Building the ARC in Nursing Education:
Cross-Cultural Experiential Learning
Enabled by the Technology of Video or Web Conferencing

DISSERTATION

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Abstract

Nurse educators must prepare students to care for a diverse population. Web-conferencing across diverse groups is one teaching method that may assist students to develop intercultural skills. Mixed-methods research was used to examine web-conferencing’s influence on cultural competence and transcultural self-efficacy of American undergraduate nursing students.

The Commission on Collegiate Nursing Education and the National League for Nursing address importance of cultural competence in nursing, underscored by the disparity between nursing and US population: majority (83.2% nurses, 63% US population), minority (16.8% nurses, 37% US population).

Current strategies to increase cultural competence of students include theory dissemination, study abroad, service learning, distance education, and simulation. Study abroad, the higher education platinum standard, is costly, and not feasible for all institutions/students. Merely 1.4 percent of US students study abroad. Thus, new experiential learning tools should be explored.

Video and/or web-conferencing is used by disciplines world-wide to bridge distance and assist multicultural communication through live voice/video, and engage more students interculturally without the typical constraints of geography and resources, both human and financial. Technology is utilized for mutual scaffolding and social
construction of knowledge. Content and culture are learned together with international peers.

Freshman nursing students in a required general education course were recruited (n=33). Study participants were randomly assigned to a treatment group (n=18) or a control group (n=15). A student cohort from a University in Dublin, Ireland participated in the web-conferences but did not participate in this research.

Students in the treatment/web-conferencing group participated in two web-conferences, covering topics presented in traditional lecture format with the control group. Thirteen students from web-conferencing group participated in one of four qualitative focus group interviews. Two Likert-style survey instruments measuring cultural competence and transcultural self-efficacy were administered pre–post. Data were analyzed with SPSS - ANOVA.

Cultural competence post scores revealed a nine percent rise for the treatment group and no change for the control group. Web-conferencing did not influence transcultural self-efficacy. Focus group qualitative data triangulated survey findings. Categories of data themes for qualitative research questions included: cultural awareness, impact of pedagogy, and development of cultural competence.

Web-conferencing with diverse peers may help to increase cultural competence of nursing students. Strategic placement throughout grade levels and curricula may increase cumulative impact of this experiential learning pedagogy.
Dedication

To my Mother, Tonya Tolle Studebaker, who believed in me and told me that I could achieve whatever I dreamed if I was willing to make sacrifices and work hard. With loving confidence, I pass on this same message to my children, Andrew, Emily and Daniel Spalla.
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Chapter 1: Introduction to the Study

In the patient advocacy book, *The Spirit Catches You and You Fall Down*, Anne Fadiman shares the chronicle of a Hmong child treated for a seizure disorder in the American medical system. This non-fiction account of the struggle of both sides that care deeply about the little girl, Lia Lee, is told in chilling detail from the eyes of the cultural facilitator. A terrible clashing of cultures occurs with temporary removal of the child from her home of immigrant parents to foster care situations, who is ultimately returned, and left with her family in a permanent vegetative state. The official physiologic cause of this outcome is sepsis, or severe infection throughout the entire body, able to grow due to a diminished immune system from the seizure medication taken exactly as prescribed. The truest cause of this tragedy was preventable, the cultural collision and inability to respect and trust the diverse other (Fadiman, 1997). Creative and caring educators can help to remove barriers and prevent such occurrences with healthcare workers in the future.

In an ideal situation, if one were to become ill and require healthcare, that care would be not only physically appropriate, it would also incorporate an awareness of, a respect for, and competence in differing cultures. Many would argue that this should not be the ideal but the expectation, the starting point, particularly in the world’s wealthiest and most highly educated country. This is especially important today in our increasingly
global society where travel and work are not confined to one’s own country of origin or residence.

Likewise, the U.S. government and worldwide groups are in support of improving cultural competence of health care providers. The United States Department of Health and Human Services (USDHHS), in its report of the national disease prevention and health promotion agenda published Healthy People 2020 (USDHHS, 2012a), addressed the need for increased cultural competence of health care providers. This need was also addressed on an international stage by the World Health Organization (WHO, 2008a). The accrediting body of health care organizations in the United States, the Joint Commission, affirms, “The provision of culturally and linguistically appropriate health care services is an important quality and safety issue and a key element in individual-centered care” (The Joint Commission, 2008, para 1). With this type of consensus by world health leaders, it is evident that the practice of nursing care from an ethnocentric point of view is universally unacceptable.

The Code of Ethics for Nurses written by the American Nurses’ Association (ANA, 2009) is a guide for professional nursing practice intended to promote the ethical obligation of the nursing profession to the public it serves. The code states that nurses are duty-bound to be aware of their own cultural beliefs and values and to understand the differences in their patients’ cultural beliefs and values. In addition, nurses are impelled to avoid forcing their own cultural beliefs and values on their patients, instead to demonstrate awareness and support of their patients’ cultural beliefs and values in the administration of nursing care.
The two accrediting bodies assessing the quality and competence of nursing higher education in the United States (U.S.) are the Commission on Collegiate Nursing Education (CCNE), part of the American Association of Colleges of Nursing (AACN), and the National League for Nursing (NLN). Both bodies address the importance of cultural competence in nursing care. The AACN (2008) includes in its document entitled, “The Essentials of Baccalaureate Education for Professional Nursing Practice” a description of the nursing student graduate prepared to work in a multicultural environment. It states:

The increasing diversity of this nation’s population mandates an attention to diversity in order to provide safe, humanistic high quality care. This includes cultural, spiritual, ethnic, gender, and sexual orientation diversity. In addition, the increasing globalization of healthcare requires that professional nurses be prepared to practice in a multicultural environment and possess the skills needed to provide culturally competent care. (p. 30)

Thus, the charge to nurse educators is to expose students to diversity in order to build requisite skills in providing culturally competent care. The NLN (2012) directs nurse educators to develop curriculum that include experiential cultural learning activities to meet this aim.

**Statement of the Problem**

Health care occurs through interaction between two separate groups, the health care providers and the patients they serve. Professional nurses are the health care providers who are at the patient bedside around the clock each day of the year. They are
the health care providers under focus for this paper. In order to provide adequate health care, nurses must possess an understanding of and support for individual cultural beliefs and values of all patients. This would be simple to do if nurses and patients with the same cultural beliefs and values could be matched exactly, an impossible task in a multicultural society of 314 million people (U.S. Census Bureau, 2012a).

There are two patient cohorts under focus for the purposes this paper. The first is the immigrant, foreign-born population. This group is comprised of both naturalized citizens and noncitizen immigrants (legal permanent residents, temporary migrants, humanitarian migrants, and undocumented migrants). The most recent data about the immigrant, foreign born population was collected in 2010 by the U.S. Census Bureau. This group comprised approximately thirteen percent of the entire population, or nearly 40 million people (U.S. Census Bureau, 2012b).

The second patient cohort is broader than the first and is clustered by race, the minority population. In 2011, the minority population in the United States was over 115 million, or approximately 37 percent of the total population (U.S. Census Bureau, 2011). Thus, by current counts, about 50 percent of the U.S. population is either foreign born or part of an ethnic or racial minority. It is estimated that by 2042, the overall minority population will become the new majority in the United States (U.S. Census Bureau, 2008e). This year, 2012, larger than 50 percent of the infant population in the U.S. is comprised of a racial minority (U.S. Census Bureau, 2012c).

By contrast, the demographic makeup of the Registered Nurse (RN) population consists primarily of White, non-Hispanic (83.2 percent) women (93 percent female).
The average age of the RN population is 46 years (Health Resources & Services Administration [HRSA], 2010).

How these vastly different racial, national and ethnic demographics impact public healthcare is a significant question. Largely, majority professionals are providing health care to minorities. Differences in cultural values, beliefs and languages between nurses and their patients are to be expected. The example cited above in the book, *The Spirit Catches You and You Fall Down*, illustrates the stark potential that still exists in healthcare today, where the cultural differences between health care providers and patients can lead to unnecessary poor outcomes if not adequately understood and addressed (Fadiman, 1997). The onus for increasing understanding, communication and appropriateness of care lies with the professionals.

A Korean woman, married to an American man, describes her cultural conflict after giving birth for the first time in the United States in an article published in the *American Journal of Maternal/Child Nursing* (Kim-Goodwin, 2003). The nursing staff was unaware of her post partum beliefs: preference for customary cultural soup after birth, need to stay physically warm and ingest warm food and liquid to restore body to normal state after losing blood, and desire for rest throughout the night. Instead of understanding these Korean beliefs and customs, the nursing staff imposed their western ideas on their patient by giving her iced beverages and cold food. Moreover, when she did not want to keep her baby in her hospital room throughout the night, the nurses’ words and actions caused her to feel lazy and guilty. While this woman suffered no physical harm from the cultural ignorance of the professional nurses, she did experience feelings of cultural confusion and disappointment in the care she labeled as inconsiderate.
Interestingly, this woman had a more positive experience with the birth of her second child. However, this was not attributed to the nursing staff inquiring about her cultural preferences or providing culturally congruent care, but was due to the patient becoming more acculturated to Western nursing care practices (Kim-Goodwin, 2003).

The problem of misunderstanding cultural differences and the impact on patient outcomes is not limited to those who are new to the United States, but includes people who are different than the majority. A report published in 2003 by the Institute of Medicine stated that “racial and ethnic minorities tend to receive a lower quality of healthcare than non-minorities, even when access-related factors, such as patients’ insurance status and income, are controlled” (Smedley, Stith & Nelson, 2003, p. 1). On a macro level they found that factors such as historical inequalities and institutional practices were pieces of the problem. On a micro level they found that individual healthcare provider preconceptions, stereotypes, and ambiguity all played a part in substandard care and poorer patient outcomes (Smedley, Stith & Nelson, 2003).

**Cultural Competence in Nursing and Nursing Education**

The problem of not providing culturally competent care is not limited to nurses in their forties. Only 52 percent of new graduate nurses in the United States report that they understand clients’ cultural needs (Li, Spector & Kenward, 2006). Thus, it is both appropriate and necessary to stress intercultural competence in nursing education to help prepare future nurses to bridge this divide. Perhaps the gap still exists because our current teaching methods do not meet the needs of all students. According to Madeleine Leininger, the founder of the transcultural nursing movement, “Transcultural Nursing is how professional nursing interacts with the concept of culture. Based in Anthropology
and Nursing, it is supported by theory, research, and practice” (Leininger, 2009, para 1). Although she coined the term transcultural nursing over a half century ago, nurse educators are still attempting to find the best pedagogy for use with students. In addition, evaluation of such teaching practices currently remains unclear.

Some authors posit that nurse educators need to move from macro theory level work to micro level work with students to ensure that they become culturally competent (Luna & Miller, 2008). Cultural competence entails consideration of racial, ethnic, socioeconomic, gender and sexual orientations. It requires personal exposure to experience with diverse others, recognizing singular and collective similarities and differences (Schim, et. al., 2006).

Current strategies in nursing education to increase cultural competence of students include study abroad (Watt, Law, Ots & Waago, 2002), service learning (Hunt & Swiggum, 2007; Riner & Becklenberg, 2001), distance or online education (Hilgenberg & Schlickau, 2002) and simulation (Rutledge, Barham, Wiles & Benjamin, 2008; Brathwaite, 2005). Faculty members employ both the dissemination of theory as well as experiential learning in their pedagogy. Study abroad and simulation are costly ventures that are not within the reach of all institutions of higher education and students. Local service learning and distance education require a more moderate investment of resources by comparison.
Experiential Learning

David Kolb is known for his work in experiential learning. He built upon the work of John Dewey, among others, to create a theory of adult learning which has six propositions (Kolb & Kolb, 2005):

(1) Learning should be viewed as a process, as opposed to an outcome; (2) Learning is building upon what is already known through the process of examination and testing in order to find a new configuration; (3) Learning must occur with some conflict as one wrestles with and acts upon opposing points of view; (4) Learning is holistic in nature taking into account the complexity of the person, including feelings, thoughts, reflection and action all working together; (5) Learning occurs when the person interacts with the environment incorporating fresh ideas and new experiences; and (6) Learning makes new knowledge.

Examples of experiential learning could be found in an interactive lecture with opportunity for group work on case studies/ problem-solving scenarios, internship and practicum experiences, student teaching and learning cooperatively (Strait & Sauer, 2004), in addition to study abroad.

According to Kolb and Kolb (2005), experiential learning is something that is created by learners in social situations and transferred to personal knowledge. The cycle proposed by Kolb and Kolb includes “abstract hypothesis, active testing, concrete experience and reflective observation” (p. 195). The student grows from the concrete experiences because of the opportunity to process and reflect on them. This leads to further internal development of theory as the deliberations are absorbed and integrated. It
is an iterative process with a push-pull between the thinking and the doing in experiential learning that is necessary for construction of knowledge. While learners repeatedly work through each stage of the cycle during experiential learning, they display preferences for some stages over others.

Thus, experiential learning is unpredictable and requires extra attention and support from faculty. Lechuga, Clerc and Howell (2009) offer some recommendations including: maintenance of the balance of appropriate challenge with necessary support, creation of a foundation of theory with unambiguous learning objectives, opportunity for integration of prior student experience and input, utilization of small group work to foster community and discourse, empathetic communication while students are grappling with difficult issues, as well as encouragement and time for critical self-reflection.

The opposite of experiential learning, non-experiential learning, could be thought of as theory that is passed from faculty to student or from textbook to student. Such learning would be more structured, predictable and unidirectional. Learners would not be required to interact with the environment in order to learn. Examples could include one-way lectures minus discussion or distance education without interactivity.

**Video or Web-Conferencing as Experiential Learning**

Video or web-conferencing is a form of experiential learning that has not been studied in nursing education. It is a unique type of distance education because of the ability to see and hear others in real time. The separation of location does not impede the ability to communicate and collaborate in a synchronous fashion. Coventry (n.d.) contends that the dialogue afforded by this technology, in the form of discussion and answering questions, “may create a sense of social presence” (p. 21). It provides the
opportunity to engage in collaborative learning across traditional physical boundaries. Video or web-conferencing may be a vehicle that can provide an advantage for students as they gain access, boost efficiency and connect over distance (Greenberg, 2004). This technology has the potential to expand the walls of the virtual classroom, increase exposure to and interaction with diverse others, and prepare learners to work in the global knowledge economy.

Cavanaugh (1999) asserts that technology-enhanced learning allows students to become situated in the real-world, enabling them to make an impact in a larger community. They become linked to learning outside the brick and mortar walls of their institutions. Video or web-conferencing permits the expansion of coursework and resources available to students, while also increasing their worldview. Thus, this type of experiential learning may be used in nursing classrooms to foster cross-cultural communication and learning. It may be an effective form of experiential learning that cultivates development of cultural awareness and cultural competence in nursing students preparing them for practice in our increasingly multicultural nation.

**Purpose of the Study**

One of the goals of higher education is to prepare students to live and work with others around the globe. This goal is becoming increasingly more difficult as the economy is forcing a larger number of students to study closer to home (College Board, 2009). Nursing students need to gain cultural awareness and some beginning level of intercultural competence before they start practicing at the bedside as registered nurses. Not everyone has the resources or access to study abroad opportunities. These
experiences of learning and working with diverse others in college should not be limited to the select few with the most political and financial capital. Web-conferencing may afford more students the opportunity to experience interaction with people from other countries than can traditional experiential learning methods, thus, may help to bridge the divide.

The purpose of the study is to examine the outcome of global web-conferencing with geographically separated cohorts of nursing students in order to determine if web-conferencing, as a form of experiential learning, can help students to achieve greater levels of intercultural competence compared to groups that do not utilize this teaching strategy. This research determined how the students’ experiences affected their awareness of cultural differences and their confidence, or self-efficacy, in dealing with difference. While there is a wealth of published research about distance education, experiential learning, and cultural competence, there is a dearth of information combining these pieces. Of specific interest is the intersection between web-conferencing (as a form of experiential learning), nursing education, self-efficacy and intercultural competence.

