and behavior. Rather, it connects changes in cognitive structure to an evolution in behavior and attitudes towards cultural difference in general (Bennett, 1998). The model has been used in numerous educational contexts, including study abroad debriefing, intercultural communication workshops, and curriculum design (Mahoney & Schamber, 2004), and allows educators to assess the developmental readiness of their students to pursue various types of intercultural learning, and to select and sequence learning activities that contribute to their learners’ development of intercultural competence (Bennett, Bennett & Allen, 2003). Numerous studies have demonstrated that the DMIS is a valuable guide for assisting educators in the design and implementation of developmentally appropriate curricula that can facilitate students’ growth through different stages of the intercultural

sensitivity model (DeJaeghere & Zhang, 2008; Koskinen, & Tossavainen, 2004; Mahoney & Schamber, 2004).

The DMIS is divided into six stages of increasing sensitivity to cultural difference. The model posits that as one's experience of cultural difference becomes more complex and sophisticated, one's competence in intercultural communication and understanding increases. Each stage signifies a particular cognitive structure expressed by attitudes and behavior towards cultural difference. By recognizing the cognitive orientation towards cultural difference, educators may infer likely attitudes and behavior, and tailor curricula to facilitate students' progress to the next stage (Bennett, 1998).

The first three stages are "ethnocentric", meaning that one uses his/her own cultural values and customs to judge all people. The second three stages are "ethnorelative", meaning that one is able to recognize and adapt to a variety of cultural values and customs (Bennett, 1998). The following section outlines a short description of each of the six stages.

The first stage is called *denial*, and refers to people who are unable to construe cultural differences in complex ways. Generally, one's own culture is experienced as the only real one. Cultural differences are either not perceived at all, or can only be perceived in broad categories such as "foreigner" or "African". People with a *denial* worldview have usually been socialized in a monocultural setting. In extreme forms of this stage, the people of one's own culture may be perceived to be the only real or valid "humans", while others are viewed as "less than human", and can therefore be exploited or eliminated. This is the worldview that has been associated with dehumanizing acts such as genocide (Bennett, 1998; Hammer, et al, 2003).

The second stage is termed *defense*, and refers to the state in which one's own culture is experienced as the only viable one. People in this group have more ability to construe cultural difference, and experience it as more "real" than people at the *denial* stage. Consequently, people in the *defense* phase feel more threatened by cultural difference than those in the *denial* phase. There is often a "them" versus "us" mentality associated with *defense*, whereby people will see their own culture as superior to others. In rare cases, people can also experience reversed *defense*, wherein they denigrate their own culture and idealize an adopted culture (Bennett, 1998; Hammer, et al, 2003).

The third stage is referred to as *minimization*, and encompasses people who experience their own worldview as universal. There is an acknowledgement of differences in cultural customs and social norms, but the view that deep down we are "all the same". Consequently, people in this stage may assume that certain cultural values are universal, when in fact they are not. For example, a person from the U.S. may believe that U.S. cultural values, such as the desire for equality and freedom, are shared by all cultures.

In the *acceptance* stage, people accept their own worldview as just one of many. The ability to form culture-general categories, which allow for the conceptualization of a range of varying cultural values/norms is characteristic of the *acceptance* stage. Individuals in this stage do not necessarily agree with or adopt contrasting cultural viewpoints, but rather acknowledge the validity and viability of different worldviews.

In the fifth stage, *adaptation*, one is able to empathize with other worldviews in order to understand and be understood across cultures. Due to the fact that people in the *adaptation* stage can understand multiple cultural viewpoints and perceptions, they are able to modify or adapt

their behavior to render it more appropriate to different cultures, and are able to function effectively in multiple cultural contexts. Bicultural individuals are often associated with this stage.

The final stage of the DMIS is called *integration*, and refers to people who are attempting reconcile contrasting cultural frames that have been internalized. Individuals in the *integration* stage are not necessarily considered more interculturally sensitive or competent than those in the *adaptation* stage. Rather, people in this stage often have multiple cultural identities.

In summary, the ethnocentric orientations of the DMIS can be understood as ways of avoiding cultural difference, through denial, defense, or minimization. Conversely, the ethnorelative orientations attempt to seek cultural difference by accepting its importance, adapting to diverse worldviews, or integrating the concept into the formation of identity. This model provides a valuable framework, in this study, for understanding students' intercultural learning as a developmental process.

Chapter 2: Literature Review

Intercultural Competence

Scholars define intercultural competence in various ways, and also refer to it by different terms including: cross-cultural competence, cross-cultural effectiveness, intercultural communication competence, intercultural sensitivity, multicultural competence and cultural competence (Bennett, 1993; Byram, 1997, Chen & Sarosta, 1996). In the literature, these terms are often interchangeable and there are also considerable variations in how the aforementioned terms are defined. Although there is significant variation in the terminology used around the concept of intercultural competence, two general clusters emerged from the literature: *intercultural communication competence* and *intercultural competence*. Each of these concepts is discussed in the following sections.

Intercultural communication competence.

Much of the research and literature on intercultural communication competence has been aimed at predicting what elements could determine an individual's success in intercultural situations. Therefore, models and discussions of intercultural communication competence generally involve lists and sets of components and/or dimensions. Chen and Sarosta (1998), define "intercultural communication competence" as "the ability to effectively and appropriately execute communication behaviours to elicit a desired response in a specific environment" (p. 241). They developed a model of intercultural communication competence with three main components : intercultural sensitivity (affective process), intercultural awareness (cognitive process), and intercultural adroitness (behavioural process). Each dimension is briefly described below.

Intercultural awareness is the cognitive dimension of the model, and refers to one's ability to understand similarities and differences in other cultures. Self-awareness and cultural awareness are the two components of the intercultural awareness dimension. *Intercultural sensitivity* is the affective dimension of the model, and refers to the emotional desire of a person to acknowledge, appreciate, and accept cultural differences. The dimension includes six components: self esteem, self-monitoring, empathy, open-mindedness, nonjudgmental, and social relaxation. *Intercultural adroitness* is the behavioral dimension of the model, and refers to one's ability to reach communication goals while interacting with people across cultures. This dimension includes four components: message skills, appropriate self-disclosure, behavioral flexibility, interaction management (Chen & Sarosta, 1996, 1998, 1999, 2000, as cited in Fritz, Mollenberg, Chen, 2001).

Wiseman (2001) argues that intercultural communication competence is comprised of knowledge, skills, and motivation needed to interact effectively and appropriately with individuals and groups from other cultures. Motivation, as defined by Wiseman (2001), is "the set of feelings, intentions, needs and drives associated with the anticipation of or actual engagement in intercultural communication" (p. 4). The inclusion of motivation in Wiseman's (2001) definition of intercultural communication competence is rather unique, as it is not included in most of the definitions found in the intercultural communication competence literature.

Kim (1992) identifies adaptability as the central component to intercultural communication competence and defines it as "the individual's capacity to suspend or modify some of the old cultural ways, and to learn and accommodate some of the new cultural ways, and creatively find ways to manage the dynamics of cultural difference/unfamiliarity, intergroup

posture, and the accompanying stress” (p. 377). Kim (1992) argues that cultural difference, intergroup posture and accompanying stress are the key challenges in intercultural encounters, and that intercultural communication competence should be understood in this context.

Kim (2001) also discusses ‘host communication competence’ under the umbrella of intercultural communication competence. This concept includes both “culture specific” and “culture general” dimensions (Kim, 2001). The culture-specific dimension refers to the ability to understand cultural and linguistic practices specific to a particular culture or subculture. Newcomers or foreigners must learn how to decipher cultural codes and patterns in order to interact and behave in a culturally appropriate manner (Kim, 2001). For example, a student studying abroad must acquire the knowledge to understand the local communication system in order to be successful. It is also essential that one understand culture-general or ‘intercultural’ communication competence, which according to Kim (2001), refers to the ability to manage a variety of communication and cultural differences, as well as dealing with the inherent stress and uncertainty often brought on by intercultural encounters. Host communication competence may be understood in terms of three interrelated components: cognitive, operational, and affective (Kim, 2001).

Intercultural competence.

Robert Hanvey (1976) provided an early and pervasive definition of intercultural competence which outlined five interdisciplinary dimensions of global education in his seminal work “An Attainable Global Perspective”. These five dimensions are outlined as follows. The first dimension, “perspective consciousness”, refers to an awareness of and appreciation for other images of the world. The second dimension, “state of the planet awareness”, refers to an in-depth

understanding of global issues and events. The third dimension, “cross-cultural awareness”, refers to a general understanding of the defining characteristics of world cultures, with an emphasis on understanding similarities and differences. The fourth dimension, “systematic awareness”, refers to a familiarity with the nature of systems and an introduction to the complex international systems. The final dimension, “options for local participation”, refers to a review of strategies for participating in issue areas in local, national, and international settings (as cited in Deardorff, 2004). It is important to note that Hanvey’s definition includes the challenge of participation in local, national, and international settings, which is not found in subsequent definitions of intercultural competence.

Lustig and Koester (2003) emphasize three key elements of intercultural competence: interpersonal and situational context, the degree of appropriateness and effectiveness in interaction, and sufficient knowledge, motivations and actions. They assert that competence depends on “the relationships and situations within which the communication occurs” (p. 65). They argue that intercultural competence is a “characteristic of the association of individuals” rather than a set of individual characteristics or traits (Deardorff, 2004), and that “there is no prescriptive set of characteristics that inevitably guarantees competence in all intercultural relationships and situations” (Lustig & Koster, 2003, as cited in Deardorff, 2004).

Bennett (1993) conceptualizes intercultural competence as a developmental model in which people progress on a continuum made up of six stages. The first three are considered “ethnocentric”, which are described as ways “avoiding cultural differences”. The second three stages are explained as “ethnorelative”, which are explained as ways of “seeking cultural difference” (Bennett & Bennett, 2004). One of the key components of Bennett’s definition of intercultural competence is empathy. Bennett argues that empathy involves being able to

comprehend another perspective through changing one's point of reference. A more comprehensive description of Bennett's developmental model is detailed in a later section of this paper.

Janet Bennett and Milton Bennett (2004), have also defined intercultural competence as "...the ability to communicate effectively in cross-cultural situations and to relate appropriately in a variety of cultural contexts (p 149)". These scholars have argued that as a part of intercultural competence, diversity initiatives should promote an "intercultural mindset and skill set" (Bennett & Bennett, 2004). This entails cultural self-awareness, knowledge of contrasting cultural values/communication styles, and the ability to use cultural generalizations without stereotyping. This approach to intercultural competence posits that a cognitive perspective (knowledge), an affective perspective (attitude), and a behavioural perspective (skills) must work together for development to occur (Bennett & Bennett, 2004). Sercu (2004) also ascertains that knowledge, skills/behavior, and attitudes/traits are three dimensions of intercultural competence that should be addressed in education.

Deardorff (2004) conducted a study entitled *The Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United States*, which aimed to determine a definition and best ways of measuring intercultural competence using a three-round Delphi technique that involved a panel of twenty one intercultural experts. The Delphi technique is a reiterative, interactive process between a researcher and a panel of experts, generally with the goal of reaching consensus among the panelists (Deardorff, 2004). Panel members generated and submitted definitions of intercultural competence, refined those definitions, and reached some agreement on the key elements of intercultural competence and assessment methods. Higher education administrators

participated in the third round of the Delphi to share their acceptance or rejection of the data developed by the intercultural experts (Deardorff, 2004).