An original model is proposed framing this research that has as the end goal an appreciation of the role of culture in health care, or ARC. The model was developed by the author after an extensive literature review. This ARC is created by participation in cross-cultural experiential learning opportunities, including study abroad, service learning, distance education, simulation, and video or web-conferencing. These experiences build students’ self-efficacy, or confidence in their ability to perform, in cross-cultural encounters. Without this confidence, nurses may turn away from, or avoid patients of different cultures. Cooper, Grywalski, Lamp, Newhouse & Studlien (2007)
reported that a substantial increase in foreign-born patients over a ten year period on a family care unit, or maternity ward, resulted in nursing staff frustration and diminished patient satisfaction secondary to cultural dissimilarities between them. The successful scenario is a nurse who gains confidence from multiple cross-cultural experiences and develops an appreciation of the role of culture in practice, embracing the opportunity to care for culturally diverse people. Video or web-conferencing is one experiential learning method utilized by other disciplines, notably business, that can help to connect people across traditional geographic boundaries. (See Figure 1.1, ARC Model for Nursing Education toward Cultural Competency, 2010.)
Figure 1.1: ARC Model for Nursing Education Toward Cultural Competency, 2010
Research questions in this study explored the changes made in cultural competence among nursing students who participate in web-conferencing with a distant international group. Mixed methods were used for this study. The main focus of the research was quantitative in nature, with a pre-post control group design. There was also a smaller, but equally informative, qualitative component to discover the new knowledge students create through the web-conferencing experience, as well as how nursing students envision applying it in their future nursing practice.

**Research Questions**

1. Do students’ cultural competence scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences?
2. Do students' transcultural self-efficacy scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences?
3. What do students feel they have learned about cultural differences and similarities by working with their distant colleagues through the process of web-conferencing together?
4. How do students believe that they will be able to use knowledge gained from the web-conferencing experience in their future nursing practice?
5. What do students think the value might be from working with a cohort from another culture as part of their nursing education?
6. How do students define intercultural competence in nursing?
7. How have students’ views regarding culture and nursing changed from participation in the web-conferencing?

8. If students’ views regarding culture and nursing have not changed, why not?

A more detailed explanation of the methodology will be provided in chapter three.

**Significance of the Study**

Twenty-first century life necessitates intercultural interaction with the linkages brought about by business, banks, financial markets, governments, higher education and healthcare. “Multicultural competence is no longer a luxury; it has become a basic qualification required for effective and fulfilling participation in a globalized world” (Ngai, 2003, p. 159). Higher education is given the mission of preparing culturally competent citizens of the world. The options for increasing awareness and learning about other cultures are not limited to student exchange and foreign language study. In fact, most students in higher education do not participate in such intercultural experiences. Madeleine F. Greene, Vice President for International Initiatives, American Council of Education, stated, “Only one percent of students study abroad. What are we going to do with the other 16,900,000?” (McMurtrie, 2007, p. A37). Thus, as colleges and universities have the goal of global competence within their strategic plans, they must create new vehicles to assist their students in the development of those skills. Today, some educators are utilizing technology in an effort to reach these goals. However, the work in this area is not expansive, particularly in nursing.
In nursing education, faculty have implemented study abroad experiences (Watt, Law, Ots & Waago, 2002), service learning (Hunt & Swiggum, 2007; Riner & Becklenberg, 2001), distance or online education (Hilgenberg & Schlickau, 2002) and simulation (Rutledge, Barham, Wiles & Benjamin, 2008; Brathwaite, 2005) to improve cultural awareness and cultural competence of their students. Study abroad and simulation are expensive and, thus, not achievable for all institutions of higher education and students. Whereas, service learning and distance education can be achieved with less investment of resources.

This study is unique because it utilized an experiential learning method that has not been employed by nursing faculty to increase cultural exchange among nursing students, conferencing with geographically separated and diverse groups via web or video. As a method of experiential learning, video or web-conferencing has been studied in the discipline of business (Elliot, 2008; Heck, 2005; Schooley, 2006; Alavi, Wheeler & Valacich, 1995; Tang & Isaacs, 1992). The outcome of such work may offer insight into an option readily available to many more institutions and nursing students than study abroad, international service learning and simulation. It may help nursing faculty create different experiential learning pedagogy on the road to greater levels of self-efficacy and cultural competence, ultimately preparing students to provide care for patients from around the globe.
A Glimpse of Upcoming Chapters

Three broad themes will be explored in Chapter Two, the literature review. One theme includes the different types of cross-cultural experiential learning experiences and how they build the knowledge, skills and attitudes necessary for cultural competence. Another theme is the role of self-efficacy in empowering and preparing nursing students to care for patients who are culturally diverse. Finally, the importance of fostering an appreciation of the role of culture in health care and in nursing higher education will be examined.

The research that informed this paper comes largely from the disciplines of higher education, business, and nursing. Pertinent study from the fields of medicine, computer science, information technology, student affairs, language studies, political science, economics, communication, sociology, geography and social work were also brought together in order to develop this work. The vast majority of relevant research originated from the United States, United Kingdom and Australia. In addition, relevant study from Germany, France, Canada, Ireland, Spain, Finland, Sweden, Norway, Saudi Arabia, Lebanon, South Korea, Taiwan and Nicaragua was also used. A review of this literature, the gaps left to be filled, and how experiential learning in the form of video or web-conferencing may develop ARC in nursing students will be presented in chapter two.

In chapter three the mixed methodology utilized in this research is described. The results of the study are presented and interpreted in chapter four. Finally, in chapter five the major findings, study limitations, and implications for future practice and research is discussed.
Definitions

It is helpful to establish some working definitions to provide a framework and context for the investigation of the interaction between web-conferencing and intercultural competence.

- **Distance Education**: This is an educational method whereby some sort of technology is used to connect students and faculty who are separated by physical location. The students and teacher communicate with one another for the purpose of the student obtaining information, making meaning of that information, and applying it in the development of skills. This term can encompass correspondence courses, videoconference coursework, television classes and web based instruction (Jung, 2001). Distance education may be synchronous or asynchronous.

- **Synchronous**: This is joint communication or conversation between participants that has almost no time delay. It takes place in ‘real time’ (KSU, 2007).

- **Global**: This is “without regard to national or geographic borders” (Goodfellow, Lea, Gonzalez & Mason, 2001, p. 65)

- **Experiential Learning**: This is “a theory of experience in order that education may be intelligently conducted upon the basis of experience” (Dewey, as cited by Kolb & Kolb, 2005, p. 193). “Education must be conceived as a continuing reconstruction of experience; that the process and the goal of education are one and the same thing (Dewey, 1897, Article III). It is “the process whereby
knowledge is created through the transformation of experiences” (Kolb, D., as cited in Kolb, A. & Kolb, D., 2005, p. 194).

- **Intercultural Sensitivity:** This occurs when one’s own cultural context is not used to understand behavior, but instead is understood through the cultural context of the other (O’Dowd, 2003). It is “the ability to experience and discriminate relevant cultural differences” (Hammer, Bennett & Wiseman, 2003, p. 422).

- **Intercultural Competence:** This is defined by Davis & Cho (2005) as the ability to exercise openness and malleability when interacting with other cultures through the transformation of knowledge, attitudes and behaviors. The term intercultural competence is used in this paper interchangeably with cultural literacy.

- **Room-based Videoconference:** This is the traditional method of viewing participants on a screen with the ability to speak from a microphone and hear the distant group (Kent State University [KSU], 2007). This type of videoconference uses a presentation room to hold the conference on each end (Mason & Davis, 2000) with compatible hardware/ equipment.

- **Web-based Videoconference or Web-conference:** Typically, this is achieved through software with video capability that is sent over the internet/ video wherein multiple locations are bridged together (RUDCE, n.d.) and hosted by a third party or company whose purpose it is to transmit the encoded data between parties. While this research utilized web-conferencing, for the purposes of this paper the terms videoconference and web-conference are used interchangeably.
Chapter 2: Review of the Literature

The discussion and study of web-conferencing as a method of experiential learning to improve cultural competence among nursing students is multifaceted. It is analogous to the visual interpretation of a complex color. For example, the color purple is created by mixing different primary colors, red and blue, and varies by shade and intensity when adding yellow, green or magenta. However, when appreciating the color purple in a work of art, the primary and secondary colors are indiscernible. The art student may find it necessary to separate the color purple into its primary and secondary colors in order to understand them and to blend them together again on a canvas. This analogy of color is much like understanding the web-conferencing research discussed in this paper. It will be appreciated in total but must first be understood through an examination of its foundational building blocks including: intercultural learning and competency, experiential learning, self-efficacy, appreciation of the role of culture, and technology and distance education. Thus, the first goal of this chapter is to discuss each of the basic building blocks, or primary colors, of this study before connecting them together to discuss their combined impact. While an attempt has been made to make this discussion as linear as possible to increase understanding of the individual constructs, at times their integration with one another prevents complete separation.

The second goal of this chapter is to demonstrate the proposed ascending hierarchical relationship between intercultural experiential learning, self-efficacy in
providing healthcare to diverse others, and appreciation of the role of culture in health care (ARC). An explanation of why video or web-conferencing was selected as an appropriate experiential learning vehicle to increase cultural awareness and cultural competence among nursing students is the third goal. The fourth, and final, goal of this chapter is to identify gaps in current knowledge.

**Five Building Blocks of Cultural Competence in Nursing Education**

**Building Block One: Intercultural Learning and Competency**

**Definitions and general models.** A discussion of intercultural learning and competency should begin with an examination of basic and general terms, including culture and cultural competence. Culture may be objectively and subjectively defined. Most people learn about objective culture by studying artifacts produced by people in order to find out more about their social mechanisms, politics, economics, and language. Subjective culture, defined as “learned and shared patterns of beliefs, behaviors, and values of groups of interacting people,” (Bennett, 1998, p. 2) is more difficult to discern. It is less obvious than the artifacts created by objective culture.

Bennett (1998) maintains that it is not so much the knowledge of objective culture, but the ability to communicate with people and understand their subjective culture, as well as one’s own, that leads to cultural competence. Cultural competence is defined as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations” (USDHHS, 2005).
It is generally understood that in many disciplines the words cross-cultural and intercultural are used synonymously. However, some interpret the words differently. Stewart and Bennett (1991) define cross-cultural as “any comparison of cultural differences…or to situations in which such differences exist” (p. xii). Cross-cultural can also be defined as more than one culture being included but in a separate fashion. An example of this would be students reading books that speak about various cultures. Such an experience could be called cross-cultural learning (Fries, 2008-2010). In contrast, intercultural is defined as “interaction between people of different cultures” (Stewart & Bennett, 1991, p. xii). Intercultural can mean that more than one culture is included in an interacting fashion. Thus, students traveling from one country to another may experience both cultures, having an intercultural experience (Fries, 2008-2010). The different authors’ definitions are congruent, not surprising as Fries work was informed by Bennett.

To add to an oft times confusing amalgamation of terms is another word that is frequently used interchangeably with intercultural, and that word is transcultural. It is defined as that which “extend(s) through all human cultures” (Princeton University, 2010, para 1). Said another way, transcultural means a “bridging of significant differences in cultural communication styles, beliefs, or practices” (Kavanaugh & Kennedy, 1992, as cited in Jeffreys, 2006). Being able to look at the world through the lens of another culture is an example of this concept.

Many disciplines define cross-cultural competence as “the ability to relate and communicate effectively when the individuals involved in the interaction do not share the same culture, ethnicity, language, or other salient variables” (Hains, Lynch & Winton, 2000, para 4). Some point out that becoming cross-culturally competent requires an
examination of different power, privilege, racial and class boundaries across diverse cultural boundaries (Hains, Lynch & Winton, 2000). Framing interactions with other cultures across the globe with an Anglo, middle-class perspective would not result in sufficient understanding or improve cross-cultural competence.

For decades, researchers have been attempting to define intercultural competence in order to help to improve it (Hammer, Bennett & Wiseman, 2003). Simply possessing knowledge about another culture does not constitute intercultural competence. To positively engage with diverse others, it is necessary to build one’s own attitudes and skills through interaction with them. Intercultural competence is defined as “the ability to think and act in interculturally appropriate ways,” (Hammer, Bennett & Wiseman, 2003, p. 1) or “the capability to accurately understand and adapt behavior to cultural difference and commonality” (Hammer, 2003, p.3). Intercultural sensitivity is “the ability to experience and discriminate relevant cultural differences” (Hammer, Bennett & Wiseman, p. 2).

In 1986, Bennett, developed a conceptual framework for understanding the relationship between the two concepts, called the Development Model of Intercultural Sensitivity [DMIS]. He proposed a mostly unidirectional continuum from ethnocentrism, the idea “that one’s own culture is experienced as central to reality in some way,” to a more sophisticated ethnorelativism, the idea “that one’s own culture is experienced in the context of other cultures” (Hammer & Bennett, 1998, p.1).

Each of Bennett’s five stages along the mostly unidirectional continuum is an expression of the individual’s world view. (See Figure 2.1, Bennett’s DMIS Model.) In the first three ethnocentric stages, denial, defense and minimization, the individual is
grappling with cultural differences while maintaining and protecting the original lens of one’s own culture. Acceptance, adaptation and integration are the last three ethnorelative stages wherein the individual is increasingly willing to try on different cultural lenses, and in relation to them gain understanding of one’s own culture. These cultural stages are seen as amenable to change through education, experience and training (Stewart & Bennett, 1991). A tool was developed by Hammer & Bennett (1998) to measure the DMIS, the Intercultural Development Inventory (IDI).

Figure 2.1

Bennett’s DMIS model (Hammer, Bennett & Wiseman, 2003)

For the purposes of this dissertation, the term intercultural will be used whenever possible as it is most descriptive of the proposed doctoral study, except for instances when a particular author or theory is being discussed in which the term cross-cultural or transcultural is used synonymously with intercultural.

Teaching and learning cultural competence in higher education. In higher education today, institutions are making changes to reflect their recognition of the value
of cultural competence and/or globalization at the local, state and national levels to prepare students for the current world marketplace and to maintain a competitive edge. One local example of an institution of higher education making changes to reflect these priorities is at the Ohio State University (OSU). A report was released in September of 2007 from the OSU International Program Task Force. A portion of their charge was to speak to and account for OSU’s standing in the international arena of higher education. The report highlighted the fact that OSU was not recognized in *Newsweek* “as one of the 100 top global universities in the world, while eight other Big Ten universities enjoy that recognition” (Hansen, et al., 2007, p. 3). Further, the task force maintained that OSU strives to prepare its students to become competitive on the international stage and to be knowledgeable and engaged citizens of the globe. To this end, the task force proposed a shift in organizational structure, with the creation of a new Vice Provost for International Affairs position as part of the President’s cabinet and Council of Deans. This position has since been realized. All disciplines on the OSU campus are now charged with the goal of preparing students to practice in a global environment. Providing experiences for them to interact and learn with others from diverse cultures is one tool that can be utilized to meet this goal.

There are multiple pedagogies used in higher education in order to teach cultural competence. Some strategies enable the students and their faculty to increase awareness of cultural differences and similarities, moving them from monocultural thinking to cross cultural perspectives. Other strategies can actually change the way thoughts of self and others are framed, shifting toward intercultural and multicultural perspectives. The platinum standard in the teaching and learning toolbox for cultural competence is
immersion in another cultural experience for a sustained period of time, typically through
study abroad. The gold standard is community based learning, including service learning,
internships and volunteering. The silver standard is simulation and games, whereby
students are able to practice developing skills in a low stakes setting with guidance from
experienced faculty. The bronze standard in teaching cultural competence utilizes case
studies and discussions around literature, art, music and movies highlighting the impact
of various levels of cultural competence. It is undetermined if other innovative
pedagogies, particularly video and web-conferencing, can be effective pedagogical tools
to be used to improve cultural competence as well as the platinum through bronze
standard experiential learning strategies.

Some students in the U.S. will participate in study abroad activities. However, the
number of students in higher education who participate in this type of experiential
learning is not high, only one percent of the total national collegiate population
(McMurtrie, 2007, p. A37). In contrast, the Corporation for National and Community
Service (2006) reports that fifty percent of community colleges and 25 percent of all
institutions of higher education have community service programs. Some utilize
participation in local service learning activities to cultivate cultural competence (Woods,
2004).