This study was an important contribution to the literature and development and assessment of intercultural competence in the higher education setting. It concluded that the highest rated general definition of intercultural competence among panel members is as follows: “Ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills, and attitudes” (Deardorff, 2004, p 184). The panel also agreed that the concept of intercultural competence is an ongoing process and that the definition will continue to evolve through on-going research. Both the higher education administrators and the intercultural experts agreed that intercultural competence can and should be assessed and measured in various ways, and that using a combination of qualitative and quantitative methods is most effective. The key methods noted for the assessment of intercultural competence included observation, interviews, and judgment by self and others (Deardorff, 2004).

After examining much of the literature on intercultural communication competence and intercultural competence, one key conclusion can be made: knowledge, skills, and attitudes are three key components of intercultural competence that are generally accepted among scholars, although countless variations on the conceptualizations of these constructs remain (Bennett & Bennett, 2004; Chen & Starosta, 1998; Deardorff, 2004; Sercu, 2004). Moreover, many scholars include additional components in their definitions such as adaptability or empathy.

Identity, Intercultural Sensitivity and Development Models.

Over the last several decades various identity and developmental models have been created. These models, each introduced by Bennett and Bennett (2004), generally fall into three

categories: “culture-general models”, which are suitable for many cultural groups, or for general “minority-majority” identity development “cultural-specific” models, which are descriptive of particular cultural groups “racial identity models”, which address visual differences and their impact on identity. One important distinction between to make between ethnic models (culture-general and culture-specific), and racial models is that in addition to simply accepting or understanding worldview of other culture groups, the former also emphasizes adaptation to other culture groups. In contrast, many racial models do not require this key ability (Bennett & Bennett, 2004). In the following section, a model that has been particularly relevant and influential in the higher education arena is detailed.

Intercultural Competence in Education

The literature asserts that instructional techniques such as small group discussion, role-play, oral presentations of research findings are among the most effective intervention strategies for increasing intercultural competence and sensitivity (Mahoney & Schamber, 2004, Sizoo & Serrie, 2004). Bennett and Salonen (2007) and Sizoo and Serrie (2004) argue that experiential learning, such as study abroad and service learning programs, provide a “desirable approach to putting theory into practice” and that it “presents opportunities for the development and practice of intercultural competence, guided by educators prepared to infuse the curriculum with intercultural learning” (Bennett & Salonen, 2004, p. 48). Below, a review of studies exploring the aforementioned instructional techniques and learning approach is outlined.

Mahoney & Schamber (2004) conducted a study that investigated developmentally appropriate teaching that can be used for improving the intercultural skills of students in general education courses. The study was guided by Bennett’s (1993) Developmental Model of Intercultural Sensitivity, and examined two research questions. The first question asked “to what

extent can a curriculum about comprehending cultural difference improve students' intercultural sensitivity levels (p. 316)?" The second research question explored "to what extent can a curriculum about analyzing and evaluating cultural differences improve students' intercultural sensitivity (p. 317)?" The results indicated that using analysis and evaluation in curriculum is more effective for increasing students' levels of intercultural sensitivity than one that merely employs comprehension of information (Mahoney & Schamber, 2004). According to these authors, curriculum that only aims to comprehend cultural difference may provide students with information about cultural difference, but will likely "stifle the realization of outcomes associated with a curriculum that seeks to assist students with valuing and negotiating cultural difference. A curriculum that employs analyzing and evaluating cultural difference, however, yields significant change in the development of intercultural sensitivity (p 325)".

International Business scholars Sizoo and Serrie (2004) conducted a study that resulted in the identification of five synergetic and related exercises that provide college students with experience in managing and resolving real-world cross-cultural management problems. The exercises address cultural difference on three levels: self, interpersonal, and organizational. According to Sizoo and Serrie (2004), the study "...indicates that there is a practical and effective way for educators to significantly improve the intercultural sensitivity of their students" (p. 166). The study offers a useful foundation for educators attempting to implement a curriculum that builds intercultural competence. Moreover, the instructional techniques and approaches to learning utilized are consistent with those promoted in the literature.

The first exercise is entitled *cross-cultural interview*, and requires each student to interview a student on campus, who is from a culture different from his or her own, and whom s/he has never met before. Students are responsible for seeking out the interviewee and are

encouraged to approach individuals enrolled in an ESL program, which adds an additional language dimension to the experience. After completing the interview exercise, students reflect upon and share their experiences through a class discussion (Sizzo & Serrie, 2004).

Sizzo and Serrie (2004) found that students who participated in this exercise were able to overcome anxiety, fear, and stress associated with getting to know strangers from a different culture. Stress, anxiety, and fear are inherent to many intercultural encounters, as evidenced by Kim (2001), and the ability to manage it effectively is an imperative part of intercultural development (Kim, 2001).

The second exercise, *cross-cultural incidents*, provides students with incidents that describe real cross-cultural misunderstandings. Cushner and Brislin detailed 110 of these situations in their book *Intercultural Interactions a Practical Guide, 2nd edition* (1996). This activity allows students to *experience* the cultural conflict through role-play and discussion, rather than simply considering it intellectually. In addition, students learn to accept the inevitability of making cross-cultural mistakes in the field, and to strategically recover from them (Sizzo and Serrie, 2004). Cross-cultural incidents employ a constructivist instructional technique, which many scholars argue should be part of a “developmental curricular design for assisting students with learning to negotiate cultural difference” (Mahoney & Shamber p. 332).

The third exercise in Sizzo and Serrie’s (2004) study is called *cross-cultural skit*, and requires students to work in groups (preferably multi-cultural) to develop and perform a skit that is set in an international business context, and illustrates a minimum of five cross-cultural mistakes that an American might make in the represented host culture. Students must collaborate with a “cultural expert” who is native to, or has lived in the represented host culture (Sizzo & Serrie, 2004). This exercise allows students to understand the complexity and adverse effects

inherent to cross-cultural incompetence. It also teaches the concept of empathy, which is a key component of intercultural competence according to numerous intercultural experts (Bennett, 1993).

The fourth exercise, *cross-cultural news*, requires students to find a newspaper or magazine article which describes the adaptation of an American company to a different culture. Students then write an analysis of the cross-cultural differences facing the organization and explain why the company is succeeding or failing at managing these differences. The selected companies and cross-cultural analyses are shared in class. This activity builds analysis skills, which and familiarizes students with real cases of organizations that are struggling with cross-cultural differences. It also promotes problem-solving skills (Sizzo & Serrie, 2004).

The final exercise presented in Sizzo and Serrie's (2004) study is called *cross-cultural management*, and requires students to design and implement a program for improving cross-cultural relations between the participants enrolled in the ESL program and those who are enrolled in the college. This exercise requires students to bring together a minimum of two foreign and two domestic students who have never met, and to require the students to engage discussions and activities that will promote cross-cultural understanding and friendship (Sizzo & Serrie, 2004). The *cross-cultural management* exercise follows the developmental educational framework largely promoted in the literature (Bennett, 1993, Bennett & Salonen, Mahoney & Schamber, 2004), as it embodies a culmination of the skills, knowledge, and experience acquired by the four exercises preceding it. In addition, the exercise addresses and develops the three most commonly agreed upon components of intercultural competence discussed in the literature: cognitive perspective (knowledge), an affective perspective (attitude), and a behavioural perspective (skills) (Bennett & Bennett, 2004, Deardorff, 2004).

The instructional techniques discussed in this section, such as small group discussion, role-play, oral presentations of research findings are among the most effective intervention strategies for increasing intercultural competence and sensitivity effectively. It is therefore important that educators aiming to increase students intercultural competence consider the practice of these techniques in a variety of contexts, both in and outside of the classroom, as well as in pre-departure trainings for study abroad students.

Intercultural Competence and Educators

The literature affirms that educators play a vital role in creating an environment that can assist students in the development of intercultural competence (Mahoney & Schamber, 2004, Vygotsky, 1992). In addition, several studies indicate that educators do not have the training or support they need to effectively integrate the development of intercultural competence into curricula and teaching practices. Kokinen and Tossavainen (2003) conducted a qualitative study that aimed to describe an international student exchange program as a context of learning intercultural competence in nursing. The study also aimed to identify the situational components that supported or hindered the process of learning intercultural competence. The process involved three interdependent categories: transition from one culture to another, adjustment to the difference, and gaining intercultural sensitivity (Koskinen & Tossavainen, 2003). The findings revealed that orientation and re-entry debriefing were not adequately linked to the main study abroad period. The research also indicated that guided intercultural encounters provide increased acquisition of intercultural competence and sensitivity, as compared to unguided intercultural encounters. The authors conclude that educators were not adequately prepared to guide students in cross-cultural dialogues or reflection in the orientation, study abroad or reentry phases (Koskinen & Tossavainen, 2003).

Sercu, (2005) conducted a study that aimed to determine the extent to which Flemish foreign language teachers' instruction and teaching practice could be characterized as directed towards intercultural communication competence as opposed to mere communicative competence. She found that the majority of foreign language teachers who participated in the study have "not yet adopted pupil-centered strategies for teaching intercultural competence" (p. 103), mainly due to teachers' lack of preparation and appropriate teaching materials. Instead, the only limited attempts to teach culture, was through "teacher-centered" approaches, namely in the form of lecture. It is important to note that the teachers in the study supported the aim to interculturalize foreign language education, and were "willing to become teachers of intercultural communication competence" (p. 97), but did not have sufficient time, resources, or training.

Sercu (2005) argues that curriculum explicitly advocating intercultural learning is not sufficient for increasing students' intercultural competence. This is chiefly because teachers who participated in the study did not have the tools to teach the curricula in a way that effectively increased intercultural competence. In order to successfully develop intercultural competence among students, teachers themselves must understand the developmental stages and components associated with it, and also require pre-service and in-service training designed help to "interculturalize" their thinking (Sercu, 2005). This assertion is supported by many researchers and scholars, including Bennett and Salonen, (2007) and Landis, Bennett, and Bennett, (2004). Leask (2009) conducted a valuable research study, which suggested that bringing home and international students together inside or outside the classroom does not necessarily result in meaningful intercultural exchanges because often, these exchanges are badly managed or not adequately structured.

Conclusion

While educators recognize the importance of teaching students to live in an ever globalizing and culturally diverse society, several challenges continue to hinder the implementation of curricula and initiatives that effectively increase intercultural sensitivity and competence (Koskinen & Tossavainen, 2003, Sercu, 2005). Although many higher education institutions identify intercultural competence as an important graduation outcome, there is very little consensus as to what it actually entails (Deardorff, 2004). The literature suggests that intercultural competence is an evolving concept and process that involves three key components: knowledge, attitudes, and skills (Bennett & Bennett, 2004, Deardorff, 2004). Research discussed in this section indicates that one of the most significant stumbling blocks in increasing intercultural competence among students may be in the lack of preparation on the part of educators. By providing intercultural sensitivity training for educators, higher education institutions may be more successful in reaching their internationalization initiatives. Finally, constructivist instructional techniques and experiential learning have proven to be effective for increasing students' levels of intercultural sensitivity.