Nationally, many efforts are underway in higher education to increase and
improve multicultural experiences for students in order to prepare them to work with
others around the world. The Association of International Educators, originally named
the National Association of Foreign Student Advisers and still retaining the acronym
NAFSA, has been at work for over 60 years in this endeavor. NAFSA publishes an
annual report that describes current international initiatives in higher education. Information is presented about awards received from various champions and stakeholders for innovative and impactful programs while other institutions are highlighted for their international initiatives (NAFSA, 2009). In their annual report, programs are described that increase study abroad opportunities, utilize technology to connect students and faculty from across the globe, and establish international campuses with connection to their U.S. counterparts. Administrators, faculty and students spotlighted in the annual NAFSA publication believe that “international education advances learning and scholarship, builds respect among different peoples, and enhances constructive leadership in a global community” (NAFSA, 2009, p. 2).

Building Block Two: Experiential Learning

“I hear, I forget;
I see, I remember,
I do, I understand.”
~ Chinese Proverb

Theories of experiential learning. David Kolb is known for his work in experiential learning. He built upon the work of John Dewey, among others, to build a theory of learning that is an adult process which has six propositions (Kolb & Kolb, 2005):

1. Learning should be viewed as a process, as opposed to an outcome.

2. Learning is building upon what is already known through the process of examination and testing in order to find a new configuration.
3. Learning must occur with some conflict as one wrestles with and acts upon opposing points of view.
4. Learning is holistic in nature taking into account the complexity of the person, including feelings, thoughts, reflection and action all working together.
5. Learning occurs when the person interacts with the environment incorporating fresh ideas and new experiences.

Kolb’s experiential learning cycle is cyclical with four stages: (1) concrete experience, (2) reflective observation, (3) abstract hypothesis, and (4) active testing. The bedrock of experiential learning is the concrete experience because it informs all other stages. Through reflection the learner is able to form concepts to test (Kolb & Kolb, 2005). New experiential learning experiences are framed by the previously tested concepts. Learners can use these experiences to become better learners through a process of meta-cognition, or learning about learning. Trusting the experience and learning that flows from it, appreciating failure as a powerful learning tool, and self-assessment of the learning process and personal strengths are key components of experiential learning meta-cognition (Kolb & Kolb, 2009).

John Dewey describes experiential learning as “a theory of experience in order that education may be intelligently conducted upon the basis of experience” (Dewey, as cited by Kolb & Kolb, 2005). Examples of this type of learning could be found in an interactive lecture with opportunity for group work on case studies/problem-solving scenarios, internship and practicum experiences, student teaching and learning cooperatively (Strait & Sauer, 2004). Although these definitions are fairly neat and
orderly, one would surmise that the learning experience is not binary, experiential or non-experiential, but shades of each fall somewhere in between with the recipient being the judge. Videoconferencing and web-conferencing, described and discussed later in a separate section, could fit under the heading of experiential learning.

**Experiential learning and higher education.** As workers are expected to compete on the global marketplace and integrate diverse ethnic views into business decision making, employers want higher education to provide experiences for students to acquire these skills (Duke, 2000; Garret, MacDonald & Rivera, 1997). The platinum standard used to experience and understand other cultures is study abroad.

This popular type of internationalization pushes participants to move from a micro to macro perspective (Schoorman, 2000). It is important that these experiences are long enough to provide the opportunity for students to reflect, from ten days (Koernig, 2007), to an entire academic session/ term (Duke, 2000). Most programs require this reflection to be documented through journal writing. This process moves the student to higher levels of learning, from comprehension to possibly analysis “through active involvement by finding examples, integrating concepts, increasing cultural awareness” (Duke, 2000, p. 159). In addition, “study abroad provides not only the possibility of encountering the world, but of encountering oneself—particularly one’s national identity—in a context that may stimulate new questions and new formulations of that self” (Dolby, 2004, p. 150). The transformation that is derived from studying in another country is related to the amount of time one is immersed in the other culture. Greater than a quarter of a million students received academic credit for study abroad work in the
2008-2009 academic year, a figure that is twice as large as it was just ten years ago (Institute of International Education, 2010).

Higher education professionals employ a type of experiential learning, encountered situations, to expose students to ideas of social justice, power, privilege and prestige (Lechuga, Clerc & Howell, 2009). Through these situations they assist students who have never experienced oppression or prejudice to observe, experience, reflect and make new knowledge. Their goal is to provide enough challenge, support and opportunity to foster future social action. Lechuga, Clerc & Howell (2009) give three suggestions for utilizing this teaching strategy: (1) pre-activity reflection using various media aids to foster dialogue among students and facilitators, (2) experiences that make use of the knowledge acquired in the pre-activity reflection, (3) post-activity reflection utilizing instruments such as logs and focused discussions of small groups. These steps, supported by theory with clear learning objectives and empathetic facilitators, are necessary components to prevent confirmation of previously held stereotypes and prejudices that can actually retard student learning (Glennon, as cited in Lechuga, Clerc & Howell, 2009). A pertinent warning about poorly designed experiential learning was expressed by Dewey,

Any experience is miseducative that has the effect of arresting or distorting the growth of further experience. An experience may be such as to engender callousness; it may produce lack of sensitivity and of responsiveness. Then the possibilities of having richer experience in the future are restricted. (Dewey, 1986, p.8)
The professoriate in higher education has acknowledged that collaboration is a key element in the development of student skills necessary to function in society. In human services, this collaboration is indispensable in bringing professionals out of their silos so that resources can be combined such that the whole is greater than the sum of its parts. Building human capital, recognizing resources in other disciplines, and working through bureaucratic mazes will be the charge of graduates. Thus, forming inter-professional alliances through experiential learning is one method to practice solving problems in an authentic way in local communities. Educators at the University of Missouri propose combining experiential learning resources within the human resources fields in order to maximize resources and foster collaboration that mimics real life (Gronski & Pigg, 2000).

**Community based learning.** Community-based learning as a form of experiential learning has gained increased popularity and respect in recent years. Sociology professionals use this vehicle to move students toward increased levels of social awareness and action. Mooney & Edwards (2001) view service learning on a continuum of community-based, experiential learning activities with increasing curricular benefits as follows: (1) “out-of-class activities,” (2) “volunteering/service add-ons,” (3) “internship/practica/co-op,” (4) “service learning,” (5) “service-learning advocacy” (p. 189). By the time the student is performing service-learning advocacy, s/he has typically acquired skills of leadership, political consciousness, and community literacy.

**Experiential education in nursing.** The field of nursing education has traditionally utilized experiential learning with students by placing them in communities and clinical settings to practice their hands-on physical skills, as well as their
communication skills. What is newer to nursing is using experiential learning as pedagogy to teach other topics that are harder to grasp and where it is more difficult to achieve student engagement. Nursing research is one such course that is often viewed negatively by students and, therefore, is a challenge to faculty. Several authors report the utility of experiential learning in this regard.

Hitchcock & Murphy (1999) reported that involving undergraduate nursing students in faculty research throughout each step of the process was an effective way to make the experience authentic, in addition to increasing students’ positive feelings about research. Supporting this finding, Pugsley & Clayton (2003) state that there was heightened positivity toward research in an experiential learning group of baccalaureate nursing students compared to previous groups who received traditional lecture instruction. These researchers assigned a hands-on problem solving activity, in addition to a small research project, as experiential learning components to teach nursing research to their students. Effectively writing successful research grant applications in collaboration with their faculty was one learning outcome of some participants of the experiential learning course. Grant application success, control group data, from students in a conventional didactic research course would have been helpful as a comparison.

Nursing education draws on service learning from higher education to teach students cultural competence. A group of all Caucasian nursing students in Minnesota was placed in a homeless shelter with 75 percent cultural diversity in a service-learning rotation as part of their coursework. Researchers conducted a qualitative study assessing student attitudes about the people in the shelter, themselves, and social justice. Reflection before, during and after the rotation was instrumental in assisting students to process their
experiences, feelings and thoughts on their way to creating new knowledge. The students expressed that in the homeless shelter they were not in the same world. Students found that the culturally diverse people also possessed hopes and dreams, but lacked access to healthcare. Students gained awareness of their own ethnocentrism through these experiences in the homeless shelter. They also learned the value of mutual problem-solving. Faculty found that “empathy and leveling of shared experience provides increased cultural desire to gain even more transcultural competence” of the nursing students (Hunt & Swiggum, p. 171).

Canadian nurse educators in a community college in Newfoundland also use experiential learning methods in an online format. The design included low stakes simulations and case-based scenarios to develop critical thinking ability. The author reported that online learning is helped by the integration of experiential learning theory with opportunity for employment of Kolb’s learning cycles. This is important for nursing students who usually possess higher confidence in concrete skills than abstract ones (Bolan, 2003).

**Simulation in professional training and higher education.** A popular form of experiential learning used in the fields of aviation and anesthesiology, as well as international, business education, medical and nursing education, is simulation. One definition of simulation is “the reproduction of the essential features of a real life situation” (Medley & Horne, p. 31). United States (US) aircrews, both military and civilian, employ simulation as a way to train and refresh about various emergency procedures and contingency plans (Gaba, Howard, Fish, Smith & Sowb, 2001). This
experience of practicing situations that occur in real life is a powerful and sometimes lifesaving educational tool in many professions.

Simulation is also used in international relations classes to enliven classrooms and enhance the learning experience (Lantis, 1998). It is cost effective as it saves the institution from spending money sending students around the world to get international relations experience. A global summit simulation was developed to take place over three separate class meetings. Faculty built five essential components into the global summit simulation to meet program goals: (1) “educational objectives,” (2) “specific roles,” (3) “background information,” (4) “rules of procedure,” and (5) “a debriefing period for discussion and reflection” (p. 42). Students in the international relations simulation are required to take a role in simulation from a country other than their own to assist them to identify with the other, and to become aware of historical forces. Measuring simulation outcomes is not easy or straightforward. However, for simulation to be effective there are two important outcomes, including the ability of participants to suspend belief, and ability to reach educational goals. Anecdotal feedback was given about the improvement in students’ critical thinking and public speaking skills in debating global participant positions during the simulated summit. Student feedback was positive, but the author suggests the use of more rigorous evaluation methods in the future (Lantis, 1998), such as comparison of course grades with a control group in a didactic lecture without simulation or experiential learning.

One last example of a budding simulation and experiential learning activity in higher education is Second Life (SL). This virtual world allows participants to practice and learn in new geographic environments, risk-free without the limitations of the real
world. Qualitative data collected during a communication course revealed that SL helped students to link education and experience, and link education and practice. Students believed that this experience complimented their real life experience. Of note was the steep learning curve that many students felt. Empirical data to determine whether or not the lessons learned in this virtual environment can be transferred to actual life was not obtained (Jarmon, Traphagan, Mayrath & Trivedi, 2009).

One key of simulations is the ability to repeat them over and over until comfort and even competence is achieved with whatever skill is being simulated and practiced. It is not clear how much simulation, or how many simulations are required for this to occur. Post-simulation conferences or debriefing sessions are necessary to promote reflection, underscore critical points, and correct misconceptions (Rauen, 2004; Medley & Horne, 2005).

**Simulation in medical education.** Anesthesiologists have made use of simulation for competency training for some time. In a report of a decade of using this experiential learning technique, they have found that simulation helps to fill holes left by traditional education, clinical or didactic, most notably critical thinking and crisis management skills. The steps of their simulation experience include typical instruction, group work and discussions, complete simulation scenarios, and debriefing sessions. Additionally, they have developed some key features and best practices. Debriefing appears to be the most critical component as that is where the real learning takes place. This was supported by participant feedback. Videotaped simulation experiences were conducted in order to examine every nuance of mechanical/technical performance and behavioral performance during debriefing sessions for the purposes of stimulating group
awareness, analysis and discussion. Experience in facilitating and debriefing is vital to effective simulation, the attainment of learning outcomes of students, and is underscored as such by the authors (Gaba, Howard, Fish, Smith & Sowb, 2001).

Medical educators in the UK have also recognized the utility of simulation. They point out some important considerations. First, they note that simulation is part of a spectrum of educational tools that must include human interaction, be it one-one-one or in groups. This is paramount as the practice of medicine occurs with real people. The second significant point is that under the fanfare there exists little empirical evidence to justify the cost and effort of this experiential educational tool, or the attainment of educational outcomes against traditional teaching methods. Instead, data has focused on how students and faculty feel about the experience (Bradley, 2006).

**Simulation in nursing education.** Nursing educators agree with other disciplines that simulation is a low risk, non-threatening way to educate students (Medley & Horne, 2005; Rauen, 2004; Alinier, Hunt & Gordon, 2004; Tuoriniemi & Schott-Baer, 2008). It allows them to practice at their own pace as many times as necessary in a controlled environment. This control is important as faculty can tailor the experience to the learner in simulation but not in real clinical experiences since they do not have power over how patients’ conditions will progress (Rauen, 2004; Medley & Horne, 2005). Nursing faculty have also developed some best practices for simulation: (1) “clearly written objectives,” (2) “authentic experiences,” (3) consideration of complexity, (4) “well-placed cues,” and (5) critical debriefing (Tuoriniemi & Schott-Baer, pp. 106-107).

Once again, debriefing is viewed as the most valuable piece of this experiential learning method. Authors caution that it should be carefully planned and led by those
with experience or the outcome could be students feeling intimidated and belittled (Medley & Horne, 2005). This experience comes at a cost to colleges as faculty must receive continuing education and adjusted faculty assignments in order to accommodate the labor intensity demanded of providing simulation education (Medley & Horne, 2005).

Just as in medical education, published evaluation of nursing simulation experiences is sparse. Rauen (2004) reports that qualitative student feedback from simulations at Georgetown University School of Nursing was positive. They were able to stop the action long enough to process or obtain assistance. Practitioner egos were spared by making mistakes in simulation versus actual clinical practice with patients. Practice opportunity was given to delve more deeply into the disease process through simulation. Many nursing faculty undertaking simulation experiences with students note that high level pre-post design studies are the next step in evaluative research.

Alinier, Hunt and Gordon (2004) conducted a qualitative simulation study with experimental and control groups. They measured three indices: level of stress, level of confidence and performance. They discovered that while there was no difference between the simulation group and control group in level of stress or confidence, there was a significant improvement in performance for the simulation group. Long term gains in performance were not measured, however. In spite of the positive results, researchers recommend that simulation not replace human interaction, but instead support it.

Despite all of the multidisciplinary positive press, simulation as an educational experiential strategy does not go unchallenged. Public health professors from the medical college at Cornell University, Hanna and Fins (2006), expressed an alternate view. They contend that exclusive reliance on simulation prepares medical students to act out parts
rather than fostering authentic relationships with real patients. These practitioners punch holes in simulation research as it is typically conducted immediately after the experience without long-term evaluation and not on real patients. Additionally, they point out that the dimension of the asymmetrical power dynamic between the physician and patient is lost in simulation without true anxiety or healing. Evaluation of the simulation experience occurs as faculty record the interactions with hired patient actors. Medical students who are performing during the simulation may state things particularly to impress the evaluators to impact their score. It is not clear whether this interaction can be transformed to the actual bedside as the only thing at stake is a grade. These authors believe that “the combination of deeper humanistic learning and mentored bedside encounters with genuinely ailing patients will foster the ability to create authentic, robust doctor-patient relationships” (Hanna & Fins, 2006).

The teaching modalities discussed above have all been used to improve cultural awareness and competence. An examination of onsite versus distance education will help to illuminate the pros and cons of each, laying additional groundwork for this research.

In the examination of different types of experiential learning it is helpful to see if any patterns evolve across disciplines. Both domestic and internationally, educators of all disciplines discovered that the key to quality experiential learning is to require reflection both before and after the experience, often called debriefing. Through reflection and sharing, “Comfortable views and approaches are often challenged, encouraging students and qualified staff alike to review their own practice and beliefs” (Watt, Law, Ots & WaagØ, p. 322). The importance of this was foreshadowed by Dewey (1986) who stated that experiential learning should be designed adequately to prevent the possibility of
thwarting student growth. Experience and skill leading reflection and discussion is critical to growth. With the exception of simulation, other experiential learning activities were viewed as equivalent, real world experiences. Simulation is viewed by some as an adjunct experience that cannot attain the same level and nuance of experience as the real world can provide.

Just as interesting as the level of cultural competence in health care is the belief in oneself to do so. This concept has been named self-efficacy, and it is another one of the primary colors, or building blocks to be examined in this literature review.

**Building Block Three: Self-efficacy**

In describing self-efficacy Bandura (1977) states, “An efficacy expectation is the conviction that one can successfully execute the behavior required to produce the outcomes” (p. 193). This, in turn, sways which choices are made regarding challenges, effort, and perseverance. Further, self-efficacy beliefs help determine which options will be viewed as selectable in addition to influencing other individual beliefs and feelings. People usually value and engage in things they think they can accomplish more than things they think they cannot accomplish, which they avoid. Thus, self-efficacy beliefs are likely to predict accomplishment (Bandura, 1977).

When unpacking the theory of self-efficacy, four sources of information that feed the theory have emerged: (1) oral persuasion, (2) emotional and psychological stimulation, (3) personal accomplishments, and (4) learning from the accomplishments of others (Bandura, 1977). Additionally, if the individual identifies with the model and the performance was good, self-efficacy is strengthened. Conversely, efficacy is weakened if the model’s performance was bad (Tschannen-Moran, Hoy & Hoy, 1998). Self-efficacy
is viewed as being cyclical because people with high self-efficacy persist long enough at a task to push past obstacles and negative experiences in order to earn positive outcomes. In turn, this process builds greater amounts of self-efficacy. Individuals most often assess self-efficacy whenever a novel charge or environment is imposed (Bandura, 1977).

**Self-efficacy, higher education and simulation.** In one setting in higher education, it was found that the amount of ability perceived by the individual influences self-efficacy. Self-doubts can usurp ability and conversely, minor overestimation can increase performance (Tschannen-Moran, Hoy & Hoy, 1998). Another factor with a positive influence on efficacy is administrative help in “solving instructional and management problems” (Hoy & Woolfolk, p. 367, 1993).

Tompson & Dass (2000) reported a case control study whereby undergraduate business students participated in either case studies or simulations about strategic management. Both teaching strategies were designed to meet their criteria for experiential learning. It was unclear how the case studies were handled in the classroom setting for the control group. The students in the computer simulation group had higher levels of self-efficacy regarding strategic management than those in the case study group. Their main point was that the experiential learning technique of simulation was more effective in improving students’ self-efficacy than traditional case studies. The authors posit that this was due to experiential learning through simulation. Using Kolb’s Experiential Learning Cycle, simulation provides concrete experiences. Then, when students are given opportunity for observation and reflection they can create abstract hypotheses, make connections, and scaffold to prior knowledge that informs active testing in the simulation.
Self-efficacy and nursing education. In nursing (Babenko-Mould, Andrusynszyn & Goldenberg, 2004; Docherty, Hoy, Topp & Trinder, 2005), researchers in the U.S. have found that self-efficacy in performing clinical skills increased using clinical simulation supplemented by online discussion and email compared to traditional delivery of content with a lecture, demonstration and lab components.

Nursing faculty in Norway and Canada connected their two groups of undergraduate students through technology and conducted mixed methods research exploring learning communities. They discovered that online asynchronous computer conferencing and synchronous teleconferencing resulted in the same levels of increased self-efficacy in developing a community of learners and meeting nursing competencies as compared to the control group who attended traditional classroom sessions. For the online students, themes that arose from the interaction included “connection, support, learning and sharing” (Babenko-Mould, Andrusyszyn & Goldenberg, 2004, p. 153). When discussing this modality of learning, the experimental group reported challenges in accessing the Internet and availability of time. It is unclear whether the control group was also placed into discussion groups with peers from their own cohort or not. Thus, the study may have compared one group who did not have the opportunity to form any discussion group with a group who formed discussion groups over distance via technology.

Building Block Four: Appreciation of the Role of Culture

The 1997 non-fiction story of the Hmong child and family by Anne Fadiman, *The Spirit Catches You and You Fall Down*, recounts in chilling detail the grave outcomes that can occur when healthcare workers provide culturally incompetent care. Tragically,
many of the health care workers who provided care for the little child, Lia Lee, did not possess the skills to bridge the differences in culture. This book has helped to bring awareness to the need to provide culturally and linguistically appropriate services to all patients.

Currently, there is collective agreement that in this multicultural world it is imperative that healthcare workers, particularly nurses who give front line healthcare around the clock, understand cultural differences in order to provide care that is congruent with those belief systems and customs of their patients (Leininger, 2002; Campinha-Bacote, 2007; Jeffreys, 2006; Giger & Davidhizar, 2004; Adam, 2008; Hubbert, 2008; Maier-Lorentz, 2008; Maltby, 2008; Mebrouk, 2008; Pacquiao, 2008; Rutledge, Barham, Wiles, Benjamin & Palmer, 2008; Wehbe-Alamah, 2008; Hunt & Swiggum, 2007; Brathwaite, 2005; Hilgenberg & Schlickau, 2002; Leuning, Swiggum, Wiegert & McCullough-Zander, 2002; Watt, Law, Ots & Waago, 2002). While hospitals and other places of health care employment can do their part in providing continuing education for practicing nurses, their primary mission is patient care. Institutions of higher education are strategically poised to provide the foundational information regarding the importance of culture and its impact on care given to patients. Although many schools and colleges of nursing teach a single class and/ or incorporate this theoretical information into their curricula, the little data there is suggests that graduating baccalaureate students have only begun to approach cultural awareness (Kardong-Edgren & Campinha-Bacote, 2008). Nursing faculty members have published their creative attempts to meet this educational need through the platinum through bronze experiential
learning methods discussed previously, such as study abroad (Watt, Law, Ots & Waagø, 2002), service learning (Hunt & Swiggum, 2007; Riner & Becklenberg, 2001), simulation (Rutledge, Barham, Wiles, Benjamin & Palmer, 2008; Brathwaite, 2005), as well as distance or online education (Hilgenberg & Schlickau, 2002). One method of experiential learning not attempted in nursing education to improve cultural awareness or cultural competence is video or web-conferencing between two groups of geographically separated diverse student groups and their respective faculty.

**Experiential learning and culture.** Some researchers have worked across national boundaries through online education with an experiential component in an effort to improve global perspectives and cultural awareness. Most results are positive with a few difficulties encountered. In the K-12 arena researchers connected indigenous people around the globe to work in art and writing together for display on the World Wide Web, as well as humanitarian effort through the *First People’s Project*, where approximately 2,000,000 students are engaged in working with one another in over 125 countries each day (iEARN, 2009). Students are instructed to create a product that would improve the quality of life on the planet and are ultimately exposed to cultures other than their own.

Challenge 20/20 is another K-12 initiative through the National Association of Independent Schools wherein international teams solve actual world problems that they implement on a local level (NAIS, 2009). iLEARN’s teamwork is active service learning and expands the classroom virtually to a world wide scale. Economics and business researchers employing experiential learning and online learning discovered some difficulties. Through an initiative called Globalview, student groups worked across continents to create business solutions to problems from companies around the globe.
The student teams were homogenous, from the same country, while their company was from a different country. It was discovered that the students worked well within their own teams but not between teams of other students that were geographically separated and diverse. This was found to be due to timetabling differences; difficulty with deadlines; and variations of dependency, accountability and control (Alon & Cannon, 2000). The wholly experiential learning groups, national and international, all experienced gains in cultural awareness, at least.

In the United Kingdom, Montgomery (2009) looked at two qualitative internationalization studies conducted ten years apart, in 1998 and 2008, and found improvement in student attitudes towards diverse others. They also noted traces of ethnic reductionism, or confusion of race and ethnicity as well as the imperative role faculty play in redirecting students, requiring experience and skill. Domestically, nursing researchers discovered that simulation used as a vehicle to teach cultural competence resulted in improved knowledge scores. However, there was no data to support actual changes in practice by students (Rutledge, Barnham, Wiles, Benjamin, Eaton & Palmer, 2008). Hunt & Swiggum (2007) used service learning in nursing education to teach cultural competence. All of the students were Caucasian and participated in a service learning rotation in a homeless shelter that was 75 percent diverse. In this qualitative study, students expressed after the experience an altered understanding of homeless shelters, themselves in relation to diverse others, and an increased understanding of social justice. Faculty found that “empathy and leveling of shared experience provides increased cultural desire to gain even more transcultural competence” of the nursing students (Hunt & Swiggum, p. 171).
**Perspectives of medical education and medicine.** In a literature review of 34 cultural competence studies of health professionals that spanned over 20 years, a few themes emerged. The first was that medical education of various sorts did produce positive shifts in the knowledge, skills and attitudes of the healthcare participants, as well as how patients rated their care (Beach, Price, Gary, Robinson, Gozu & Palacio, et al., 2005). The investigators believed that strategies employing bias avoidance while teaching general cultural concepts, and maintaining focus on the patient showed the most promise and warranted further study. The most disparate conclusion, compared to nursing, is that these physician academics felt that the main focus should be on connecting cultural competence education to patient compliance with treatment regimens. This exposed their overarching goal in this endeavor, finding ways to increase compliance from diverse others (Beach, et al, 2005). This is dissimilar to nursing cultural competence research with an aim to help nurses *understand the patient’s perspective* in order to provide culturally congruent care.

We cannot afford to view our patients as difficult, non-compliant, or the less value-laden term, non-adherent. Instead they are to be viewed as helpers and cultural informants in our journey towards cultural competence in healthcare delivery (Campinha-Bacote, 2007, p. 7).

The discipline of medicine attempts to teach cultural competence both with students and practicing physicians. However, their perspective is slightly different from that of nursing. Investigators conducting cultural competence training with medical residents attempted to change their attitudes. They found that residents’ attitudes related to the importance of patient opinion and health care beliefs were more positive as a result
of the intervention. However, they did not examine how this changed their behavior with patients or how long this change would persist (Crosson, Brazeau, Boyd & Soto-Greene, 2004).

**Disagreement about cultural competence education.** Despite the seismic shift toward increasing cultural competence, everyone is not necessarily in agreement regarding the need for increased effort towards cultural competence education. Some resistance is occurring.

Dreher and MacNaughton (2002) take the position that the national push for healthcare practitioners to practice multicultural care is redundant. They posit that nursing theory takes into account the uniqueness of each individual already, stating that “Cultural competence is really nursing competence” (Dreher & MacNaughton, 2002, p. 185). They believe that the push to inculcate cultural competence into nursing care is an attempt to shift responsibility from government public health policy to the individual nurse (Dreher, et al.).

While nurse educators are strategically positioned to teach nursing students about cultural differences and the impact on their states of health, they need to understand best practices evolving from research. This work does not need to be created in isolation within the discipline of nursing. There are lessons that can be gleaned from other disciplines in the broader community of higher education.

**Cultural competence in healthcare and nursing.** Starting from a more fundamental level, cultural competence entails consideration of racial, ethnic, socioeconomic, gender and sexual orientations. It requires personal exposure to
experience with diverse others, recognizing singular and collective similarities and differences (Schim, et. al., 2006).

Cultural competence in healthcare is necessary as there are cultural differences in perceptions of illness and disease, as well as health and wellness. Healthcare seeking behaviors and feelings about the providers differ among cultural groups (Ahmann, 2002). Thus, a competent healthcare professional should be attuned to these differences and shift practice accordingly.

It is reiterated in the literature on local (Cooper, Grywalski, Lamp, Newhouse & Studlien, 2007), national (ODPHP, 2000 & USDHHS, 2004), and international (WHO, 2006) levels that healthcare providers should, but do not, reflect the society from which they come. In the United States (U.S.), programs are underway to increase the numbers of racial minority nurses in practice and higher education for research and teaching roles. Despite these programs, the proportion of racially diverse nurses in practice decreased from 12.3 percent in 2000 to 10.7 percent in 2004. Some strides were made during that same time period in higher education as racially diverse students enrollment in nursing programs increased from 21.5 percent in 2000 to 23.5 percent in 2004 (Spratley, Johnson, Sochalski, Fritz & Spencer, 2001; HRSA, 2010; AACN, 2009).

Currently, in the U.S. there is a push for health care practitioners who can communicate effectively with the changing demographic face of our nation. From the Office of Minority Health (USDHHS, 2007), in their publication National Standards on Culturally and Linguistically Appropriate Services [CLAS], cultural competence is identified as an important attribute of effective health communication. The standards outlined in this document demonstrate that culturally competent communication is vital
to health promotion and disease prevention through clinical situations and relationships between health care professionals and the public.

Internationally, the collective voice of the World Health Organization (WHO, 2006) made its appeal for distance education, as well as cultural competence in health care. It was affirmed in their World Health Report (2006) that the high cost of higher education of healthcare professionals, driven up by competition for resources, can be reduced by sharing via distance education. Concerning cultural competence, the report stated, “the profiles of students entering health professions rarely reflect national profiles of social, linguistic and ethnic diversity, as students are disproportionately admitted from the higher social classes and dominant ethnic groups in society” (p. 74).

**The importance of transcultural nursing.** Citing the shift in the U.S. population over the past few decades, increased intercultural movement and globalization throughout the world, as well as trend analyses, numerous authors assert that cultural competence in nursing care is essential to positive patient outcomes (Brathwaite, 2005; Rutledge, Barham, Wiles, Benjamin, Eaton & Palmer, 2008; Pacquiao, 2008; Adam, 2008; Papadopoulos & Omeri, 2008; Leuning, Swiggum, Wiegert & McCullough-Zander, 2002; Maier-Lorentz, 2008; Omeri, 2008; Leininger, 2002). Additionally, the demographics of the registered nurse (RN) workforce is not changing in sync with the general US population, but instead remains mostly homogenous at 83.2 percent White, non-Hispanic, 46 year old women (93 percent) (HRSA 2010).

The discipline of nursing is presently at an intersection of the need for professionals who possess multicultural nursing skills and a current community of nurses
who represent the dominant culture. The time is ripe for increased intercultural nursing education.

Transcultural communication is critical to effective nursing care. It includes recognition of cultural differences in the various components of non-verbal communication, such as eye contact, touch, silence, space and distance, as well as healthcare beliefs. Without awareness by healthcare workers of how diverse others communicate, patient messages can be wrongly interpreted, and care provided can be culturally incongruent leading to emotional distress for the compliant patient. Some patients choose non-compliance with treatment regimens when faced with cultural miscommunication. Neither path promotes trust with caregivers, satisfaction with care or positive patient outcomes. Additionally, this type of culturally incongruent communication creates frustrated and uncomfortable nurses when caring most intimately for patients for which they have little understanding of nonverbal cues (Maier-Lorentz, 2008).

Although transcultural nursing as a “term” was coined over a half century ago, nurse educators are still attempting to find the best pedagogy for use with students. In addition, methods to evaluate such teaching practices currently remain unclear. Some authors propose that nurse educators move from macro level work with theory development to micro level work with students to ensure that they become culturally competent (Luna & Miller, 2008). Others contend that nurses should avoid research about caring and culture because it is “too soft, feminine and nonscientific…irrelevant and unnecessary” (Leininger, 2002, p. 189). Thus, there is not unanimity of and support for the next best step.
In an editorial in *Contemporary Nurse* (2008), Papadopoulos and Omeri from the United Kingdom and Australia, respectively, write that there is difficulty advancing the practice of transcultural nursing due to lack of international standards. They highlight the importance of obtaining certification in transcultural nursing, or standardizing practice, in order to foster excellence in nursing care and push the field forward.

There is certainly movement in transcultural nursing circles to address these issues. In the U.S., standards have been developed for the practice of transcultural nursing (Transcultural Nursing Society, 2010; Journal of Transcultural Nursing, 2011). In 2012, the Transcultural Nursing Society International (TCNS) completed a certification process offered to nurses around the globe (Transcultural Nursing Society, 2012).