Intercultural Competence Assessment and Measurement Tools

While most higher education institutions consider “global literacy” or “intercultural competence” as important graduation outcomes, few have specifically addressed the assessment or measurement of these anticipated outcomes (Deardorff, 2004). Intercultural assessment tools provide educators with the means to assess and measure a variety of the aforementioned outcomes. In most cases, these instruments also aid educators in developing appropriate interventions and responses. Intercultural assessment tools allow educators to understand and measure the effectiveness and outcomes of common internationalization initiatives such as the acquisition of intercultural competence. While there are numerous instruments for assessing

learning outcomes for diversity, there are fewer that are specifically designed for the assessment of intercultural sensitivity or competence of students, faculty, or staff (Bennett & Salonen, 2007). Seven of the most common instruments appropriate for use in higher education institutions are as follows: *The Intercultural Development Inventory* (IDI), *The Cross-Cultural Adaptability Inventory* (CCAI), *Cross-Cultural World-Mindedness Scale* (CCWMS) *Intercultural Sensitivity Inventory* (ISI), the *Assessment of Intercultural Competence* (AIC), The Intercultural Sensitivity Scale (ISS), and the Openness to Diversity Scale (the Openness to Diversity Scale and the ISS are included in their entirety in the appendix).

The IDI and CCAI are two commercially available tools, which have dominated the research landscape in recent years. However, the latter three instruments represent the emerging non-commercial sector. This section briefly reviews the purpose, application, availability, reliability, and scoring of each of these assessment tools.

The Intercultural Development Inventory

Purpose and application.

The IDI is a psychometric instrument developed by Hammer, Bennett, and Wiseman (2003), which can be used to effectively measure students' orientations towards cultural difference described in the Developmental Model of Intercultural Sensitivity (DMIS). The IDI is a statistically reliable, cross-culturally valid measure of intercultural competence. According to Hammer, Bennett, and Wiseman (2003), "This measurement should be useful for the purposes of assessing training needs, guiding interventions for individual and group development of intercultural competence, contributing to personnel selection, and evaluating programs" (p. 441). The IDI is grounded by the theoretical constructs of the DMIS, which is briefly described below.

The DMIS, created by intercultural communication scholar Milton J. Bennett, is among the most prevalent intercultural sensitivity tools discussed in the literature. The DMIS is a culture-general and developmental model of intercultural competence that was created as a framework “to explain the observed and reported experiences of people in intercultural situations (Bennett & Bennett, 2004, p. 162)”. It is a framework for understanding reactions of people towards cultural difference, and is based on “meaning-making” models of cognitive psychology and radical constructivism.

The DMIS is divided into six stages of increasing sensitivity to cultural difference. The first three stages are “ethnocentric”, meaning that one uses his/her own cultural values and customs to judge all people. The second three stages are “ethnorelative”, meaning that one is able to recognize and adapt to a variety of cultural values and customs. The following section outlines a short description of each of the six stages. The DMIS and IDI have been used in numerous educational contexts, including study abroad debriefing, intercultural communication workshops, and curriculum design (Mahoney & Schamber, 2004), and allows educators to assess the developmental readiness of their students to pursue various types of intercultural learning, and to select and sequence learning activities that contribute to their learners’ development of intercultural competence (Bennett, Bennett, & Allen, 2003).

Availability, reliability, and scoring

The IDI can assess intercultural competence at the individual, group and organizational level. It is a theory based instrument consisting of 50 statements that respondents score using a 5-point response set ranging from “agree” to “disagree”, and can be taken either in paper form or online (Paige, 2004). The IDI has alpha coefficients of .80 to .84 for the five scales (Hammer, Bennett, & Wiseman, 2003). A three-day qualifying seminar, with a tuition of \$1300-\$1500, is

mandatory for those who wish to use the IDI, and each instrument costs \$10. The instrument must be trainer-scored or scored by the Intercultural Communication Institute, and is available in various languages. Information on trainings and purchasing the instrument can be found at <http://www.idiinVENTORY.com/>

Cross-Cultural Adaptability Inventory

Purpose and application.

The CCAI is a widely used self-assessment tool developed by Kelley and Meyers (1995b). It was designed to assess an individual's effectiveness in cross-cultural interaction and communication, both domestically and abroad. The CCAI measures four variables: Emotional Resilience, Flexibility and Openness, Perceptual Acuity, and Personal Autonomy (Davis & Finney, 2006). Emotional Resilience refers to one's ability to cope with the stresses and ambiguity inherent to new cultural environments. Flexibility and Openness reflects the extent to which these abilities are present in regards to new ways of thinking and behaving in diverse cultural contexts. Perceptual Acuity assesses one's ability to identify and interpret both verbal and nonverbal cultural communication cues. Personal autonomy measures an individual's sense of identity and ability to respect differing cultural values.

The CCAI helps its respondents understand the qualities that can increase intercultural effectiveness, develop intercultural communication skills, and make an informed decision about one's readiness to live/study/work abroad. This instrument is used in academia, business, and government settings to strengthen cultural and diversity training programs and to promote cultural awareness within the classroom, student affairs, resident life, or in study abroad/community programs.

Availability, Reliability, and Scoring.

The CCAI is a 50-item survey that uses a 6-point Likert scale response format ranging from “definitely not true” to “definitely true”. Kelly and Meyers (1995a) reported the results of their study with a normative sample (N = 653). Internal consistency reliability coefficients ranged from .68 to .82 on the four scales and .90 overall. Formal training is not required to use the CCAI, although users should have a training background and/or undergraduate degree (Kelley and Meyers, 1995a). Each instrument costs \$9-10 dollars (Sinicrope, C., Norris, J., Watanabe, Y., 2006). The instrument may be purchased through a variety of companies that specialize in development and assessment such as Vangent (<http://www.jvrcatalogue.com/?p=352>).

Cross-Cultural World-Mindedness Scale**Purpose and application.**

The Cross-cultural Worldmindedness Scale (CCWMS) is an instrument that evaluates attitudes towards race, religion, world government, war, patriotism, and global education. The key concept assessed by the CCWMS is “worldmindedness”, which is defined as “positive attitudes towards issues such as immigration, world government, and world economic justice (Paige, 2004, p 113)”. The scale is used for study-abroad pre-departure and re-entry programs to detect value orientations and shifts, and can also be used to test study abroad outcomes. The CCWMS draws on the earlier work of Sampson and Smith (1957) and Sivernail (1979).

Availability, Reliability, and Scoring

The 26-item scale, developed by Der-Karabetian (1993), uses a 6-point Likert-style response format ranging from “strongly agree” to “strongly disagree”. Based on a survey

conducted by 10 nations, Der-Karabetian (1992) reports that the CCWMS internal reliability varied between countries from .69 (India) to .90 (England), while the alpha coefficients were .80 to .85 for two U.S. samples. There are no training requirements for the CCWMS, and it can be either trainer scored or self-scored. The CCWMS is available at no cost in Der-Kerabetian (1992).

Intercultural Sensitivity Inventory

Purpose and application.

The Intercultural Sensitivity Inventory (ICSI) (Bhawuk & Brislin, 1992) is able to measure one's ability to modify behavior in culturally appropriate ways when coming into contact with diverse cultures. More specifically, the ICSI measures the cultural constructs of individualism, collectivism, and flexibility and open-mindedness. The ICSI offers an opportunity to explore cultural identity through the assessment of one's cultural value orientations and flexibility in adapting to new cultures or people (Paige, 2004). The instrument measures intercultural sensitivity, while the role of language competence and developmental aspects of intercultural competence over time are not considered.

Availability, reliability, and scoring.

The 46 question self-report instrument uses a 7-point Likert scale ranging from "very strongly agree" to "very strongly disagree". The instrument is divided into two parts. In the first part, the respondents answer 16 questions twice, once while imagining to live and work in Japan, and again while imagining to live and work in the U.S. In the second part, participants respond to statements intended to measure flexibility and open-mindedness. Based on Bhawuk and Brislin's (1992) study, which used two culturally heterogeneous samples, results show strong internal

consistency reliability with Cronbach alphas for two the samples of .82 and .84 (Paige, 2004). The ICSI does not require any specific training, is available at no cost in Bhawuk and Brislin (1992), and can be self-scored.

The Assessment of Intercultural Competence

Purpose and application.

The Assessment of Intercultural Competence (AIC) is a self-assessment tool that measures the development of intercultural sojourners over time. The instrument was developed by The Federation of the Experiment of International Living (FEIL) as an initial step to a larger project of assessing the intercultural outcomes of its programs. FEIL researchers defined intercultural competence as “a complex of abilities needed to perform effectively and appropriately when interacting with others who are linguistically and culturally different from one’s self (Fantini, 2006, p 12)”. Fantini (2006) identified different components from within this definition including dimensions of intercultural competence (knowledge, attitude, skills, and awareness), characteristics of intercultural competence, domains of intercultural competence (relationships, communication, and collaboration), language proficiency, and developmental level (Sinicrope, Norris, & Watanabe, 2007).

Availability, reliability, and scoring.

In its initial version, this AIC employed both self and other-reported procedures and interviews lasting approximately one hour. Fantini (2006) reported reliability estimates of .70 and greater factor loadings of .60 and greater for each item on the four dimensions of intercultural competence: knowledge, attitudes skills, and awareness (Sinicrope, Norris, &

Watanabe, 2007). All components of the AIC are available at no cost in the Fantini (2006) appendix.

The Intercultural Sensitivity Scale

Purpose and application

The Intercultural Sensitivity Scale (ISS) is a twenty-four item instrument that asks participants to respond on a Likert scale from one to five with an answer of one equaling strong disagreement and five equaling strong agreement. The instrument, which was developed by Chen and Starosta (2000), measures intercultural sensitivity. According to Chen and Starosta (1998), “the concept of intercultural sensitivity refers to the subjects’ active desire to motivate themselves to understand, appreciate, and accept differences among cultures (p. 143)”. The twenty four-questions are grouped under the following five factors: Interaction Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment, and Interaction Attentiveness.

Availability, reliability, and scoring.

Chen and Starosta (2000) found that the ISS demonstrated high internal consistency with 86 and 88 reliability coefficients in two separate studies. The instrument was found to be statistically significant (Chen & Starosta, 2000). The developers of this scale have placed it in the public domain so that it may be freely used in other studies.

Openness to Diversity/Challenge Scale

Purpose and application

The Openness to Diversity/Challenge Scale (Pascarella et al., 1994) was specifically developed for use with college students. This is an eight-item instrument that uses the same Likert scale as the ISS instrument. The scale “not only includes an assessment of an individual’s openness to cultural, racial and value diversity, it also taps the extent to which an individual enjoys being challenged by different ideas, values, and perspectives” (Pascarella et al., 1996).

Reliability, availability and scoring.

The Openness to Diversity/Challenge Scale was originally developed through factor analysis in a longitudinal pilot study. Pascarella et al. (1996) found that the scale had internal consistency (alpha) reliabilities of 0.83 for the precollege measure and 0.84 for the end-of-first-year follow-up, dependent measure. The developers of this scale have placed it in the public domain so that it may be freely used in other studies.

Conclusion

The growing focus on developing interculturally competent students, professionals and citizens underscores the importance of effectively assessing intercultural competence. In order to offer the highest quality programs, which accurately reflect institutions’ internationalization initiatives, educators must understand if relevant objectives of programs, such as study abroad or language foreign language education, are being met.

Chapter 3: Research Design

Research Questions

There is one overarching research question guiding this study. The main research question is as follows: *To what extent, if any, are Bentley University's internationalization initiatives, specifically in the undergraduate short-term study abroad arena, increasing intercultural competence among its students?*

The research question was intended to elucidate how, if at all, Bentley University's internationalization initiatives, as they relate to study abroad are helping students acquire intercultural competence. Measuring students' levels of intercultural competence before and after their participation in two different study abroad programs examined if short term study abroad programs are successful at increasing students level of intercultural competence.