Collaborative international efforts are made through special issues in scholarly journals devoted to transcultural nursing in order to provide a venue for knowledge dissemination. These leaders in transcultural nursing are strongly encouraging partnership with other nurse educators and disciplines in both quantitative and qualitative research for the purpose of discovering best educational practices toward increasing cultural competence. This collective work would benefit all and promote progress, as opposed to slow and independent silo research (Omeri, 2008).

**Theoretical base: Models of transcultural nursing.** There are several authors who have created theories and models of cultural competence in the field of nursing. However, two of them, Leininger and Campinha-Bacote have earned the respect of the larger nursing community over decades. Their work, both individually and collectively, is frequently included in nursing text books and is viewed as seminal. Another nurse researcher who is newer to the scene, Jeffreys, has also made a substantial contribution to
the field of cultural competence in nursing care. Her work is unique because it employs the use of a construct the other two do not, self-efficacy. These three models will be briefly presented and then compared and contrasted below.

Madeleine Leininger is the matriarch of the field of cultural competence in nursing care. She is the founder of both the Transcultural Nursing Society and the Journal of Transcultural Nursing, both in 1974 (Nurses Info, 2009). She developed the Sunrise Model of Culture Care Diversity and Universality. This model examines eight factors that influence patterns and practices of care: educational; economic; political and legal; cultural values, beliefs and lifeways; kinship and social; religious and philosophical; and technological. All factors are situated within the individual’s culture and social structure and create a worldview. The charge to healthcare workers, particularly nurses, is to examine how each of the factors impacts the patient’s worldview. This is compared to the generic care, nursing care practices and professional care practices to find any instances of incongruence. Then one of three decisions and actions is taken to give culturally congruent care: (1) preserve/ maintain culture care, (2) accommodate/ negotiate culture care, or (3) repattern/ restructure culture care. This model of culture care has been used to create other models (Giger & Davidhizar, 2004; Pacquiao, 2008), develop whole cultural competence courses (Kardong-Edgren & Campinha-Bacote, 2008), build programs of care (Hubbert, 2008), construct educational collaborations (Hilgenberg & Schlickau, 2002), produce service learning programs (Hunt & Swiggum, 2007), inform research activities (Mebrouk, 2008), and assess patient culture to provide care that is congruent (Wehbe-Alamah, 2008).
The second model is Josepha Campinha-Bacote’s Process of Cultural Competence in the Delivery of Healthcare Services. It is supported by five assumptions: (1) developing cultural competence is a process; (2) five constructs build cultural competence; (3) variation occurs to a larger extent within cultural groups than between them; (4) the cultural competence of the healthcare provider and her/ his ability to deliver culturally responsive care is directly related; (5) cultural competence is vital to culturally responsive care. The five constructs that nurses must develop include cultural awareness, cultural knowledge, cultural skill, cultural encounters and cultural desire. The interplay between the constructs is represented by a circle of spirals, one for each construct, with the cultural encounters spiral in the center (Campinha-Bacote, 2002).

Campinha-Bacote has developed several self-report scales in Likert-style for use with both nurses and students to measure the five constructs. Cultural desire, the one affective construct, was originally depicted as a volcano which grows within the caregiver (Campinha-Bacote, 2008). She asserts that cultural desire can be “‘caught’ by faculty who model this construct, but also ‘taught’ within nursing curricula as a critical component of cultural competence” (Campinha-Bacote, 2008, p. 141). However, cultural desire cannot occur without opportunity for cultural encounters. Thus, cultural encounters is the construct at the center of the latest revision to the model. Since the model is a mixture of cognitive and affective domains, she recommends mixed methods research to adequately measure the depth and richness of cultural competence (Campinha-Bacote, 2002).

As Leininger before her, Campinha-Bacote’s work has sparked others to: envision new models of cultural competence and social justice advocacy (Pacquiao, 2008);
develop service learning activities (Hunt & Swiggum, 2007); evaluate courses (Brathwaite, 2005); create novel teaching/learning strategies, such as simulation (Rutledge, Barham, Wiles, Benjamin, Eaton & Palmer, 2008) and transcultural online courses (Adam, 2008); and create new knowledge through research (Kardong-Edgren & Camphina-Bacote, 2008; Maltby, 2008). It remains unclear if a novel teaching/learning strategy utilizing online learning formats between groups of students and their respective faculty could be effectively used to improve cultural competence.

The most recent work in transcultural nursing utilized for this dissertation was published in 2006 and 2010 by Marianne Jeffreys. Her work was informed largely by Leininger and Bandura. She created a model of cultural confidence with the added dimension of confidence or transcultural self-efficacy (TSE), which she defines as:

the perceived confidence for performing or learning transcultural nursing skills. It is the degree to which individuals perceive they have the ability to perform the specific transcultural nursing skills needed for culturally competent and congruent care. (Jeffreys, 2010, p. 51).

This construct is vital as those with low self-efficacy are at risk for increased task avoidance and decreased commitment (Bandura, 1977). Thus, students’ TSE is something important to attempt to measure and improve with pertinent pedagogy. She defines cultural confidence as “a multidimensional learning process that integrates transcultural skills in all three dimensions (cognitive, practical, and affective), involves TSE (confidence) as a major influencing factor, and aims to achieve culturally congruent care” (Jeffreys, 2006, p. 25). Jeffreys has developed and tested a Transcultural Self-Efficacy Tool (TSET) for measuring TSE.
Jeffreys’ TSE pathway is not a continuum like Bennett and Kolb. Instead, it is similar to a decision tree. Critical for educators is Jeffrey’s TSE pathway as a tool to guide student instruction after determining whether they are inefficacious, efficacious or supremely efficacious via the TSET results. This is important because students will view a new transcultural task as either an obstacle, an appropriate challenge, or effortless. This, in turn, determines how much preparation, energy, commitment, assistance and motivation is used.

Students who are either inefficacious or supremely inefficacious will likely provide culturally incongruent care, feel overwhelmed, dissatisfied and stressed. The risk is high that they will continue to provide culturally incongruent care and avoid such experiences in the future. Those who are efficacious, assess the task as an appropriate challenge, expend the necessary energy to prepare to meet the task, are committed to task completion, feel satisfied and motivated, and seek help when necessary. These students will often provide culturally congruent care and will feel satisfied, motivated and ready to tackle the next task. However, sometimes their care misses the mark, or turns out to be culturally incongruent. They interpret it as small impediment, experience a manageable amount of dissatisfaction, and are able to maintain motivation to cope with the stress and continue learning how to handle the next transcultural task (Jeffreys, 2006). Nursing faculty who understand the TSE pathway are better equipped to provide appropriate instruction and guidance for students after determining their level of TSE.

**Compare and contrast cultural competence models.** In all three nursing models, from Leininger, Camphina-Bacote and Jeffreys, cultural competence is viewed as a developmental process that does not have a finite end point. Consequently, nurses
can work their entire careers towards this aim without ever reaching a finish line. Another similarity between models is that they all speak to affective and cognitive skills. Although defined slightly differently in each model, all recognize that one’s cultural lens is situated within an environment and is influenced by experiences, both past and present.

One other important point of agreement between these three theorists is that cultural competence education has not been adequately studied, thus progress is difficult to make. Jeffreys (2006) states that two important barriers to timely transformation in the ability of nurses to provide culturally competent care is lack of nurses skilled to provide and educate others about transcultural care, and a scarcity of evaluative research on effective pedagogy towards the aim of increasing cultural competence among student nurses.

The differences among these models are, perhaps, more interesting. Leininger’s model is useful because it differentiates between different types of care practices, including folk, nursing and medicine. Additionally, it describes the care decisions to be taken by the nurse after assessment of the patient’s culture: preservation, accommodation, and repatterning. It is only to be used as a guiding framework and does not have a tool by which to measure, in a quantitative way, the level of cultural competence. However, Camphina-Bacote’s model has tools that can be used to measure the amount of cultural competence for either practicing nurses or students. She is the only theorist of the three who believes that no matter what you teach students, if they do not possess cultural desire, they will not continue this educational journey independently after graduation. However, through research using her model, she has discovered that cultural desire cannot flourish without sufficient cultural encounter experiences. Jeffreys’ model stands
out as it comes from an educational perspective with the additional critical construct of TSE and how the level of it can impact patient care. She also has developed several tools, one of which, the Transcultural Self-Efficacy Tool (TSET), is used to determine where a student is on the pathway to providing culturally competent and congruent care, as well as a pathway to guide cultural competence education. Being able to diagnose where a student is on this path enables the nurse educator to construct an educational plan to meet the needs of the student toward increasing TSE.

Campinha-Bacote, Bennett, Jeffreys and Kolb all identify real practice as critically important to development of cultural competence, self-efficacy or experiential learning. Bennett’s *Developmental Model of Intercultural Sensitivity* is mostly unidirectional with one moving from a place of ethnocentricity to ethnorelativism in the ongoing process of becoming more culturally competent. Jeffreys’ *Transcultural Self-Efficacy Pathway* is also mostly unidirectional. However, reappraisals occur and one can enter the pathway innumeros times. Kolb’s *Experiential Learning Cycle* and Campinha-Bacote’s *Process of Cultural Competence in the Delivery of Healthcare Services* are cyclical and iterative. The same message is clear throughout each of their models; experience is critical to learning, self-efficacy and cultural competence.

**Current teaching strategies to improve cultural competence in nursing.** Not surprisingly, some nurse educators are using simulation as a vehicle to teach cultural competence. Students interviewed “standardized patients,” actors, who were culturally diverse. Their interviews were videotaped for later review and reflection. Afterwards, they participated in simulation with high performance mannequins so that they could demonstrate psychomotor skills. This experience was also videotaped for debriefing
purposes. Their research was evaluated by positive student feedback and increased cultural knowledge scores. However, they did not provide data indicating that these artificial experiences could be transferred to actual practice by the students (Rutledge, Barham, Wiles, Benjamin, Eaton & Palmer, 2008).

Staff development educators are also tackling the issue of cultural competence in real nursing practice through their research based on the model by Campinha-Bacote. Mixed methods research was used to examine the outcome of a short-course, one two-hour session per week for five weeks, or ten hours total. The five components of the course for these community health registered nurses were: (1) introduction to terms and explanation of model, (2) cultural awareness, (3) cultural knowledge, (4) cultural skill, and (5) cultural encounter through a simulated game. Positive changes in cultural competence were found post short-course moving from awareness to competent and proficient levels. Additionally, this immediate increase in scores was present at a three month follow-up. The qualitative findings echoed the same positivity. The nurses reported increase self-confidence in their ability to care for culturally diverse patients, as well as changes in their behaviors and practice after participating in the educational intervention (Brathwaite, 2005).

In a retrospective, descriptive study of nursing students in Australia, a single course on American race and racism was given. Additional content was threaded throughout the curriculum. After an 18 month period of time during their nursing studies students were asked to reflect on any learning. Three themes emerged demonstrating cross-cultural growth: “equal treatment, commitment to serve all clients, (and) It’s not easy” (p. 113).
There are limits to participation in a few of the platinum to bronze standards in experiential learning of undergraduate nursing students, particularly study abroad. It is costly (Koernig, 2007; Christie & Ragans, 1999); requires time away from family, jobs (Duke, 2000), and other study at the home college or university; and does not always translate into equivalent academic credit, sometimes causing students to take additional academic term(s) to graduate (Christie & Ragans, 1999). Additionally, currently practicing nurses have limited opportunity to take advantage of current pedagogy. It is important to continue to develop tools that will produce culturally competent healthcare workers. Web-conferencing can be used in a new way as a technologic tool to meet this aim.

**Building Block Five: Technology and Distance Education**

One broad definition of distance education is used in this literature review. It is education wherein the student group and faculty group are separated geographically. Distance education can be provided through online courses, web-conferencing, video-conferencing, tele-conferencing, and correspondence courses. All of these mediums for distance education are enhanced by technology, except correspondence courses which rely on the U.S. Postal Service.
Figure 2.2, Taxonomy of Technology Enhanced Distance Education, illustrates the interconnection of the various forms of technology enhanced distance education. Each of those four technologies enables communication between the inner circle, representing national education, and the outer circle, representing international education. Thus, the technologies exist in a space that can be both national and international. Each is capable
of connecting groups from the same and/or different nations in dialogue for the purposes of collaboration and learning.

**Distance education versus onsite education.** Onsite education is the traditional model whereby students physically attend classes in brick and mortar buildings for face-to-face interaction with their faculty. The definition of online education is “teaching and learning activities enabled by electronic media” (Romm & Taylor, 2000, as cited in Granger & McGarry, 2002, p. 220). The purpose and impetus of online education has been under debate. Some believe that online courses should be available in order to give a choice, because it is possible, and because the technology is here to stay (Volzer & Weaver, 2004; Jancek, 2001). Bray (2007) reports a divergent view that online instruction should be utilized only to solve a problem faced by traditional education. In the discussion of purpose, some believe that it is a platform for education, while others believe that it is a communication vehicle (Markel, 2001; Bray, 2007, respectively). Online learning does not yet possess the same reputation for quality as traditional onsite learning, possibly inhibiting its potential growth (Mangan, 2012; Stimpson, 2012; Carnevale, 2007; Ashburn, 2006; Volzer & Weaver, 2004; Jancek, 2001).

Many types of institutions are capable of offering online education, including community colleges, comprehensive universities, research universities and virtual universities (The Institute for Higher Education Policy, 2000). Frequently, traditional onsite universities have a conglomerate of older buildings that have antiquated designs making space difficult to manipulate. Online learning loosens the coupling of teaching and physical space (Commonwealth of Australia, 2003; Newman & Johnson, as cited in McAllister and Mitchell, 2002). The flow of students arriving and leaving a traditional
classroom for onsite learning is no longer an issue. The room does not have to be empty at a certain time so that the next course can begin. Thus, the college itself experiences flexibility in course management and more students can be situated in the educational setting (Bray, 2007). Faculty members are given flexibility to manipulate their schedules as well. The classroom space is virtual in online learning (Byrd, 2001).

Locally, The Ohio State University Department of Statistics utilizes a buffet of learning opportunities approach. A multitude of educational options is offered, including traditional methods and many technology-enhanced methods. At the beginning of the course, students contract which methods they will utilize in completing assigned coursework. Faculty and teaching assistants are matched according to which styles correspond with their capabilities and preferences. This educational schema attempts to reach a broad variety of teaching and learning styles to maximize learning outcomes. The statistics department follows students weekly to assess progress toward course objectives. Module progression can only occur after proficiency is demonstrated. Based on analysis of their data, they predict a 25 percent decrease in course repetition, enabling increased enrollment (Twigg, 2001). Videoconferencing and web-conferencing could be another effective educational tool in this collective strategy toolbox.

Implementation of online courses presents faculty and administration with new challenges (McAlister, Rivera & Hallam, 2001). The traditional curriculum assessment needs to be completed to evaluate which portions can be utilized appropriately in the virtual format (Byrd, 2001). Faculty members have experienced incongruent learning objectives arising from traditional onsite courses once they begin online instruction.
Specific goals of online courses are necessary to create appropriate objectives (McAlister, Rivera & Hallam, 2001).

**Experiential learning and distance education.** An example of how experiential learning can be incorporated into distance education arises from the business sector whereby mentorships are created between community leaders and students for community work. In addition, students have traditional face-to-face instruction, as well as online learning sessions and coaching. This hybrid course interaction was described as bridge building in that it served to link academic/theory with service to the community. Students were able to build new knowledge through practice in their community work and reflection in class and online (Strait & Sauer, 2004). In this instance, a hybrid course brought together the best of each educational method for student learning. Alavi, Yoo and Vogel (1997) contend that since no one institution holds the best faculty in every discipline, that technology-mediated learning “enable(s) value-added partnerships” (p. 1329) which can improve the quality of education for everyone.

**Harnessing technology to increase intercultural exchanges.** When searching for research currently available directly addressing global perspectives, little is found in relation to web-conferencing specifically. Since each of these technologies involve teaching students not physically present, many of the findings from other types of distance education can inform the use of web conferencing. Therefore, literature on distance learning and video or web-conferencing is included as they are similar learning vehicles.

There is a vast amount written around the world about experiences and lessons learned regarding online education and culture. Several authors (Cifuentes & Murphy,
2000; Merryfield, 2002; Kim & Bonk, 2002) have been in agreement that cross-cultural learning prepares students to live and work as citizens of the world with local, regional and global ties. These researchers’ experiences of conducting video-conferencing and online teaching with students from kindergarten through college offer insight into cross-cultural student behavior and learning, as well as defining the instructor role. Some of these insights will be discussed further in this chapter.

The ways technology can assist with intercultural exchanges in higher education are becoming apparent. The evidence in this literature review suggests that it is one method by which educators can engage more students interculturally without the typical constraints of geography and resources, both human and financial. Technology is being utilized to assist with mutual scaffolding for the social construction of knowledge. Content is learned together in addition to learning about culture from international peers (Volet & Wosnitza, 2004; Warschauer, 1997). Muller-Hartman (2000) suggests that assignments need to push international student groups to compare and contrast their social observations, mutually deciding upon meaning that is congruent with both cultural perspectives.

There are many countries that utilize technology to teach in higher education with an intercultural component. They include: U.S., United Kingdom, Australia, Germany, China, Taiwan, France, South Korea, Spain and Denmark, in an approximate descending order. It is assumed that this list is not all encompassing, just the most frequently published (O’Dowd, 2000 & 2003; Furstenberg, Levet, English & Malliet, 2001; Von Der Emde, Schneider & Kötter, 2001; Kinginger, Gourvès-Hayward & Simpson, 1999; Davis & Cho, 2005; Devon, Hager, Lesenne & Pauwels, 1998; Liaw, 2006; Volet &
Wosnitza, 2004 & Müller-Hartmann, 2000). The disciplines that have embarked upon this venture include: Foreign Languages (Liaw, 2006; Devon, Hager, Lesenne & Pauwels, 1998; O’Dowd, 2003), International Education (Volet & Wosnitza, 2004; Ngai, 2003), Education (Davis & Cho, 2005; Davis, Hagenson, Nilakanta, Fraser, Fernandez, Nyvang, et. al. 2001; Goodfellow, Lea, Gonzalez & Mason, 2001), Technology (Devon, Hager, Lesenne & Pauwels, 1998; Davis & Cho, 2005; Davis, Hagenson, Nilakanta, Fraser, Fernandez, Nyvang, et. al. 2001), and Science (Devon, Hager, Lesenne & Pauwels, 1998), in estimated order from greatest to least regularity in publication. Interestingly, nursing is less frequently found in literature searches related to the theme of technology and international collaborations in higher education, despite the fact that Healthy People 2010 (USDHHS, 2012a) and the World Health Organization (WHO, 2008a) both call for increased cultural competence of health care providers nationally and internationally.

Technology, nursing education and culture. Progress is occurring in current teaching strategies in nursing, both with pre-licensed students and practicing nurses. However, they all have slightly different aims, and are not necessarily measuring cultural competence as an outcome. Some faculty are partnering online in an effort to connect geographically separated groups of nursing students in the US (Hilgenberg & Schlickau, 2002). In one situation/course the task was for pairs of students, one from each site, to work toward a solution to case studies of diverse cultural groups in each of their regions, one group Amish and the other Mexican. Each student was required to have three communications, email entries, with her/ his partner over a period of three weeks. The authors believe that this experience increased cultural diversity exposure, or cultural
awareness, for each group and provided the opportunity to work toward solving real problems caused by cultural differences. The evaluation of the project was the collection of qualitative student responses. Students largely appreciated the opportunity and knowledge they gained about another culture. Interestingly, they blamed technology for the lack of timeliness of some of their email communication with their partners. They requested greater structure and more frequent interaction, weekly, throughout the entire semester (Hilgenberg & Schlickau, 2002).

There are both strengths and weaknesses of technology-enhanced international education experiences. Some prefer asynchronous over synchronous online learning as it affords more time to compose thoughts (Volet & Wosnitza, 2004) and is better suited for creative and analytical components of the course/exchange (Ngai, 2003). There is the luxury of time in asynchronous learning whereby students can collect their ideas, write, reread and revise all before submitting/participating in the discussion. However, thoughtful, informed planning is necessary when creating a diverse student body. For example, Washer (2001) explains that students for whom English is a second language (ESL) need more support in distance education.

Many authors (Devon, Hager, Lesenne & Pauwels, 1998; Davis, Hagenson, Nilakanta, Fraser, Fernandez, Nyvang, et. al. 2001; Davis & Cho, 2005) assert that flexibility is one of the essential components in the implementation of cross-cultural learning. O’Dowd (2000) reports that the interactivity required of online learning during virtual international educational experiences is inherent and increases cultural competence. Faculty from Penn State University College of Engineering and the technology and engineering institutes of the Université d’ Artoisin Béthune, France
stated that the Internet provides greater quantity, quality and rapidity of interactions among their geographically separated student cohorts (Devon, Hager, Lesenne & Pauwels, 1998). Liaw (2006) used cross-cultural psychology and anthropology as the framework for such experiences, mostly comparing/contrasting in an effort to uncover similarities and differences between student groups. Both Liaw (2006) and O’Dowd (2003) warn that greater faculty presence may be necessary to prevent an underscoring of previously held stereotypes or a “fossilizing of stereotypes” (Liaw, p. 50), as can occur with short sojourns abroad without adequate preparation and training (O’Dowd, 2003).

Some implementation of pre-immersion work is necessary to prepare the students for the experience by understanding own culture first (Volet & Wosnitza, 2004; Liaw, 2006).

In these studies effectiveness was assessed in a variety of ways. A few of the authors argue that “face-to-face experience is vital for learning essential multicultural skills” (Ngai, 2003, p. 157) and explain that virtual encounters can supplement but not supplant them. Ngai (2003) proposed four key components to use as benchmarks when assessing such exchanges: (1) analytic competence, (2) emotional competence, (3) behavioral competence, and (4) functional/task competence (p. 168-169). Goodfellow, Lea, Gonzalez and Mason (2001) wrote of another matrix for intercultural online exchanges that included: (1) cultural otherness, (2) globality of issues and contexts, (3) linguistic difference in fluency and ability to respond, and (4) academic convention in assessment between differing educational systems (pp. 75-79).

Students and faculty often respond positively to the multicultural experiences in higher education. Liaw (2006) shared that the students enjoy the change in perspectives, increased knowledge of their own and others’ cultures, increased knowledge of
communicating with the others, and enjoy distance learning as a vehicle for increasing
cultural competence. Davis, Hagenson, Nilakanta, Fraser, Fernandez, Nyvang, et al.
(2001) stated that their students appreciate the opportunity to see how technology was
being used across the globe. The faculty expressed positive feelings about the
experiences in all articles. However, it must be noted that their response also included
concerns about workload and other practical issues.

One exemplar found in the literature was an initiative developed by faculty at the
University of Iowa School Of Public Health in a Global Health Campus whereby web-
conferencing was used to connect people for the purposes of education and training (VDI,
2005). Through this campus, a connection has been made in Nairobi, Kenya with the Aga
Khan University in East Africa to address health issues there (World Health
Organization, 2008b). The impact of this initiative has been highlighted on the Global

Other situations in which it is appropriate to use videoconferencing or web-
conferencing are for supplementing coursework, gaining access to external experts to
teach students, increasing cultural awareness and cooperation, and giving students the
opportunity to collaborate across physical distance (Mason & Davis, 2000). Vanderbilt
University Center for Science Outreach utilizes videoconferencing to provide service
learning activities. This project connects science experts with k-12 students to augment
and advance science education. They assert that it helps to connect theory to practice
(McCombs, Ufnar & Shepherd, 2006).

Video and web-conferencing characteristics. Video or web-conferencing is
unique because of the ability to see and hear others in real time. The separation of
location does not impede the ability to communicate and collaborate in a synchronous fashion. Coventry (n.d.) contends that the dialogue afforded by this technology, in the form of discussion and answering questions, “may create a sense of social presence” (p. 21). It provides the opportunity to engage in collaborative learning across traditional physical boundaries.

In a summary of research that focused on videoconferencing in higher education, Greenberg (2004) drew several conclusions. Videoconferencing can be just as effective as traditional face-to-face education. Although some state that videoconferencing is superior to traditional education and some posit that videoconferencing is inferior to traditional education, the majority of educators have found that there is no significant difference in learning outcomes for students. Given that starting point, videoconferencing and web-conferencing may be a vehicle that can provide an advantage for students as they gain access, boost efficiency and connect over distance (Greenberg, 2004). Additionally, utilization of this technology may expand the reach of the virtual classroom, increase exposure to and interaction with diverse others, and learn to work in the global knowledge economy.

Interaction among students and faculty and between students is a key ingredient possible with this synchronous technology. Faculty members are required to utilize teaching strategies that promote and develop interactivity between all of the participants. This is critical to success as there is greater potential for any message to get lost without adequate time to interact and process (Greenberg, 2004). In a review of literature about pedagogy and videoconferencing, Armirian (2003) asserts that this interaction supports critical thinking as students work out meaning over distance and can lead to increased
student satisfaction. Webster and Hackley (1997) found that students felt more positively about courses that included increased opportunity for interaction. McCombs, Ufnar and Shepherd (2006) add that “interactivity supports more social learning, leading to the creation of a community of distance learners” (p. 65). Interaction in videoconferencing is supported by thoughtful room design. Placing students in a semi-circle facing the camera, as opposed to traditional rows, allows all faces to be seen by the instructors, as well as the remote group, thereby facilitating greater communication (Webster & Hackley, 1997; Mason & Davis, 2000).

Alavi, Yoo and Vogel (1997) describe videoconferencing used to engage in experiential learning in management education with two geographically separate groups, one of students and faculty and the other with just one student group. They utilized in-class activities via videoconferencing and out-of-class experiential activities managed by asynchronous computer discussion among groups. The researchers discovered that there was no significant difference in academic performance between the local and distant groups who had received face-to-face education with their local instructor or distant education with their videoconference remote instructor. Nor were there significant differences for either group in the out-of-class learning context. However, satisfaction in social presence and in-class interactions dropped with the group physically separated from the faculty. This was hypothesized to be related to slower feedback and nonverbal cues.

Faculty who engage in this type of educational method must learn to shift from traditional lecture as educators lose effectiveness in this realm (Mason & Davis, 2000). They must adapt their current teaching style to one which is more interactive (Amirian,
2003). Thus, situations whereby interaction can be appropriately infused must be planned in order for videoconferencing to be a sound pedagogical method (Greenberg, 2004; Amirian, 2003). Further, it is advised that faculty must provide clear expectations and build cognitive scaffolding to allow students to reach past previous knowledge and feel comfortable as participants during the videoconference (Amirian, 2003). Svinicki (2004) defines scaffolding as the process by which teachers provide instruction that enables the student to compare new information to information already learned, to provide a bridge or scaffold to previously held knowledge, ultimately helping the student to compare the examples and gain understanding of the new information.

Videoconferencing technology is a budget-friendly manner by which to reach distant peers (Greenberg, 2004). If using the traditional ISDN (Internet Services Digital Network) line, through standard telephone wire, with compatible videoconferencing systems, a one-time purchase is made. If using web-conferencing via Internet Protocol (IP), over computer line, there is cost associated with paying a third party to transport the data between sites. However, the cost of both videoconferencing and web-conferencing is substantially less than the cost of traveling a distance with a group of students, a student exchange, or a study abroad.

**Distance course versus videoconferencing.** Jung (2001) defines distance learning as communication undertaken by a physically separated learner and instructor who utilize some sort of technology in an attempt to obtain new information, to process that information into the creation of knowledge, and to cultivate the skills of applying that knowledge appropriately. It may occur synchronously, at the same time, or asynchronously, at different times. Videoconferencing and web-conferencing are in the
subset of synchronous distance learning. Whereas correspondence courses, web based instruction, and television classes are in the asynchronous subset of distance learning. The asynchronous subset is considered more flexible with regard to time.

When attempting to compare and contrast distance learning with videoconferencing it is helpful to back up and revisit the dialogue between traditional face-to-face education and e-learning or web-based instruction. This is important because videoconferencing and web-conferencing fall somewhere in the middle of them, drawing components of each. Zhang, Zhao, Zhou & Nunamaker (2004, p. 76) developed a table outlining the advantages and disadvantages of traditional learning and web-based instruction. Based on an in depth review of literature, the table was revised to include a new column developed by the author addressing the advantages and disadvantages of video-conferencing and web-conferencing. (See Table 2.1: Advantages & Disadvantages of Traditional Learning, Video-conferencing/ Web-conferencing & Web-based Instruction.)
Table 2.1

Advantages & Disadvantages of Traditional Learning, Video-conferencing/ Web-conferencing & Web-based Instruction, revised from Zhang, Zhao, Zhou & Nunamaker (2004, p. 76)

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Traditional Face-to-Face Instruction</th>
<th>Video-conferencing/ Web-conferencing</th>
<th>Web-based Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback immediate</td>
<td>Feedback immediate</td>
<td>Time and location independent</td>
<td></td>
</tr>
<tr>
<td>Experience with this method for both students and faculty</td>
<td>Engaging to students</td>
<td>Decreased cost to deliver</td>
<td></td>
</tr>
<tr>
<td>Engaging to students</td>
<td>Social community development</td>
<td>Student centered</td>
<td></td>
</tr>
<tr>
<td>Social community development</td>
<td>Must be interactive</td>
<td>Self-paced</td>
<td></td>
</tr>
<tr>
<td>Can be interactive</td>
<td>Decreased cost to deliver with global audience</td>
<td>Accessible to global audience</td>
<td></td>
</tr>
<tr>
<td>No technologic savvy required of participants</td>
<td>Accessible to global audience</td>
<td>Minimum technologic savvy required of participants</td>
<td></td>
</tr>
<tr>
<td>Most participants comfortable and familiar with this method</td>
<td>Interaction can be saved for later reuse</td>
<td>Easier for participants who have language differences</td>
<td></td>
</tr>
<tr>
<td>Most not anxious</td>
<td>More natural conversation</td>
<td>More natural conversation</td>
<td></td>
</tr>
<tr>
<td>Easier for participants who have language differences</td>
<td>Ability to learn complex tasks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More natural conversation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to learn complex tasks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group size can be large</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

continued
<table>
<thead>
<tr>
<th>Disadvantages</th>
<th>Traditional Face-to-Face Instruction</th>
<th>Video-conferencing/Web-conferencing</th>
<th>Web-based Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and location dependent</td>
<td>Time and location dependent</td>
<td>Feedback delayed</td>
<td></td>
</tr>
<tr>
<td>Increased costs to deliver</td>
<td>Lack of experience with this method for all</td>
<td>Lack of experience with this method for all</td>
<td></td>
</tr>
<tr>
<td>Can be faculty centered</td>
<td>Can be faculty centered</td>
<td>Not as interactive</td>
<td></td>
</tr>
<tr>
<td>Pacing driven by group</td>
<td>Pacing driven by group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not accessible to global audience</td>
<td>Some participants uncomfortable with this method</td>
<td>Greater faculty preparation time</td>
<td></td>
</tr>
<tr>
<td>Interaction cannot be saved for later reuse</td>
<td>Can be anxiety producing for some</td>
<td>Technologic savvy required to participate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group size limited to less than 30</td>
<td>Some participants uncomfortable with this method</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased cost to deliver with local audience</td>
<td>Can be anxiety producing for some</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>More difficult for participants with language differences</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less natural asynchronous conversation, visual anonymity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decreased ability to learn complex tasks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group size limited</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.1
A discussion about ways videoconferencing is similar to face to face education has been occurring for quite some time. Burke, Lundin & Daunt (1997) found that videoconferencing closely resembled/ was able to mirror face-to-face traditional education much more than web-based instruction. They witnessed full student engagement with high degree of unprompted interaction which was able to be continued at high levels for a long amount of time. This is counter to Coventry’s (n.d.) findings that participants have limited amount of ability to maintain heightened attention during videoconferences.

Interactivity, paramount to the success of videoconferencing and web-conferencing, can be separated into two pieces: interactivity between the learner and her/his material, and interactivity between people. Both types of interaction are present to large degree in this method of teaching and learning (Bates, as cited Burke, Lundin & Daunt, 1997). In contrast, web-based instruction is heavily skewed toward interactivity between the learner and her/his material. From this perspective, videoconferencing and web-conferencing possesses some of the same strengths as traditional face-to-face instruction.