Hypotheses

There are two types of statistical hypotheses: null and alternative. "The null hypothesis states that there is no relation between the measures of the variables (Hoy, 2009, p 70)". If the null hypothesis is rejected, we are able to accept the alternative hypothesis. There are six hypotheses tested in this study, each of which is detailed below:

- Students who participate in STP exhibit an increase in scores from their pre test to their post-test on questions relating to Openness to Diversity.
- Students who participate in STP exhibit an increase in scores from their pre test to their post-test on questions relating to Interaction Engagement.

- Students who participate in STP exhibit an increase in scores from their pre test to their post-test on questions relating to Respect for Cultural Differences.
- Students who participate in STP exhibit an increase in scores from their pre test to their post-test on questions relating to Interaction Enjoyment.
- Students who participate in STP exhibit no significant difference in scores from their pre test to their post-test on questions relating to Interaction Attentiveness.
- Students who participate in STP exhibit no significant increase in scores from their pre test to their post-test on questions relating to Interaction Confidence.

Students who participated in short-term faculty led programs were expected to increase scores from their pre-test to post-test on Interaction Engagement, Interaction Enjoyment, Openness to Diversity and Respect for Cultural Differences, while no significant increase was expected for Interaction Confidence and Interaction Attentiveness. The aforementioned hypotheses were formulated based on previous research using the same instruments (Forgues, 2005). In Forgues' (2005) study on the relationship between semester-long study abroad experiences and students attitudes towards diversity and culture, results showed that Interaction Confidence and Intercultural Attentiveness did not exhibit an significant increase in scores from pre-test to post-test. Forgues (2005) surmised that this result was due to the fact that students who choose to study abroad may already perceive themselves as having those characteristics. The findings from the aforementioned study, as well as a review of the literature, informed the formulation of the hypotheses used in this study.

Methodology

This quasi-experimental research was designed to understand if short term study abroad, which is a Bentley University internationalization initiative aimed at increasing students' level of intercultural competence, actually increases intercultural competence among students. According to Campbell and Stanley (1963), the key difference between quasi-experimental designs and experimental designs is the use of random assignment. While randomizing improves internal validity by increasing the researcher's ability to conclude that treatment outcomes resulted from the intervention, in many contexts it is not possible for randomization to occur. In particular, in this specific study, could not randomly assign Bentley students to participate in short term study abroad programs.

Among the most frequently used quasi-experimental designs is called a "nonequivalent group design", which generally requires a pretest and posttest for a treated and comparison group. According Campbell and Stanley (1963), "One of the most widespread experimental designs in educational research involves an experimental group and a control group both given a pre test and a post test, but in which the control group and the experimental group do not have pre-experimental sampling equivalence (p 47)". In this study, the Intercultural Sensitivity Scale, Openness to Diversity Scale, and Demographic questions were administered to students before and after they participate in a short-term study abroad program.

While the validity of this design is not as strong as it would be under randomized design, this study does address potential threats to validity. One of the most common threats to the validity of quasi-experimental designs is selection bias. According to Creswell (2009), a selection threat occurs when participants are selected who have certain characteristics that

predispose them to have certain outcomes. In this particular study, participants' previous intercultural inclination/exposure was a point of concern. Some research shows that students who have been raised in immigrant families or students who have multiple cultural identities are more interculturally competent than those who do not have these characteristics (Suarez-Orozco & Qin-Hilliard, 2004). That is, students who choose to participate in short-term study abroad programs are likely different (in terms of intercultural inclination/exposure) than the average Bentley student, which limits external validity of the study. Consequently, a control group, composed of a nearly random group of Bentley students (who are enrolled in a required general education class), was used. Using survey and demographic data, which includes information regarding students' previous intercultural exposure; I quantify how the groups are different. This allows me to address to what extent we can expect the results to be generalizable to the wider Bentley population, and whether they are likely to be robust to wider audience.

Site and participants

The participants of this study were all undergraduate students attending Bentley University. Two groups, of approximately 50 students each, were invited to participate in the study: a treatment group and a control group. The treatment group consisted of students who participated in a short-term faculty program and completed a pre-test before travel, and a post-test after travel. The control group, who consisted of students who were enrolled in a general education course at Bentley University, was used to determine how the study abroad group compared to the typical Bentley University student population. The control group only completed the test once, and it was compared to the treatment groups' pre-test to determine external validity.

All of the students participating in a short-term study abroad programs in March 2011 were invited to participate in the treatment group. The students invited to participate in the control group were all enrolled in one of four required general education courses. This group is representative of the general Bentley student body because every Bentley student must complete these general education courses. The control group was used to determine if the treatment population suffers from selection bias. That is, it was used to determine if the treatment group was significantly different than the general Bentley student body.

Data collection

Instrumentation

Three instruments were used in this study: the Intercultural Sensitivity Scale (ISS) (Chen & Starosta, 2000), the Openness to Diversity/Challenge Scale (Pascarella et al., 1996), and a demographic survey designed by the researcher (each instrument is included in the Appendices). Each of the aforementioned instruments is discussed below.

The Intercultural Sensitivity Scale (ISS) is a twenty-four item instrument that asks participants to respond on a Likert scale from one to five with an answer of one equaling strong disagreement and five equaling strong agreement. The twenty four-questions are grouped under the following five factors: Interaction Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment, and Interaction Attentiveness. Chen and Starosta (2000) found that the ISS demonstrated high internal consistency with 86 and 88 reliability coefficients in two separate studies. The developers of this scale have placed it in the public domain so that it may be freely used in other studies.

The second instrument used in this study is the Openness to Diversity/Challenge Scale (Pascarella et al., 1994), which was specifically developed for use with traditional college students. This is an eight-item instrument that uses the same Likert scale as the ISS instrument. The scale “not only includes an assessment of an individual’s openness to cultural, racial and value diversity, it also taps the extent to which an individual enjoys being challenged by different ideas, values, and perspectives” (Pascarella et al., 1996). The Openness to Diversity/Challenge Scale was originally developed through factor analysis in a longitudinal pilot study. Pascarella et al. (1996) found that the scale had internal consistency (alpha) reliabilities of 0.83 for the precollege measure and 0.84 for the end-of-first-year follow-up, dependent measure. The developers of this scale have placed it in the public domain so that it may be freely used in other studies.

The final instrument used in the study is a personal data form that was designed by the researcher. The personal data form collects basic information about the participants. The questions on the personal data form will allow the researcher to provide descriptive statistics of the participants. They also classify students in the two groups set out for the study. Questions asking for age, gender, class standing, major and race/ethnicity allowed for between-group comparisons. Several questions about prior international experiences were designed to allow for discussion of the impact of those experiences on the other two instruments.

Distribution

The data was collected by the Bentley University study abroad office using a survey distributed online through a system called qualtrics. Students in each group were sent email messages by the Study Abroad Office, asking them to visit the website where the survey is

located and to complete the survey online. The Study Abroad Office maintains email address lists of students who have and who will participate in study abroad programs. The control group representing the general Bentley population was also emailed the survey by the study abroad office. Email addresses of students will be obtained from the professors of four general education courses.

The treatment group was given the anonymous survey approximately one week before the group travels and again immediately after the group traveled, although in the second administration of the survey, the demographic information was not collected again. Students were invited to complete the online survey one week prior to departure, but no longer have access to the survey once their short-term study abroad program began. The control groups took the online survey once, during the same time frame that the treatment group took the pretest. Since the instruments demonstrated internal consistency, a span of two weeks was unlikely to reveal any changes in the control group (i.e. maturation), which is why the control group only completed the test once.

Participants in both control and treatment groups were advised of appropriate informed consent information when they clicked on the link containing the survey, which was in the email inviting students to participate in the survey. By clicking on the button to proceed to the survey they indicated their agreement with the informed consent information and their willingness to participate in the study. Students' ID numbers were used to link the pre and post-tests. Once the data was collected, each student ID number was assigned a random number. After the random numbers were assigned, and there was no trace of the ID number, the study abroad office released the data to the principal investigator who stored and analyzed the data on SPSS.

Data Analysis

Descriptive Statistics.

Using the SPSS program, the demographic data was analyzed first to determine if the control and treatment groups were statistically equivalent. The number and standard deviations of the demographic variables were reported. One column was assigned for the treatment group, and another column for the control group. A chi-squared test was run for independence for each variable. For instance, class breakdown, majors, etc. This approach was used for all demographic, categorical data. Fraenkel and Wallen (2003) define categorical data in the following way: “Categorical data simply indicate the total number of objects, individuals, or events a researcher finds in a particular category (p 190)”. The control and treatment group was compared on a variety of demographic questions including: sex, race, intercultural exposure, and ISS factor scores between control and treatment group.

Factor Analysis.

In order to break down the many question survey into a few factors, and to and verify that these factors agree with established results used the ISS, a factor analysis is conducted. According to Fraenkel and Wallen (2003), factor analysis “is a technique that allows the researcher to determine if many variables can be described by a few factors” (p 340). By conducting a factor analysis, the following five factors, which were previously established by Chen and Starosta (2000), were verified to have a statistically valid breakdown: Interaction Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment, and Interaction Attentiveness.

Attitudinal Statistics.

Using the factors generated above, two sets of tests were conducted. First, an independent t-test between the pre-test and the control was run. This shows if there were statistically significant differences in intercultural competence between the treatment group and the random sample control group. The report includes:

- means, standard deviations, sample sizes for each group (pre-test and control) and each factor.
- test statistic t for each factor.
- p-value for each factor, in order to determine significance

Second, a paired t-test between the pre- and posttest results was conducted. This demonstrates if there were statistically significant differences resulting from the intervention. The same criteria noted above were reported:

- means, standard deviations, sample sizes for each group (pre-test and control) and each factor.
- test statistic t for each factor.
- p-value for each factor

Although researchers commonly assume Likert scales are continuous, the data is more appropriately analyzed as categorical data. Non-parametric tests were used to verify the robustness of the t-test results. According to Field (2009)

Non-parametric tests are sometimes known as assumption free tests because they make fewer assumptions about the type of data on which they can be used. Most of these tests work on the principal of ranking the data: that is, finding the lowest score and giving it a rank of 1, then finding the next highest score and giving it a rank of 2, and so on. This

process results in high scores being represented in large ranks, and low scores being represented by small ranks. The analysis is then carried out on the ranks rather than the actual data (p 540).

A Wilcoxon signed rank test was used to determine if the scores have increased. Field (2009) explains that the test is “used in situations in which there are two sets of scores to compare, but these scores come from the same participants (p 552)”. By running a Wilcoxon signed rank test for each *question*, I was also able to show how scores have changed and if the change is statistically significant. Finally, in order to verify control versus pre treatment results a chi-squared test was run for each question, which told us if the distribution of answers was different in a statistically significant way.

Conclusion

In order to offer the highest quality study abroad programs, that accurately reflect such institutional objectives as graduating “interculturally competent students” or “global citizens”, it is valuable to measure the acquisition of intercultural competence during short-term study abroad programs. Measuring the acquisition of intercultural competence in these programs can help higher education institutions demonstrate that the programs are aligned with internationalization initiatives at the institutional level. In order to create study abroad programs that reflect broader institutional internationalization initiatives, educators must have an understanding of *which* programs are effective (in terms of increasing intercultural competence), and to *which degree* they are effective.

Chapter 4: Results

Descriptive Statistics Results

There were three key findings that emerged from this study. First, participants' overall levels of intercultural competence and openness to diversity increased after short-term study abroad experiences. Second, students' who were culturally exposed prior to their short-term study abroad experience improved scores in more areas than those who were not previously interculturally exposed. Finally, after comparing the control and treatment groups, the two groups were found to be virtually identical.

All students who participated in a short-term faculty-led program in March 2011 were invited to participate in the study. There were 39 undergraduate students in this group: 20 undergraduate students responded to the pretest, while thirteen responded to the posttest and were included in the data analysis. This produced a response rate of 33 percent. Participants' short-term program destinations for this study were varied: Ireland and Poland (30.8%), England (15.4%), Italy (30.8%), and Spain (15.4%). Table 1 shows the participant answers on each of the demographic survey items. These items were designed to solicit information regarding demographics and previous cultural exposure.

Table 1: Responses to Demographic Survey

Variable	Response	N	%
Major	Accountancy	4	30.8
	Corporate Fin. & Accounting	1	7.7
	Economics/Finance	1	7.7
	Management	2	15.4
	Marketing	4	30.8
	Mathematical Sciences	1	7.7
	Total	13	100.0
Gender	Male	5	38.5
	Female	8	61.5
	Total	13	100.0
Race	White/Caucasian	11	84.6
	African American	0	0.0
	Hispanic	0	0.0
	Asian	2	15.4
	Total	13	100.0
Country of Citizenship	US	13	100.0
	Dual citizenship	0	0.0
	Country other than the US	0	0.0
	Total	13	100.0
Class	Freshman	2	15.4
	Sophomore	3	23.1
	Junior	4	30.8
	Senior	4	30.8
	Total	13	100.0
Studied Second Language	Yes	13	100.0
	No	0	0.0
	Total	13	100.0
Travel/reasons besides STP	Never	2	15.4
	Once	3	23.1
	2-3 times	5	38.5
	4-7 times	1	7.7
	8+ times	2	15.4
	Total	13	100.0
	Time abroad prior to STP?	1 day to 2 weeks	8
More than 2 weeks, less than 4		2	15.4
1-3 months		1	7.7
Total		11	84.6
Previously Studied Abroad	Yes	3	23.1
	No	10	76.9
	Total	13	100.0
Duration of Study Abroad	1-2 weeks	1	7.7
	2-4 weeks	1	7.7
	1-2 months	1	7.7
	Total	3	23.1
Relationship/other culture	0	4	30.8
	2	5	38.5
	5 or more	4	30.8
	Total	13	100.0
# culturally focused classes	0	4	30.8
	1	2	15.4
	2	3	23.1
	3	1	7.7
	5 or more	3	23.1
	Total	13	100.0
Liberal Studies Majors	I am not a LSM	5	38.5
	Global Perspectives	3	23.1
	Health and Industry	2	15.4
	Media Arts and Society	3	23.3
	Total	13	100.0
Program	GLS 270 (Ireland, Poland)	4	30.8
	ID 245 (England)	2	15.4
	MK 344 Retailing (Italy)	4	30.8
	ML 298 (Spain)	2	15.4
	Other	1	7.7
Total	13	100.0	

The data reported in Table 1 demonstrates that the majority of students reported Accountancy (30.8%) and Marketing (30.8%) as majors. The other majors reported by participants included Corporate Finance and Accounting (7.7%), Economics and Finance (7.7%), Management (15.4%), and Mathematical Sciences (7.7%). The gender distribution was representative of national averages. From 1999-2009, the national averages for US study abroad students ranged from 64.2%-65.6% for females, and 34.4%-35.8% for males (Institute of International Education, 2010). In this study, women represented 61.5% of the sample, while men represented 38.5% of the sample. The results for race and ethnicity were also consistent with national averages, with 84.6% of participants in this study identifying as White/Caucasian. From 1999-2009, US White/Caucasian students represented 80.5%-84.3% of the total US study abroad student population (Institute of International Education, 2010).

There were more juniors and seniors (61.6%) represented than freshman and sophomores (38.5%) in this study. Participants' reported their class standings as follows: 15.4% freshmen, 23.1% sophomores, 30.8% juniors, and 30.8% seniors. The majority of participants were Liberal Studies Majors (LSM) (61.5%). Bentley University has defined the LSM option as follows: "The LSM is an optional double major. It does not stand alone, but is an interdisciplinary second major that is paired with a primary major in a business discipline or with one of the arts and sciences majors requiring a significant business component. The impulse behind the LSM is to help students increase the value and make meaning out of their liberal arts education at Bentley by combining some required courses in the general education curriculum with arts and science electives and some business electives under specific themes or concentrations (Retrieved June 30, 2011 from <http://www.bentley.edu/academic-services/day/Majors/lsm.cfm#overview>)". The

LSM majors represented in the sample were: Global Perspectives (23.1%), Health and Industry (15.4), and Media arts and Society (23.3%).

All participants reported having studied a second language, and 84.6% of students reported previous travel abroad for reasons other than study. Of the students who had spent time outside their home country for reasons other than study, 61.5% reported that their longest sojourn was between 1 day and two weeks, 15.4 reported it was between two weeks and a month, and 7.7% reported it was between one month and three months. The data reported in Table 1 also demonstrates that 23.1 of the sample studied abroad prior to participating in this study, while 76.9 did not.

Finally students were asked to report how many close relationships they had experienced with someone from another culture. The participants were fairly evenly distributed on this dimension: No close relationships (30.8%), two close relationships (28.5%), and five or more (30.8%). The number of culturally focused courses students reported completing prior to participation in the short-term program was quite varied: No courses (30.8%), one course (15.4%), two courses (23.1%), three courses (7.7%), five or more courses (23.1%).

Attitudinal Survey Results

The main research question in this study asked: “To what extent, if any, are Bentley University’s internationalization initiatives, specifically in the undergraduate short-term study abroad arena, increasing intercultural competence among its students”? To answer this question, both pre-tests and post-tests designed to quantitatively measure various components of intercultural competence, were distributed to participants before and after their short-term study abroad experience. As outlined in the Methodology section, participants completed two

instruments regarding their attitudes towards diversity and different cultures: the Intercultural Sensitivity Scale and the Openness to Diversity Scale. The Intercultural Sensitivity Scale (ISS) is a twenty-four item instrument that asks participants to respond on a Likert scale from one to five with an answer of one equaling strong disagreement and five equaling strong agreement. The instrument, which was developed by Chen and Starosta (2000), measures intercultural sensitivity. According to Chen and Starosta (1998), “the concept of intercultural sensitivity refers to the subjects’ active desire to motivate themselves to understand, appreciate, and accept differences among cultures (p. 143)”. The twenty four-questions are grouped under the following five factors: Interaction Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment, and Interaction Attentiveness.

Chen and Starosta (2000) found that the ISS demonstrated high internal consistency with 86 and 88 reliability coefficients in two separate studies. The instrument was found to be statistically significant (Chen and Starosta, 2000). The developers of this scale have placed it in the public domain so that it may be freely used in other studies.

The Openness to Diversity/Challenge Scale (Pascarella et al., 1994) was specifically developed for use with college students. This is an eight-item instrument that uses the same Likert scale as the ISS instrument. The scale “not only includes an assessment of an individual’s openness to cultural, racial and value diversity, it also taps the extent to which an individual enjoys being challenged by different ideas, values, and perspectives” (Pascarella et al., 1996).

The Openness to Diversity/Challenge Scale was originally developed through factor analysis in a longitudinal pilot study. Pascarella et al. (1996) found that the scale had internal consistency (alpha) reliabilities of 0.83 for the precollege measure and 0.84 for the end-of-first-

year follow-up, dependent measure. The developers of this scale have placed it in the public domain so that it may be freely used in other studies.

Table 2 displays statistics from a paired t-test for the entire sample, and lists the mean and standard deviation for the pre and post-tests on each of the sub-scales. The mean scores on each factor were compared for both the pre-test and the post-test to determine if a significant difference existed between the two tests. It is important to note that despite the small sample size, the mean scores for each of the six factors increased from the pre-tests to the post-tests. This increase indicates that most of the participants' post-study abroad scores were higher than their pre-study abroad scores.

Table 2: Mean Factors for ISS and Openness to Diversity for Pre and Post-tests

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Interaction engagement	3.9890	13	.50997	.14144
	Post interaction engagement	4.2527	13	.46347	.12854
Pair 2	Pre respect for cultural Differences	4.3590	13	.61931	.17177
	Post respect for cultural Differences	4.6154	13	.41042	.11383
Pair 3	Pre Interaction confidence	3.4615	13	.67025	.18589
	Post Interaction confidence	3.8000	13	.77889	.21602
Pair 4	Pre Interaction enjoyment	4.1795	13	.53775	.14914
	Post Interaction enjoyment	4.2821	13	.63605	.17641
Pair 5	Pre Interaction attentiveness	3.7692	13	.43853	.12163
	Post interaction attentiveness	4.3590	13	.48038	.13323
Pair 6	Pre Openness to Diversity	4.2019	13	.66250	.18374
	Post Openness to Diversity	4.4423	13	.52444	.14545

For this study, alpha was set at .05 because a 95% confidence level was deemed sufficient to avoid type 1 error and still find important results. Table 3 demonstrates the statistical significance of the change in means for each factor. Three of the factors revealed statistical significance, one factor trended towards significance, and two factors did not uncover statistical change.

Table 3: Test for Equality of Means Results for Overall Sample on Pre and Post-tests

Item	t	df	Sig.	Mean diff.
Interaction Engagement	1.556	12	.146	.26374
Respect for Cultural Differences	2.012	12	.067	.25641
Interaction Confidence	2.910	12	.013	.33846
Interaction Enjoyment	.843	12	.416	.10256
Interaction Attentiveness	4.308	12	.001	.58974
Openness to Diversity	2.221	12	.046	.24038

While all of the factor scores increased from pre-test to post-test, three of the factors uncovered statistically significant differences: Interaction Confidence ($t=2.910$, $p=.013$); Interaction Attentiveness ($t=4.308$, $p=.001$); and Openness to Diversity ($t=2.221$, $p=.046$). These findings suggest that after participants returned from a short-term study abroad program, they identified themselves as being more confident interacting with those from other cultures, more attentive in interactions with those from other cultures, and also reported an increased openness to diversity after participating in short-term study abroad programs.

Statistically significant factors.

The change in the Openness to Diversity factor is significant at the .05 level and has a magnitude of approximately a quarter of a point, meaning that students increased their openness to diversity by an quarter of a point on average. The Interaction Confidence factor is significant at the .05 level and has a magnitude of approximately a third of a point, meaning that students increased their confidence interacting with those of other cultures by a third of a point on average. Most dramatically, the change in the Interaction Attentiveness factor is highly significant at the less than .001 level. Moreover the magnitude of the change in students' scores was more than half a point on average.

The Respect for Cultural Differences factor ($t=1.556$, $p=.067$) approached statistical significance, meaning that it is somewhat significant. While the p-value was not below .05 it still fell below .01, which indicates that it approaches significance. This finding suggests that participants tended to identify themselves as having more respect for cultural differences after participating in a short-term study abroad program. The magnitude of change for the Respect for Cultural Differences factor averages a quarter of a point.

Factors not showing statistical significance.

While there were significant differences between the pre-tests and post-tests on three factors, and weak significance on one factor, two of the factors were not significant. On the Interaction Engagement factor ($t=1.55$, $p=.146$) and Interaction Enjoyment factor ($t=.843$, $p=.416$), the scores of the pre and post-tests were not found to be statistically different. This could be for a few different causes including that the sample was small which makes finding significance more difficult. Alternatively, it could be the short time spent abroad, or there is also the possibility that study abroad simply may not have an impact on participants' engagement when interacting with people from other cultures.