It is more difficult to learn the cultural nuances and teaching/learning styles in web-based or online instruction. Adding video with visual cues and nonverbal signals can make a positive impact. Following the learning experiences through videoconferencing, students from Hong Kong expressed an appreciation for being able to understand cultural differences, particularly related to learning. They attempted higher levels of participation than without the addition of video, secondary to thoughtful faculty teaching methods and student catalyst-like behavior. Students in Hong Kong do not typically challenge the
opinions of others or question lecturers. However, the opportunity to watch the Australian student group via videoconference was the right balance of distance and personalization to encourage interaction, as opposed to disappearing into the group that can sometimes occur in a face-to-face setting. The virtual learning environment of a videoconference empowers students by “cultivating disinhibition which engender(s) a feeling of equality among all participants in being able to initiate interaction in both agenda setting and the teaching/learning process” (Burke, Lundin & Daunt, 1997, p. 360).

Online education has been identified by students as a strong delivery method for some aspects of learning and as a weak delivery method for certain types of content. One of the major points of student satisfaction with web-based instruction is the heightened amount of control and flexibility. Students studying in this environment enjoy the ability to set their own hours, to control the pace of learning, to have access to learning wherever they had access to a computer and establish internet access. Clearly, this type of learning is best suited for students who are highly internally motivated. However, for material that is more difficult or unfamiliar, student satisfaction with web-based instruction diminished (Piccoli, Ahmad & Ives, 2001).

The lack of audio and video enhancements in distant education can cause altered student-faculty exchanges. These communication shifts occurring during computer mediated communication have not gone unnoticed by faculty who teach online courses and receive student email. Joinson, a senior lecturer in information systems in the United Kingdom, has conducted research and published extensively regarding the construct of visual anonymity which arises in online learning (Joinson, n.d.). He has found that this visual anonymity from computer mediated learning results in “reduced public self-
awareness…and heightened private self-awareness” (Joinson, 2001, p. 188) leading to
greater levels of online self-disclosure, compared to learning face-to-face where
participants are directly observable. Thus, it appears that the lack of video in online
learning may distort normal communication patterns.

When given the choice, students in higher education select more versus less
methods of communication. In other words, they perceive visualizing the instructor as
receiving more information and prefer that to less, or solely written communication. The
more information, the better as students felt most positively about full interactive audio
and video over limited interaction or no interaction (Allen, Bourhis, Burrell & Mabry,
2002).

**Learning best suited for videoconferencing.** During online education,
participants cannot see one another as they can in face-to-face classes. This can be
problematic for groups comprised of different cultures and languages. Video-
conferencing is helpful when it is necessary to maximize nonverbal cues in order to
increase accuracy of communication and learning with multicultural groups (Veinott,
Olson, Olson & Fu, 1999). When such groups speak different languages, the ability to use
nonverbal cuing through video-conferencing is a plus (Veinott, Olson, Olson & Fu,
1999).

Learning interactions between geographically separated groups that require more
intimate communication, such as negotiating solutions to problems or problem based
learning, are assisted by video-conferencing. Likewise, video-conferencing makes it
possible to see others when performing educational activities with them that necessitate
more complex communication (Veinott, Olson, Olson & Fu, 1999). Learning where
higher levels of public self-awareness are desired (Joinson, 2001), social interaction with groups is necessary, and the development of relationships and a high level of team work is required all benefit from video-conferencing (Tang & Isaacs, 1993). In these cases, video-conferencing helps to simulate actual face-to-face contact.

Video-conferencing is positively leveraged in distant learning situations that benefit from viewing 3-dimensional objects (Tang & Isaacs, 1993), such as human patient simulations in health care fields, engineering, chemistry, distant surgery participation and education (VDI, 2005). Learning whereby students require more immediate feedback (Greenberg, 2004), with faculty who are comfortable teaching in an interactive fashion (Greenberg, 2004), are also helped with video-conferencing. These situations require as close to face-to-face presence as possible and video-conferencing is one way to attain such contact.

When it is necessary to increase access to valuable resources over a distance, video-conferencing can accentuate the ability to interact with well-known field experts in separate locations (VDI, 2005). This can occur when the students are scattered in various places or when the experts are not close to campus. Additionally, video-conferencing can help in learning situated in colleges attempting to reach a larger audience to increase educational options and access (Greenberg, 2004). In both of these situations, the video-conference is the vehicle that allows the faculty to be almost as close as a face-to-face learning experience.

Video-conferencing serves well learning situations that are not time independent, are synchronous, in which there is time to plan ahead and train all participants. Unlike
face-to-face learning, adequate monetary and technical support for the equipment and information technology staff assistance is a requirement (Greenberg, 2004).

The business world has performed quasi-experiments examining the effects of video on conferences between geographically separated groups. They have found that interpersonal communication is facilitated by video as it assists with turn taking; punctuates verbal communication with gestures, facial expressions, and reasons for hesitations in speech; and demarcates humor and sarcasm. Participants expressed increased satisfaction with conferences where video was utilized, and articulated significant drops in satisfaction when video was removed. The authors contend this is because “video supports social interaction” (Tang & Isaacs, 1992, p. 188).

In order to meet the needs of the global economy, researchers at the University of Michigan and the Chinese Academy of Sciences studied the effects of video-conferencing and web-conferencing on accomplishing remote work. They found that pairs of native speakers were able to perform equally well with or without video enhancement. In contrast, non-native pairs of speakers showed significant improvement in performance with video assisted communication. Not surprisingly, the non-native speaking pairs believed the video to be more useful than the native speaking pairs. Furthermore, the greater the disparity in language, the more the pair valued the addition of video. For more complex tasks participants used a greater number of gestures to improve clarity, showing a considerably improved performance. When examining the results, or impact of video, the authors explain, “There is less confusion, less need for explicit repair, and common ground is more easily negotiated” (Veinott, Olson, Olson & Fu, 1999, p. 307).
In addressing faculty views about video-conferencing in higher education, Coventry (n.d.) found that approximately fifty percent of the sample believed it was more difficult to engage students, to get them to participate and to provide practical experiences than in face-to-face settings. An equal percentage of faculty felt that video-conferencing allowed them to respect student viewpoints, spark critical thinking and promote diverse thinking.

**From monocultural to intercultural teaching and learning.** The way to maximize student learning in this regard is to infuse activities and resources that reflect the variety of cultural learning preferences, mixing student groups to maximize cross-cultural exposure and experiences (McLoughlin, 2001b); and provide real world tasks for solving in a collaborative fashion, in order to create the requisite skill set for working together in a global, multicultural context (TSCCUT, 2005; Whittle, et. al., 2000). Merryfield (2003) challenges educators who embark in online teaching to guide conversation with a more global lens and challenge Euro-American assumptions because “understanding the relationship between culture, power, and worldview is fundamental to the development of perspective consciousness” (p. 151). This virtual excursion is critical because these classrooms fill the need for exposure to multicultural perspectives since a majority of students in higher education will not have the opportunity to visit or study in another country (McLoughlin, 2001b).

The pedagogy informing online learning with distant others is pleuralistic, shifting from monocultural to cross-cultural teaching about new and different ways to build knowledge (McLoughlin, 2001a). From Australia, the Sydney Campus of Curtin University of Technology [TSCCUT] (2005) cautions that merely adding a global topic
in a course does not automatically create cultural awareness of students. They must actively participate in group discussion of topics of international interest with course content and sources arising from around the globe. This sentiment was also expressed earlier by Merryfield (2001). The cultural perspective of the education does not necessarily change just because the course is online.

Merryfield (2000) shares data from interviewing teachers identified as proficient at multicultural and global education. They had a common history of being on societal fringes and an understanding of what it means to not be a part of the mainstream of power and privilege. Caucasian teachers who embarked successfully on this journey had experiences of being outsiders, typically in another country. Merryfield’s view is that teaching these issues is difficult, at best, if never lived. This is contrary to the popular notion that anyone can be taught to be an effective multicultural and global educator (Merryfield, 2000).

Other successful strategies for increasing cultural awareness during online education include the utilization of cultural consultants to assist with discussion, to add alternative perspectives and move conversation from ethnocentric to global (Merryfield, 2001). Students can build relationships and connect globally from online creating cross-cultural collaborations in a safe environment, whereby they increase cultural competencies through deeper interactions and exchange of ideas with diverse peers. If given the opportunity to engage in online simulations with culturally diverse scenarios, students develop the necessary skills to handle these situations in the marketplace (Kitsantas, 2003).
The heterogeneous society of the U.S. demands increased flexibility in teaching, wherein an eclectic paradigm is useful to preserve individual cultural identity (Collis, 1999). Ensuring cultural inclusivity is the goal so that students do not have to divorce themselves from their culture and assimilate in the online course (McLoughlin, 1999). Four essential pieces have been found necessary in order to maintain fluidity: (1) language and communication, (2) communication and interaction, (3) content, and (4) representational/visual form. The most critical point is that multiculturalism can occur in education via an online course but not without human sensitivity and skills acquired from interacting with and observing diverse cultures. Thus, the marriage of technology and humanness is the best approach in a multicultural online setting (Collis, 1999).

Collaborative cross-cultural video-conferencing in higher education creates more tolerant and respectful members of society who display multicultural awareness and a positive self-concept (Cifuentes & Murphy, 2000). Utilizing a social constructivist pedagogy wherein students’ experiences are supported allows them to make meaning and grow from a parochial to global viewpoint (Cifuentes, et. al., 2000; Whittle, Morgan & Maltby, 2000). In other words, these experiences enable students to gain a broader perspective, expanding their vision and understanding of others. Collaborating teachers may also benefit as they are empowered through their multicultural relationships with one another (Cifuentes, et al.). Providing students with the opportunity to work over a span of time helps them to build relationships with their culturally diverse peers, as opposed to other life experiences, such as donating in a paternalistic fashion (Merryfield, 2002). It is unclear how many opportunities students need to work with peers from other cultures in order for increased awareness and transformation to occur.
There are cultural differences in students’ collaborative behavior that must be acknowledged by faculty in order to encourage early online social engagement, facilitate discussion across cultures and decrease barriers that minimize communication and collaborative learning. These differences should be explicitly addressed with the students to further cultural understanding (Kim & Bonk, 2002). Key teaching methods that should be employed by global educators are: “confront stereotypes…resist simplification of other cultures and global issues; foster the habit of examining multiple perspectives; teach about power, discrimination, and injustice; and provide cross-cultural experiential learning” (Merryfield, 2002, p.18).

In online education, cultural competence is critical because technology acts as a ‘global amplifier,’ enabling people who would not otherwise meet to interact and recognize cultural similarities and differences (Cole & Engestrom, as cited in McLoughlin, 2001b, p. 8). The classroom is enlarged with international participants forming a global perspective (McLoughlin, 2001b; Merryfield, 2003) wherein students learn to recognize and consider positions of various stakeholders, and gain awareness that local actions have global effects, and vice versa. Students also come to understand ethical considerations of their actions (TSCCUT, 2005), develop flexible thinking, cross-cultural skills and competencies, and a global network (McLoughlin, 2001b).

For the online groups from the U.S. there were gains in cultural knowledge and awareness. Hilgenberg & Schlickau (2002) reported that nursing students appreciated the opportunity to interact with geographically separate, culturally diverse peers through assigned email exchanges throughout the academic term. The students also expressed knowledge gains from the online experience. They blamed technology for decreased
timeliness of email communication and requested greater structure and frequency in future interaction. Adding audio to a domestic online cultural diversity course for nursing students was found to increase knowledge of content (Adam, 2008). However, others warn that online instruction regarding cultural competence can supplement but not replace face-to-face experiences (Campinha-Bacote, as cited by Adam, 2008).

**Gaps in Research**

In this chapter, an attempt has been made to loosely couple intercultural learning and competency, experiential learning, self-efficacy, appreciation of the role of culture, technology, and distance education, the primary colors or building blocks, in an effort to improve cultural competence of nursing students. It is evident that there are gaps in the current body of knowledge. It is unknown if web-conferencing is an effective concrete learning experience. It is also unknown if this new type of experiential learning can improve self-efficacy and/or cultural competence from a couple of experiences with opportunity for reflection. Thus, the aim of the proposed research is to study the effect of connecting disparate groups of nursing students and faculty through the experiential learning method of web-conferencing to ascertain if there is an impact on cultural awareness, cultural competence and/or self-efficacy. Additionally, we need to better understand the following questions.

1. Do students’ cultural competence scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences?
2. Do students' transcultural self-efficacy scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences?

3. What do students feel they have learned about cultural differences and similarities by working with their distant colleagues through the process of web-conferencing together?

4. How do students believe that they will be able to use knowledge gained from the web-conferencing experience in their future nursing practice?

5. What do students think the value might be from working with a cohort from another culture as part of their nursing education?

6. How do students define intercultural competence in nursing?

7. How have students’ views regarding culture and nursing changed from participation in the web-conferencing?

8. If students’ views regarding culture and nursing have not changed, why not?

A detailed description of study methods occurs in Chapter Three, Methods.
Chapter 3: Methodology

This chapter is intended to provide a thorough description and explanation of the methodology selected for the study of the research questions discussed in Chapter One:

(1) Do students’ cultural competence scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences?

(2) Do students' transcultural self-efficacy scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences?

(3) What do students think they have learned about cultural differences and similarities by working with their distant colleagues through the process of web-conferencing together?

(4) How do students believe that they will be able to use knowledge gained from the web-conferencing experience in their future nursing practice? (5) What do students think the value might be from working with a cohort from another culture as part of their nursing education?

(6) How do students define intercultural competence in nursing?

(7) How have students’ views regarding culture and nursing changed from participation in the web-conferencing? and (8) If students’ views regarding culture and nursing have not changed, why not?

To summarize, nursing practice occurs in a multicultural world (Watt, Law, Ots & Waagø, 2002; Leuning, Swiggum, Wieger & McCullough-Zander, 2002). Thus,
educational pedagogy should be such that students are prepared to meet the needs and challenges of working with diverse populations (Leuning, Swiggum, Wiegert & McCullough-Zander, 2002; Omeri, 2008). Underscoring this need for teaching strategies and curricula that improve cultural competence is the lack of diversity in the student and nursing workforce populations (Adam, 2008). Traditional methods to reach these educational goals that are currently being employed in nursing higher education are international student exchange programs (Watt et al., 2002), service learning (Hunt & Swiggum, 2007; Riner & Becklenberg, 2001), distance or online education (Hilgenberg & Schlickau, 2002) and simulation (Rutledge, Barham, Wiles & Benjamin, 2008; Brathwaite, 2005). However, a deficit still exists in providing culturally competent health care. This is expressed at both national (United States Department of Health and Human Services [USDHHS], 2012b) and international levels (World Health Organization [WHO], 2012).

In the literature review, the second chapter, teaching pedagogies and methods were presented from other disciplines and countries that have not been attempted in nursing education in the United States (U.S.). Higher education, business, sociology, foreign language, communication, political science, medicine and nursing are some of the disciplines from the U.S., United Kingdom (U.K.), Australia, Sweden, Norway, Lebanon, and Saudi Arabia informing this work. The purpose of this study was to discover if transcultural self-efficacy and cultural competence of nursing students can be improved through web-conferencing, and to examine what knowledge the students created from the experience. Nursing has not utilized web-conferencing to advance transcultural self-efficacy and cultural competence making this research unique.
Theoretical framework. The concepts that have informed the design of this study are important to note as all researchers hold certain assumptions. Pragmatism, constructionism, and contextualism are concepts paramount to the development of this mixed methods research. A pragmatic researcher views the problem as the highest concern and the method of solving the problem is secondary. “[Pragmatic] researchers posit that research is contextually based and typically employ both quantitative and qualitative approaches to understand the problem” (Bloomberg & Volpe, 2008, p. 10). In this study, the problem is how to teach students culturally congruent health care.