Intercultural Exposure

Culturally exposed participants.

In this particular study, participants' previous intercultural inclination/exposure was a point of interest. Some research shows that students who have been raised in immigrant families or students who have multiple cultural identities are more interculturally competent than those who do not have these characteristics (Suarez-Orozco & Qin-Hilliard, 2004). In order to better understand the impact of intercultural exposure on participants' scoring on the ISS and Openness

to Diversity Scale, a demographic survey, which includes information regarding students' backgrounds and previous intercultural exposure, was distributed. The students' intercultural exposure was quantified by totaling the number of trips outside the United States and the number of close relationships with someone from another culture. Table 4 displays statistics from a paired t-test for the entire sample of culturally exposed students, and lists the mean and standard deviation for the pre and post-tests on each of the factors. The mean scores for each factor were compared for both the pre-test and the post-test to determine if a significant difference existed between the two tests. All of the factor scores increased from pre-test to post-test.

Table 4: Culturally Exposed: Mean Factors for ISS and Openness to Diversity for Pre and Posttests
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Interaction engagement	4.0816	7	.37668	.14237
	Post interaction engagement	4.2245	7	.48695	.18405
Pair 2	Pre respect for cultural Differences	4.5476	7	.35635	.13469
	Post respect for cultural Differences	4.6905	7	.42414	.16031
Pair 3	Pre Interaction confidence	3.5714	7	.85189	.32198
	Post Interaction confidence	3.8571	7	.83837	.31687
Pair 4	Pre Interaction enjoyment	4.2381	7	.49868	.18848
	Post Interaction enjoyment	4.4762	7	.60422	.22837
Pair 5	Pre Interaction attentiveness	3.8095	7	.57275	.21648
	Post interaction attentiveness	4.4286	7	.49868	.18848
Pair 6	Pre Interaction engagement	4.2679	7	.77200	.29179
	Post interaction engagement	4.4464	7	.59449	.22470

Table 5 demonstrates the statistical significance of each of the factors for participants who were considered culturally exposed. For the culturally exposed participants, two factors revealed statistical significance, and four of the factors did not. When looking at the entire sample, Openness to Diversity was significant, while in the culturally exposed group it was not.

Table 5: Culturally Exposed: Test for Equality of Means Results for Culturally Exposed Students on Pre and Post-tests

Item	t	df	Sig.	Mean Difference
Interaction Engagement	.691	6	.515	.14286
Respect for Cultural Differences	1.216	6	.270	.14286
Interaction confidence	7.071	6	.000	.28571
Interaction enjoyment	1.698	6	.140	.23810
Interaction attentiveness	2.635	6	.039	.61905
Openness to Diversity	1.198	6	.276	.17857

While all of the factor scores increased from pretest to posttest, two of the factors revealed statistically significant differences: Interaction Confidence ($t=7.071$, $p=.000$) and Interaction Attentiveness ($t=2.635$, $p=.039$). It is important to note that the change in Interaction Confidence is extremely significant at the .000 level, which will be discussed further in the final chapter. Moreover the magnitude of change was a third of a point on average. The change in Interaction Attentiveness was also significant the .05 level, with a magnitude of change of quarter of a point. Culturally exposed participants exhibited a score increase of .285 on the Interaction Confidence factor and .619 on the Interaction Attentiveness factor after having participated in a short-term study abroad program. These findings suggest that after culturally exposed participants returned from a short-term study abroad program, they identified themselves as being more confident interacting with those from other cultures and more attentive in interactions with those from other cultures.

Interaction Engagement ($t=.691$, $p=.515$), Respect for Cultural Differences ($t=1.216$, $p=.270$), Interaction Enjoyment ($t=1.698$, $p=.140$), and Openness to Diversity ($t=1.198$, $p=.276$) did not reveal any statistically significant difference between the pre-test and the post-test.

Culturally Unexposed Participants

Table 6 displays statistics from a paired t-test for the entire sample of culturally unexposed students, and lists the mean and standard deviation for the pre and posttests on each of the factors. The mean scores for each factor were compared for both the pretest and the posttest to determine if a significant difference existed between the two tests. All of the factor scores increased from pretest to posttest.

Table 6: Culturally Unexposed: Mean Factors for ISS and Openness to Diversity for Pre and Posttests

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Interaction engagement	3.8810	6	.65413	.26705
	Post interaction engagement	4.2857	6	.47809	.19518
Pair 2	Pre respect for cultural Differences	4.1389	6	.81252	.33171
	Post respect for cultural Differences	4.5278	6	.41388	.16897
Pair 3	Pre Interaction confidence	3.3333	6	.41312	.16865
	Post Interaction confidence	3.7333	6	.77632	.31693
Pair 4	Pre Interaction enjoyment	4.1111	6	.62063	.25337
	Post Interaction enjoyment	4.0556	6	.64693	.26411
Pair 5	Pre Interaction attentiveness	3.7222	6	.25092	.10244
	Post interaction attentiveness	4.2778	6	.49065	.20031
Pair 6	Pre Interaction engagement	4.1250	6	.57009	.23274
	Post interaction engagement	4.4375	6	.48573	.19830

Table 7 demonstrates the statistical significance of each of the factors for participants who were considered culturally unexposed. For the culturally unexposed group, one factor revealed statistical significance, and five of the factors did not.

Table 7: Culturally Unexposed: Test for Equality of Means Results for Culturally Unexposed Students on Pre and

Item	t	Post-tests		Mean Difference
		df	Sig.	
Interaction Engagement	1.412	5	.217	.40476
Respect for Cultural Differences	1.606	5	.169	.38889
Interaction confidence	1.549	5	.182	.40000
Interaction enjoyment	.277	5	.793	.05556
Interaction attentiveness	3.953	5	.011	.55556
Openness to Diversity	1.872	5	.120	.31250

Of the six factors being tested, Intercultural Attentiveness ($t=2.635$, $p=.039$) was the only one that revealed a statistically significant difference. The aforementioned factor increased by .5 out of 5. This factor was also found statistically significant in the overall sample, and in the culturally exposed group. As noted above, this finding suggests that after culturally unexposed participants returned from a short-term study abroad program, they identified themselves as being more attentive in interactions with those from other cultures.

The remaining five factors, Interaction Engagement ($t=1.412$, $p=.217$), Respect for Cultural Differences ($t=1.606$, $p=.169$), Interaction Confidence ($t=1.549$, $p=.182$), Interaction Enjoyment ($t=.277$, $p=.793$), and Openness to Diversity ($t=1.872$, $p=.120$), did not reveal statistical significance as they did not have a p value of $<.05$. This finding suggests that on the pre and posttest, culturally unexposed individuals identified themselves as having about the same level of interaction engagement, interaction enjoyment, respect for cultural differences, interaction confidence and openness to diversity when interacting with individuals from different cultures.

For Interaction Enjoyment the p-value decreases from .42 in the overall sample to .14 for the culturally exposed subset. The magnitude of the change in the overall sample is .1, while in the exposed group it increases to .24. For the culturally unexposed subset the significance is .8 and the mean difference is .06. These findings suggest that the experience of studying abroad has a different impact on culturally exposed than it does for culturally exposed. It is likely that with a larger sample size, that the culturally exposed group would attain significance on this dimension.

Control and Treatment Group Comparisons

Table 8 displays statistics from a paired t-test for the treatment and control groups, and lists the mean and standard deviation for the treatment and control groups on each of the demographic questions. The mean scores on each demographic item were compared for both the treatment and control groups to determine if significant difference existed between the two groups.

Table 8: Mean Factors for Treatment and Control Groups on Demographic Items

Statistics for Control and Treatment Groups					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Gender	treatment	13	1.62	.506	.140
	control	19	1.53	.513	.118
Race	treatment	13	1.46	1.127	.312
	control	19	1.47	1.504	.345
Current year in school	treatment	13	2.77	1.092	.303
	control	19	1.74	.562	.129
Studied second language	treatment	13	1.00	.000	.000
	control	19	1.05	.229	.053
Travelled outside home country for purposes other than study abroad	treatment	13	2.85	1.281	.355
	control	19	3.42	1.305	.299
Longest time spent abroad prior to short-term program	treatment	11	1.36	.674	.203
	control	17	1.59	.870	.211
Previously studied abroad	treatment	13	1.77	.439	.122
	control	19	1.95	.229	.053
Duration of study abroad	treatment	3	2.00	1.000	.577
	control	1	2.00	.	.
Close relationships with person from another culture	treatment	13	3.31	2.057	.570
	control	19	4.21	1.619	.371
Culturally-focused classes taken at Bentley	treatment	13	3.00	1.958	.543
	control	19	2.21	.855	.196

On all demographic questions, except for their year in school, students in the control and treatment group were virtually identical. Table 9 demonstrates the statistical significance of the change in means for each demographic question. At the .001 level, students' current year in school ($t=3.514$, $p=.001$) was the only item that had any statistical significance, suggesting that there were slightly more third and fourth year students in the treatment group than the control group. Other than the slight aforementioned difference, students in the treatment and control

group were indistinguishable on all of the other demographic items, meaning that the demographic results of this study are generalizable to the larger Bentley population.

Table 9: Test for Equality of Means Results for Treatment and Control Groups

Item	t	df	Sig.	Mean Difference
Gender	.485	30	.631	.089
Race	-.025	30	.980	.012
Current year in school	3.514	30	.001	1.032
Studied second language	-.823	30	.417	.053
Travelled abroad for purposes other than study abroad	-1.233	30	.227	.575
Longest time spent abroad prior to short-term program	-.725	26	.475	.225
Previously studied abroad	-1.502	30	.143	.178
Duration of study abroad	.000	2	1.00	.000
Close relationships with person from another culture	-1.388	30	.175	.903
Culturally-focused classes taken at Bentley	1.562	30	.129	.789

Table 10 displays statistics from a paired t-test for the treatment and control groups, and lists the mean and standard deviation for the treatment and control groups on each of the factors. The mean scores on each factor were compared for both the treatment and control groups to determine if significant difference existed between the two groups.

Table 10: Mean Factors for Treatment and Control Groups on Factors

Treatment and Control Group Statistics

	control	N	Mean	Std. Deviation	Std. Error Mean
<u>Interaction Engagement</u>	treatment	13	3.9890	.50997	.14144
	control	19	3.6090	.41743	.09576
<u>Respect for Cultural Differences</u>	treatment	13	4.3590	.61931	.17177
	control	19	4.0175	.49968	.11463
<u>Interaction Confidence</u>	treatment	13	3.4615	.67025	.18589
	control	19	3.5263	.50864	.11669
<u>Interaction Enjoyment</u>	treatment	13	4.1795	.53775	.14914
	control	19	4.1053	.64838	.14875
<u>Interaction Attentiveness</u>	treatment	13	3.7692	.43853	.12163
	control	19	3.8070	.43484	.09976
<u>Openness to Diversity</u>	treatment	13	4.2019	.66250	.18374
	control	19	3.9079	.43270	.09927

Table 11: Test for Equality of Means Results for Treatment and Control Groups

Item	t	df	Sig.	Mean Difference
Interaction Engagement	2.312	30	.028	.37999
Respect for Cultural Differences	1.723	30	.095	.34143
Interaction confidence	-.311	30	.758	.06478
Interaction enjoyment	.340	30	.736	.07422
Interaction attentiveness	.765	30	.811	.03779
Openness to Diversity	1.522	30	.138	.29403

On all factors, except for Interaction Engagement, students in the control and treatment group were not statistically different. Table 10 demonstrates the statistical significance of the change in means for each factor. At the .05 level, Interaction Engagement ($t=2.312$, $p=.028$) was the only item that had any statistical significance. The treatment group had a mean of 3.99, while the control group had a mean of 3.61, suggesting that the treatment scored slightly higher on Interaction Engagement. This may be because students who chose to study abroad identify themselves as having a slightly higher level of Interaction Engagement than those in the control group. Other than the slight aforementioned difference, students in the treatment and control group indistinguishable on all of the other factors, meaning that the attitudinal survey results of this study are generalizable to the larger Bentley population.

Chapter 5: Discussion and Conclusion

Discussion

This study was designed to illuminate how, if at all, Bentley University's internationalization initiatives, as they relate to study abroad are helping students acquire intercultural competence. Using the Intercultural Sensitivity Scale and the Openness to Diversity Scale, this study quantitatively measured the extent to which undergraduate students who participated in short-term study abroad programs scored higher on the Intercultural Sensitivity Scale and Openness to Diversity Scale after having participated in a short-term study abroad experience. The data revealed that after students participate in short-term study abroad programs, they do exhibit significantly higher levels of intercultural sensitivity and openness to diversity based on these instruments. These research findings hold important implications for students, faculty, administrators, and institutions. This chapter discusses implications for practice, limitations and external validity of the study, and areas for future research.

In this study, participants were asked to provide demographic data about themselves and to report their attitudes towards diversity and culture by completing two scales in an online survey. This study quantitatively measured the extent to which short-term study abroad programs increase levels of intercultural competence and openness to diversity among its participants, and found that participants' levels of intercultural competence and openness to diversity increase after participating in these programs. As part of its mission, strategic plan, and internationalization initiatives, many higher education institutions, such as Bentley University, claim to graduate students who are "interculturally competent" and/or "open to diversity", yet have no concrete way of demonstrating that these initiatives are being met. Through quantitative

measurement, this study shows that short-term faculty led programs are one effective approach to reaching these institutional objectives. Moreover, the control group data show us that these research findings can be applied to the general Bentley student population, not just to those who self-selected to participate in short-term study abroad. The demographic data revealed that Bentley students were comparable to the larger US study abroad population on several of the factors (Institute of International Education, 2010).

A key finding revealed by this study is that students who have been exposed to diversity and cultural differences prior to their sojourns abroad, generally increase levels of intercultural competence in more areas than those students who have had little to no previous intercultural exposure. Therefore, in order for students to get the most out of their short-term study abroad experiences, institutions should require students to enroll in interculturally-focused courses and/or other cross-cultural experiences on campus prior to studying abroad.

Descriptive results.

The demographic information demonstrated that all of the participants' short-term programs traveled to European countries. The gender and race/ethnicity distribution was representative of national averages: from 1999-2009, the national averages for US study abroad students was about 65% for females, and 35% for males (Institute of International Education, 2010). In this study, women represented 61.5% of the sample, while men represented 38.5% of the sample. Consistent with national averages, 84.6% of participants in this study identified as White/Caucasian, while national averages from 1999-2009, indicate that US White/Caucasian students represented 80.5%-84.3% of the total US study abroad student population (Institute of International Education, 2010). The majority of participants (61.5%) were Liberal Studies

Majors (LSM), which was discussed in more detail in chapter four. Given the interdisciplinary, and in some cases globally-focused ,nature of the LSM it was not surprising that there was a high number of these students in the sample.

Attitudinal Results.

Chen and Starosta (1998) argue that intercultural sensitivity is the foundation of successful intercultural communication. Pascarella et al (1996) assert that improving students' openness to diversity is an important step in improving the general attitude towards diversity on campus. The findings suggest that short-term study abroad programs have a substantial impact on students' level of intercultural sensitivity and openness to diversity. That is, students who participated in short-term study abroad programs exhibited increased levels of intercultural competence and increased openness to a diverse range of people and ideas.

Openness to Diversity and Respect for Cultural Differences.

There were six hypotheses tested in this study, only one of which was supported. While the scores actually did increase for all of the factors, Openness to Diversity was the only factor with a predicted score increase, that ended up being statistically significant. Given the small sample size these results are not surprising. Respect for Cultural Differences, another factor with a predicted score increase, approached significance at the .01 level. These findings are consistent with previous research (Forgues, 2005). Has the sample size been bigger, it is highly likely that statistical significance would have been found in more factors, increasing the likelihood of more hypotheses being supported.

Interaction Attentiveness and Interaction Confidence.

It was predicted that students were going to exhibit no significant increase in scores from their pre test to their post-test on questions relating to Interaction Attentiveness and Interaction Confidence. Interestingly, these factors were found to have the highest statistical significance in this study. The hypotheses were developed based on previous research (Forgues, 2005), which used the ISS and Openness to Diversity Scale to measure students' changes in attitudes over the course of a semester-long experience abroad, as opposed to short-term programs. While short-term study abroad programs offer students less time to experience the host culture, they generally have more intensive guidance and interaction with faculty as compared to most semester programs. The literature asserts that guided intercultural encounters provide increased acquisition of intercultural competence and sensitivity, as compared to unguided intercultural encounters (Koskinen and Tossavainen, 2003). This data suggests that the intensive guidance that STP students received from faculty members throughout their intercultural experiences resulted in an increase of their levels of attentiveness and confidence when interacting with those from other cultures. Furthermore, prior studies indicate that educators do not generally have the training or support necessary to effectively integrate the development of intercultural competence into curricula and teaching practices (Sercu, 2005; Bennett and Salonen, 2007; and Landis, Bennett & Bennett (2004). While this study did not attempt to measure teachers' levels of intercultural competence, or their understanding of the developmental stages and components of it, we can assume that by providing intercultural training and other tools to increase the preparedness of faculty, that students scores would also increase.

Interaction Engagement and Interaction Enjoyment.

It was predicted that students would exhibit an increase in scores from their pre and post-test on Interaction Engagement and Interaction Enjoyment factors. The two aforementioned

factors were not found to be statistically significant. There are several possible reasons: first, the sample was small which makes finding significance more difficult. Second, the time abroad was short, which may have made it difficult to affect a change. Finally, there is a possibility that short-term study abroad simply may not have an impact on participants' engagement when interacting with people from other cultures. Such a finding would indicate that students who choose to study abroad may already feel comfortable engaging with a variety of people from other cultures. Similarly, this finding indicates that on the pre and post-test, students identified themselves as having about the same level of enjoyment when interacting with people from different cultures. This finding suggests that those who choose to participate in short-term study abroad programs may perceive themselves as already enjoying interactions with people from different cultures.

Cultural Exposure.

In addition to the overall sample, two subgroups were identified: culturally exposed students and culturally unexposed students. This information was collected on a demographic survey, which included information regarding students' backgrounds and previous intercultural exposure.

While all of the factor scores increased from pretest to posttest, two of the factors revealed statistically significant differences: Interaction Confidence and Interaction Attentiveness. It is important to note that the change in Interaction Confidence is extremely significant at the .000 level. Moreover the magnitude of change was a third of a point on average. The change in Interaction Attentiveness was also significant the .05 level, with a magnitude of change of quarter of a point. Culturally exposed participants exhibited a score increase of .285 on

the Interaction Confidence factor and .619 on the Interaction Attentiveness factor after having participated in a short-term study abroad program. These findings suggest that after culturally exposed participants returned from a short-term study abroad program, they identified themselves as being more confident interacting with those from other cultures and more attentive in interactions with those from other cultures. This implies that students would likely feel more confident working in multicultural teams or with a people from diverse backgrounds in a classroom, social or professional setting. Additionally, this finding implies that after culturally exposed participants returned from their study abroad programs, they were better equipped to attend to others' social and cultural expectations, particularly when interacting with individuals from diverse cultural backgrounds.

Interaction Engagement, Respect for Cultural Differences, Interaction Enjoyment and Openness to Diversity did not reveal any statistically significant difference between the pre-test and the post-test. As mentioned above, this finding suggests that on the pre and post-test, culturally exposed individuals identified themselves as having about the same level of engagement, enjoyment, respect for cultural differences, and openness to diversity when interacting with individuals from different cultures. It is interesting to note that in the culturally exposed group, Openness to Diversity was no longer significant, while in the overall sample it was statistically significant. It is highly likely that if the sample size were larger, that Openness to Diversity and many of the other factors also would have been significant.

In the culturally unexposed group, Intercultural Attentiveness revealed a statistically significant difference with an increase of .5 out of 5. This factor was also found statistically significant in the overall sample, and in the culturally exposed group. The robustness of this factor may be due to the intensive guidance provided by faculty in the short-term study abroad

context. As noted above, this finding suggests that after culturally unexposed participants returned from a short-term study abroad program, they identified themselves as being more attentive in interactions with those from other cultures.

Control and Treatment Group Comparisons.

As mentioned in the methodology section, the validity of this design is not as strong as it would be under randomized design, although this study does address potential threats to validity. One of the most common threats to the validity of quasi-experimental designs is selection bias. According to Creswell (2009), a selection threat occurs when participants are selected who have certain characteristics that predispose them to have certain outcomes. In this particular study, participants' previous intercultural inclination/exposure was a point of concern. That is, students who chose to participate in short-term study abroad programs may have been different (in terms of intercultural inclination/exposure) than the average Bentley student, which would have limited the external validity of the study. Consequently, a control group, composed of a nearly random group of Bentley students, who were enrolled in a required general education class, was used. Using survey and demographic data, which includes information regarding students' previous intercultural exposure; the groups' differences were quantified through a variety of statistical tests. This allowed us to address the extent to which we could expect the results of this study to be generalizable to the wider Bentley population, and whether they are likely to be robust to wider audience. The results suggested that there was no significant difference between the two groups other than that control group had more first and second year students than the treatment group. This is likely because the control group consisted of students enrolled in required general education classes, which generally compose a larger part of students' course

load during the first two years of college. In the second two years, students have generally chosen a major and have more electives in their course load.

With both demographic and attitudinal results being generalizable to the larger Bentley population, we can conclude that there was minimal selection threat in this study, as evidenced in tables 8, 9, 10, and 11. We can also conclude that students who chose to participate in short-term study abroad programs were not significantly different (in terms of intercultural inclination/exposure and other demographic/attitudinal factors) than the average Bentley student, which bolsters the external validity of the study, and increases the likelihood that the results are robust to a wider audience. Finally, the control group shows us that individuals who choose to study abroad were not significantly different than the Bentley population as a whole. This suggests that if the study abroad access/participation were expanded, we would expect to get similar results. In other words, these results indicate that treatment group was not likely a unique group of students who shared special characteristics that were atypical of the general Bentley student population (i.e. high levels of cultural exposure). We can assume the treatment groups' results not were impacted by potential biases or by self-selection.

Implications for Practice

Linking Internationalization Initiatives to Outcomes.

The results from this study suggest that students exhibit higher levels of intercultural sensitivity and openness to diversity after participating in short-term study abroad programs. One of the key reasons that these are important findings is because they validate Bentley University's internationalization initiatives and strategic goals. Bentley University has three overarching goals guiding the institution from 2009-2013, the lengthiest of which states:

Invest in teaching and education methodologies as crucial elements, parallel to research, in educating graduates who can meet the future's challenges. Such investments will support an education philosophy both inside and outside of the classroom that fully appreciates...that managers and leaders must be able to lead and work within teams of disparate individuals. They must be at ease with differences with differences that include, but are not limited to, culture, ethnicity, language, nationality, class, race, religion, sexual identity, and gender (Achieving the Business University: Bentley University 2009-2013, p. 7).

In addition to its strategic plan, Bentley University's mission also calls for its graduates to have the ability to work effectively with people from diverse backgrounds:

Bentley graduates will be talented and ethical individuals who have a significant impact on organizations and society because of their ability to: 1) examine situations from multiple perspectives;...3) connect with ideas, people, and entities; 4) be comfortable with ambiguity and risk, and 5), work effectively with diverse individuals and groups (Achieving the Business University: Bentley University 2009-2013, p. 7).

The research question guiding this study asked to what extent, if any, are Bentley University's internationalization initiatives, specifically in the short-term study abroad arena, increasing intercultural competence among its students. The findings of the study suggest that Bentley's internationalization initiatives in the short-term study abroad arena are indeed increasing students' level of intercultural competence and openness to diversity. Therefore, the results of this research indicate that these programs are effectively supporting the university's mission and strategic plan. There is an important caveat.

The Caveat: The Importance of Intercultural Exposure.

The caveat the results of this study raise is that *students who were culturally exposed prior to study abroad were more likely to improve scores after studying abroad as compared to their culturally unexposed counterparts*. This finding has considerable implications for practice. The culturally exposed and culturally unexposed groups increased on the Interaction Attentiveness factor, while the culturally exposed group also increased on the Interaction Confidence factor. This finding suggests that students who are interculturally exposed prior to short-term study abroad experiences are more likely to improve scores in more areas than in those who are culturally unexposed. Therefore, if institutions provide more opportunity for cultural exposure prior to study abroad experiences, there is a significantly higher chance that students will increase scores in more factors after going abroad.

In other words, sending students abroad is not the whole story. In order to maximize the development of intercultural competence in students, they need adequate preparation and guidance both *prior* and *during* their study abroad experiences. This finding is consistent with previous research, which affirms that educators play a vital role in creating an environment that can assist students in the development of intercultural competence (Mahoney & Schamber, 2004, Vygotsky, 1992). Furthermore, effective instructional techniques, discussed at length in Chapter Three, such as small group discussion, role-play, and oral presentations of research findings are among the most effective intervention strategies for successfully increasing intercultural competence and sensitivity.

The findings of this study affirm that going abroad is not enough to single-handedly increase students' levels of intercultural competence. The practice of the aforementioned

instructional techniques in a variety of contexts, both in and outside of the classroom, as well as in pre-departure trainings for study abroad students can maximize students development of intercultural competence both prior to and during short-term study abroad programs.

Limitations

The small sample size was most notable limitation in this study. While the small sample size did provide statistically significant results, there likely would have been even more significance had there been more participants in the study. With a larger sample size, it is probable that significance would have been attained on all factors in the overall sample, and that significance would have also been attained on more factors in the culturally exposed and unexposed sub-groups.

Another limitation was the slight difference in age between the control and treatment groups. While this difference was quite small, it would have been ideal to have the same distribution of students spread across the four classes in both the control and treatment groups. If this study was repeated, it may be better to select the control group in a more randomized fashion rather than only inviting those who are enrolled in a general education course. The main reason that students were slightly younger in the control group is likely because most students tend to take more general education courses during the first half of college, while more electives are taken in the second half. Therefore, while general education classes are representative of the general student population, the majority of students in these classes are likely to be slightly younger.

Finally, this study only examined students' change in attitudes using quantitative methods. Including some qualitative inquiry, in addition to the qualitative research methods, may have yielded more robust results.

Areas for Future Research

This study only looked at short-term programs that took place over students' spring break in March 2011. It would be interesting to compare longer short-term programs (i.e. four or six weeks), semester-long and service learning programs as well. This would provide more information on the impact of the length and type of short-term study abroad programs on students' levels of intercultural competence. Additionally, an exploration of intercultural sensitivity and competence in higher education as it compares race theory would be valuable.

The literature asserts that in order to successfully develop intercultural competence among students, faculty themselves must understand the developmental stages and components associated with it, and also require pre-service and in-service training designed help to "interculturalize" their thinking (Sercu, 2005). This assertion is supported by many researchers and scholars, including Bennett & Salonen, (2007) and Landis, Bennett, & Bennett, (2004). Therefore, an exploration of the impact of educators on students learning during short-term study abroad experiences would be valuable. It would be worthwhile to investigate if there are any correlations between educators' preparedness to foster meaningful intercultural experiences, and the changes in students levels of intercultural competence.

The literature also asserts that instructional techniques such as small group discussion, role-play, oral presentations of research findings are among the most effective intervention strategies for increasing intercultural competence and sensitivity (Mahoney & Schamber, 2004,

Sizoo & Serrie, 2004). An exploration on whether there is any correlation between the course content and instructional techniques and students' development of intercultural competence. An exploration on whether there is any correlation between the course content and instructional techniques and students' development of intercultural competence would be of considerable value given the emphasis on Bentley's mission. A study of the instructional techniques would also be of considerable benefit to other institutions, particularly those whose student populations are unable because of cost, time and other factors to partake of even a one or two week foreign travel experience.

Finally, the use of qualitative research methods in conjunction with quantitative research methods would provide a more robust understanding of how what specific factors impact students' development of intercultural competence. According to the results of a study conducted by Deardorff (2004), intercultural competence can and should be assessed and measured in various ways, and using a combination of qualitative and quantitative methods is most effective. The key methods noted for the assessment of intercultural competence include observation, interviews, and judgment by self and others (Deardorff, 2004). Broadening the methods used to research and assess students' development of intercultural competence could provide a valuable contribution to the field.

Conclusion

In recent years, many education institutions are "internationalizing", which generally entails attempting to raise intercultural awareness and competence among students (Leask, 2009; Suarez-Orozco & Sattin, 2007). Among internationalization initiatives, study abroad is considered one of the most effective means for increasing intercultural competence, yet prior to

this study there has been little concrete evidence demonstrating this notion, particularly in the short-term study abroad arena.

Institutional governing boards, professional accrediting agencies, and educational consumers are demanding assurances that institutions will provide the necessary knowledge and tools for its graduates' success in today's changing global landscape (Williams, 2005, Black 2006). The results of this study suggest that by measuring the development of intercultural competence in short-term study abroad programs, institutions can demonstrate that their programs are aligned with internationalization initiatives at the institutional level. The results also revealed that students' development of intercultural competence is highest when they have been provided with adequate intercultural training and preparation prior to their sojourns abroad. Moreover, this study demonstrates that short-term study abroad programs are one effective way of ensuring that students' levels of intercultural competence increase, and that they are ultimately better prepared to live and work in an increasingly interconnected, global landscape.

Appendices

A: Intercultural Sensitivity Scale (Chen & Starosta, 2000)

Below is a series of statements concerning intercultural communication. There are no right or wrong answers. Please work quickly and record your first impression by indicating the degree to which you agree or disagree with the statement. Thank you for your cooperation.

Please put the number corresponding to your answer in the blank before the statement

5 = strongly agree

4 = agree

3 = uncertain

2 = disagree

1 = strongly disagree

___ 1. I enjoy interacting with people from different cultures.

___ 2. I think people from other cultures are narrow-minded.

___ 3. I am pretty sure of myself in interacting with people from different cultures.

___ 4. I find it very hard to talk in front of people from different cultures.

___ 5. I always know what to say when interacting with people from different cultures.

___ 6. I can be as sociable as I want to be when interacting with people from different cultures.

- ___ 7. I don't like to be with people from different cultures.
- ___ 8. I respect the values of people from different cultures.
- ___ 9. I get upset easily when interacting with people from different cultures.
- ___ 10. I feel confident when interacting with people from different cultures.
- ___ 11. I tend to wait before forming an impression of culturally-distinct counterparts.
- ___ 12. I often get discouraged when I am with people from different cultures.
- ___ 13. I am open-minded to people from different cultures.
- ___ 14. I am very observant when interacting with people from different cultures.
- ___ 15. I often feel useless when interacting with people from different cultures.
- ___ 16. I respect the ways people from different cultures behave.
- ___ 17. I try to obtain as much information as I can when interacting with people from different cultures.
- ___ 18. I would not accept the opinions of people from different cultures.
- ___ 19. I am sensitive to my culturally-distinct counterpart's subtle meanings during our interaction.
- ___ 20. I think my culture is better than other cultures.

____ 21. I often give positive responses to my culturally different counterpart during our interaction.

____ 22. I avoid those situations where I will have to deal with culturally-distinct persons.

____ 23. I often show my culturally-distinct counterpart my understanding through verbal or nonverbal cues.

____ 24. I have a feeling of enjoyment towards differences between my culturally-distinct counterpart and me.

Note. Items 2, 4, 7, 9, 12, 15, 18, 20, and 22 are reverse-coded before summing the 24 items.

Interaction Engagement items are 1, 11, 13, 21, 22, 23, and 24, Respect for Cultural Differences items are 2, 7, 8, 16, 18, and 20, Interaction Confidence items are 3, 4, 5, 6, and 10, Interaction Enjoyment items are 9, 12, and 15, and Interaction Attentiveness items are 14, 17, and 19.

Appendix B: Openness to Diversity/Challenge Scale (Pascarella et al., 1996)

Below is a series of statements concerning Openness to Diversity/Challenge. There are no right or wrong answers. Please work quickly and record your first impression by indicating the degree to which you agree or disagree with the statement. Thank you for your cooperation.

Please put the number corresponding to your answer in the blank before the statement

5 = strongly agree

4 = agree

3 = uncertain

2 = disagree

1 = strongly disagree

____ 1. I enjoy having discussions with people whose ideas and values are different from my own.

____ 2. The real value of a college education lies in being introduced to different values.

____ 3. I enjoy talking with people who have values different from mine because it helps me understand myself and my values better.

____ 4. Learning about people from different cultures is a very important part of my college education.

____ 5. I enjoy taking courses that challenge my beliefs and values.

___ 6. The courses I enjoy the most are those that make me think about things from a different perspective.

___ 7. Contact with individuals whose background (e.g. race, national origin, sexual orientation) is different from my own is an essential part of my college education.

___ 8. I enjoy courses that are intellectually challenging.

Note: The developers of both the Openness to Diversity/Challenge Scale and the Intercultural Sensitivity Scale have placed their respective instruments in the public domain so that they can be freely used when conducting research.

Appendix C: Personal Data Form

What is your gender? 1. Female 2. Male

What is your race?

1. African American

2. Hispanic/Latino

3. Asian/Pacific Islander

4. Native American

5. White/Caucasian

6. Multiracial

7. Other

Where were you born? 1. In the US 2. In another country

What is your country of citizenship? _____

What is your major? _____

If you are a Liberal Studies Major (LSM), please select your concentration:

Where is the destination of your program?

Have you ever studied a second language? Yes No

How many times have you traveled outside of your home country for purposes other than study abroad (vacation, work, etc.)?

What is the longest period of time you can recall traveling or living out side of your home country?

1 day to 2 weeks

2-4 weeks

1-3 months

3-6 months

6 months - 1 year

1 year - 2 years

2 years or more

Have you ever studied abroad? Yes No

How many close relationships have you had with someone from another culture (friendship, romantic relationship, family-member, etc.)?

1

2

3

4

5 or more

How many culturally-focused classes have you taken at Bentley (not including language classes)?

1

2

3

4

5 or more

What is your year in school?

1. Freshman

2. Sophomore

3. Junior

4. Senior

5. Graduate

6. Other

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