As defined by Abbot (2004), constructionism is “the social process…made up of people who construct their identities and selves in the process of interaction with one another” (p. 47). In other words, the students in the United States cohort may become more in touch with their ethnicity when interacting with students who hold different ethnic identities. The social setting helps to bring their ethnicity into being.

The context of the study is also important to understand. It was conducted via web-conference over the internet instead of an in-person classroom situation within a college setting. Any meaning made by the students cannot be divorced from the context within which it is situated. This is known as contextualism (Abbot, 2004).

Appropriateness of mixed method design. This study utilizes both quantitative and qualitative research methods. Much is known about teaching cultural competence in nursing with quantitative tools developed to measure cultural competence (Campinha-Bacote, 2007), and transcultural self-efficacy (Jeffreys, 2006). Obtaining honest answers to survey questions can be problematic, particularly for questions deemed sensitive in nature to the respondents (Schaeffer, Mendenhall & Ott, 2006). This is a strength of self-
administered anonymous surveys since responders do not have to share their answers with an interviewer in person (Fowler, 2002). In addition to the current knowledge base regarding cultural competence education, important dimensions remain unknown, such as the meaning students make together through the experience of being connected with diverse groups of other students via web-conferencing. The awareness of differences and similarities in culture, as well as how students define cultural competence in nursing, are best gleaned from qualitative inquiry through focus group interviews. It is in this context that the students had the opportunity to speak freely about their thoughts and feelings from participation in the two web-conferences.

Web-conferencing was conducted between two geographically separated groups of nursing students and their respective faculty, one located in Ohio and the other located in east central Ireland. Web-conferencing is unique because it affords the ability to see and hear others in real time. The separation of location does not impede the ability to communicate and collaborate in a synchronous fashion. Coventry (n.d.) contends that the dialogue afforded by this technology, in the form of discussion and answering questions “may create a sense of social presence” (p. 21). It provides the opportunity to engage in collaborative learning across traditional physical boundaries. Whole group discussions can occur between locations, as well as small group discussion among local groups with reporting back to the larger, combined group across the web. Students have the opportunity to construct knowledge together with faculty members in the role of facilitator.

The primary methodology in this study was quantitative. Nurse researchers have studied the constructs of cultural competence and transcultural self-efficacy and
developed survey instruments to measure them. “The purpose of the survey is to produce statistics, that is, quantitative or numerical descriptions about some aspect of the study population” (Fowler, 2002, p. 1). Two surveys were used: (1) the *Inventory for Assessing the Process of Cultural Competence Among Health Care Professionals* (IAPCC) (Campinha-Bacote, 2009), and (2) the *Transcultural Self-Efficacy Tool* (TSET) (Jeffreys, 2006). Both of the surveys selected have been used to measure change in student attitudes, of both nurses and other health care professionals, and beliefs regarding these constructs with different pedagogies (Brown et al., 2008; Salman et al, 2007; Denial, Hoppe & Carlson, 2006; Cooper-Brathwaite, 2005; Luquis & Perez, 2005; Jeffreys & Smolilaka, 1999). These tested surveys were used to collect data before and after a different form of experiential learning, web conferencing. This was done to determine if web-conferencing can be a useful vehicle to connect dissimilar groups in order to improve cultural competence and transcultural self-efficacy among nursing students.

In addition, the following open-ended questions were explored as they are important for deeper understanding and are not addressed by the quantitative methods: What do students learn about cultural differences and similarities by working with their transatlantic colleagues through the process of web-conferencing together? How do students believe that they will be able to use any knowledge gained from the web-conferencing experience in their future nursing practice? Why do students think that working with a cohort from another culture is part of their nursing education? How do students define intercultural competence in nursing?

Therefore, the purpose of the qualitative component of this mixed methods study was to add to, inform and support or refute the quantitative data in order to increase
understanding, “make sense of complex situations…learn from the participants in a setting or process the way they experience it…construct a theory or theoretical framework that reflects reality” (Morse & Richards, 2002, p. 28).

In an editorial in *Qualitative Health Research*, Morse (2005) discusses the flurry of mixed methods research and even the request of it by granting agencies. She argues that using mixed methods with the same data set, and without requisite methodological principles, is not sound or appropriate. Indeed, she states that oft times quantitatively driven mixed methods research uses a qualitative component to prop up an otherwise insufficient quantitative study design. These arguments are valid leading to careful consideration of why both methods were selected for the design of this study. Two separate data sets will be used. The research methods will be discussed in turn, beginning with quantitative.

Nurse researchers have conducted much research on cultural competence in nursing enough to understand many of its separate components and to develop survey instruments which have been tested and measure this construct (Campinha-Bacote, 2009 & Jeffreys, 2006). These quantitative surveys were used in order to determine if the pedagogy of web-conferencing, as a method of experiential learning, is effective in improving cultural competence and transcultural self-efficacy among nursing students. Supplementing the quantitative data will be qualitative data gathered from focus group interviews about the meaning made of the experience of web-conferencing with geographically separated and culturally diverse student peers.
Quantitative Research Questions

1. Do students’ cultural competence scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences? (This will be measured with the Inventory for Assessing the Process of Cultural Competence among Health Care Professional – Student Version, IAPCC-SV.)

2. Do students’ transcultural self-efficacy scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences? (This will be measured with the Transcultural Self-Efficacy Tool, TSET.)

Quantitative hypotheses.

1. There will be no significant differences between groups on the pretests of the IAPCC-SV.

2. There will be no significant differences between groups on the pretests of the TSET.

3. There will be significant differences between groups on the posttests of the IAPCC-SV with the web-conferencing group scoring higher than the control group.

4. There will be significant differences between the groups on the posttests of the TSET with the web-conferencing group scoring higher than the control group.

In the above hypotheses, the IAPCC-SV is the Inventory for Assessing the Process of Cultural Competence among Health Care Professional – Student Version, the
survey tool to assess levels of cultural competence (Campinha-Bacote, 2007). TSET is the *Transcultural Self-Efficacy Tool*, the survey tool to assess levels of transcultural self-efficacy (Jeffreys, 2006). (See the Survey Research section of this chapter for a detailed description of each of these tools.)

**Quantitative Data Collection**

**Participants.** This study was conducted with senior level undergraduate nursing students at a private single-purpose nursing college in the Midwest of the United States. It was conducted on the campus. A student group from University in Dublin, Ireland participated in the web-conference experiences with the students from the private college. The international nursing students were *not* included in the data collection for this study as the tools have only been tested with students in the United States. Testing the validity and reliability of the survey tools with other cultures is beyond the scope of this study. Therefore, for the purposes of this study, the freshman undergraduate nursing students at the private college were the participants of focus.

A full IRB review was conducted and approval was granted on March 20, 2012, protocol number 2012B0119. (See Appendix B: IRB Approval.) During the research, I was an administrator of distance education for post-licensure nursing students at the Private Catholic College in Ohio, the location of the research. However, I conducted the research presentation/recruitment in my role as a doctoral candidate from a large public research university. The research was conducted with a student group over which I have no authority. Subjects were enrolled in an undergraduate, pre-licensure nursing students in a face-to-face class.
The instructor of a Human and Religion course at the Private Catholic College in Ohio told the nursing students that a doctoral candidate would be speaking with them about participating in research but did not solicit the students. I traveled with the instructor and her students to a field trip to a synagogue during their course. After the field trip experience, I introduced myself as a doctoral candidate from the large public research university. I did not wear my employee badge from the Private Catholic College in Ohio. I spoke with the student group, explained the research, and asked them to consider participation. I told them that it was entirely optional, and that even if they did begin the study, they could drop out at any time. I explained that participating or not had no influence on their grade in the instructor’s class. I handed each of them a hard copy of the recruitment letter written according to the template from and approved by the IRB of the large public research university. Later that day, I sent an email of this same recruitment letter to each student from my university student email account. Their email response back to me saying that they would participate served as their informed consent. (See Appendix C: Recruitment Letter.) Thirty-five students volunteered to participate from the convenience group of an intact class of 80 students. Participants were randomized into a treatment group (n=18) and control group (n=17).

Survey Research

Survey research was chosen as the method to collect data for the quantitative portion of this study. The reason this method was chosen is that it can provide numerical data about the relationship among variables (Fowler, 2002) in order to better describe any difference among the means between groups and correlation between the students’ transcultural self-efficacy and cultural competence and the experiential learning through
international web-conferencing. As discussed in chapter two, several nurse researchers have contributed to the specialization of transcultural nursing. A few have developed and tested theories and models, as well as survey tools to measure different constructs related to their theories and models regarding cultural competence in nursing.

**Campinha-Bacote’s survey instrument: IAPCC.** Josepha Campinha-Bacote is one of the most well-known transcultural nursing theorist who has done extensive work in this area since the 1980s. She holds advanced certification in Transcultural Nursing by the Transcultural Nursing Society. In 1991, Campinha-Bacote (2003) defined cultural competence as “the ongoing process in which the healthcare professional continuously strives to achieve the ability and availability to work effectively within the cultural context of the patient (individual, family, community)” (p. 3).

A *Culturally Competent Model of Care* was created by Campinha-Bacote (2007) that includes five interdependent constructs: cultural awareness, cultural knowledge, cultural encounters, cultural skill, and cultural desire. Her visual representation has evolved into a five circle figure, with cultural encounters at the center and the other four constructs in separate circles positioned around the edges. Campinha-Bacote believes that cultural encounters are the antecedent to a person’s work toward achieving the other constructs of cultural awareness, cultural desire, cultural knowledge, and cultural skill. A person must have the opportunity to encounter other cultures in order to develop and strengthen the other constructs (Campinha-Bacote, 2011).

The first instrument developed (Campinha-Bacote, 2009) was the *Inventory for Assessing the Process of Cultural Competence Among Health Care Professionals* (IAPCC), a tool measuring the five constructs of her model. It was largely used with
Registered Nurses, although Campinha-Bacote maintains that it can be used with other disciplines in health care. The tool was tested for reliability and revised, resulting in the IAPCC-R which was “designed to measure the level of cultural competence” (Campinha-Bacote, 2007, p. 119).

When nurse researchers first used the IAPCC-R with nursing students, the reliability was lower than desired, so it was amended for students leading to the Student Version, or the IAPCC-SV. There are 20 items on the IAPCC-SV. All of them are Likert style questions, “assessing attitudes toward a topic” (Ary, Jacobs, Razavieh & Sorensen, 2006, p. 227). After various statements are made regarding the constructs, participants indicate on the four point Likert response format whether they “strongly agree, agree, disagree, or strongly disagree” (Campinha-Bacote, 2007, p. 121). It is currently a pencil and paper survey, but can be administered on a computer.

**Jeffreys’ survey instrument: TSET.** Marianne Jeffreys is a well-known scholar in transcultural nursing circles who received the 2003 Leininger Award for Excellence in Transcultural Nursing from the Transcultural Nursing Society. Building on Bandura’s work with self-efficacy and agreeing “that self-efficacy is a mediator and predictor of outcome performance behaviors and outcomes,” (Jeffreys, 2006, p. 63) she developed a model called the Cultural Competence and Confidence (CCC) model. Jeffreys’ key construct of transcultural self-efficacy is defined as “the perceived confidence for performing or learning transcultural nursing skills. It is the degree to which individuals perceive they have the ability to perform the specific transcultural nursing skills needed for culturally competent and congruent care” (Jeffreys, 2006, p. 31).
In the CCC model, nursing students can behave in one of three ways: inefficacious, efficacious or supremely efficacious. If they are inefficacious, having low confidence and self-efficacy, they will see transcultural nursing tasks as obstacles. They will feel overwhelmed and defeated and thus expend little energy to learn. This makes them at risk to deliver culturally incompetent care. Those who are overly efficacious, having too much confidence and self-efficacy compared to their skillset, will see the transcultural nursing tasks as effortless. They will not bother to prepare for care. The risk is that they may deliver culturally incompetent care. It is only the efficacious, or the strong resilient group, with the confidence and self-efficacy that matches their skills, who will see the transcultural nursing task as a challenge worthy of the effort to learn. They will demonstrate the persistence to continually learn and refine their skills, eventually being able to deliver culturally competent care. Jeffreys’ (2006) CCC model can be used by nursing educators to identify where students are in the learning process regarding cultural competence and confidence, create educational plans, develop innovations in education and research, and evaluate those plans and innovations.

Jeffreys created and tested a tool, the Transcultural Self-Efficacy Tool (TSET), to measure the construct of transcultural self-efficacy with cognitive, practical and affective subscales. The cognitive component asks 25 questions about the confidence of students’ knowledge regarding how culture influences the care delivered by the nurse. The practical component asks 28 questions about the students’ confidence in their ability to interview patients of diverse cultures about their values and beliefs. The affective component asks 30 questions about the students’ attitudes, values and beliefs (Jeffreys, 2006). Based on Bandura’s self-efficacy theory, her literature review, and testing of her
instrument, Jeffreys was able to validate her assumptions that informed the TSET.

“Learning in the cognitive, practical, and affective dimensions is paradoxically distinct, yet interrelated. Learners are most confident about their attitudes (affective dimension) and least confident about their transcultural nursing knowledge (cognitive dimension)” (Jeffreys, 2006, p. 44). There are a total of 83 items, all with a ten point Likert response format from “1 – not confident” to “10 – totally confident” (Jeffreys, 2006, p. 164). Thus, as the scores rise, the higher the self-efficacy of the respondents. One of the identified purposes for using the TSET is to “evaluate the effectiveness of specific teaching interventions” related to the transcultural self-efficacy perceptions of nursing students (Jeffreys, 2006, p. 53).

The web-conferencing experience was expected to improve the affect dimension of self-efficacy. However, it was not expected to improve specific knowledge of different cultural factors that influence nursing care, the cognitive subscale. The ability to interview patients of different cultural backgrounds, the practical subscale, is also not anticipated to improve as a result of the international web-conferencing presented here. Thus, those two portions of the survey were not utilized in order to prevent undue wear on the participants (R. Lomax, personal communication, April 21, 2011), and to be mindful of the length of the survey to maximize participants’ willingness and ability to answer questions (Fowler, 2002).

**Reliability and validity.** Reliability is “the extent to which a measure yields consistent results; the extent to which scores are free of random error” (Ary et al., 2006, p. 638). Cronbach’s Alpha statistical procedure measures whether there is homogeneity among the test items, or that they measure the same things. Cronbach’s Alpha results
closest to 1.0 have the greatest reliability. In other words, the larger the number, or the reliability coefficient, the more reliable the instrument is at measuring the construct it intends. It is up to the researcher to determine which level is acceptable. However, there are some fairly standard guidelines. For instances of assessing the reliability of personality variables, such as cultural competence, .60 to .70 Cronbach’s Alpha is often deemed acceptable, particularly when the results are not going to be used to make irrevocable decisions (Ary et al., 2006).

In the social sciences, the measure of validity is whether the instrument measured a particular hypothetical construct, such as cultural competence, with a particular group in a particular setting (Ary et al., 2006). Therefore, the discussion in this chapter regarding validity of the quantitative instrument will focus on its demonstrated ability to measure constructs as defined by the theorists.

**Reliability of the IAPCC-SV.** Campinha-Bacote (2009) reports that the reliability of the IAPCC-SV instrument is 0.783 with the Cronbach’s Alpha coefficient of reliability. Said differently, the scores of the instrument consistently measure the five constructs of her *Culturally Competent Model of Care*. Thus this instrument falls within the acceptable range of reliability for the purposes of measuring cultural competence with nursing students in an academic setting.

**Validity of the IAPCC-SV.** Face and content validity for Campinha-Bacote’s construct of cultural competence were established for the IAPCC-SV instrument by a panel of experts (2009). In other words, leaders in the field of cultural competence in nursing believed that the tool would measure what it said it would for its purpose, known as face validity (Ary et al., 2006). Content validity, “the measurement incorporates the
domain of the phenomenon under study” (United States National Library of Medicine, 2009, para 116), was also established. Thus, the IAPCC-SV will be acceptable for use in this study with nursing students measuring the construct of cultural competence.

**Reliability of the TSET.** Results for multiple studies revealed Cronbach’s Alpha figures of 0.92 to 0.98 for the entire instrument, as well as all three of the subscales (Jeffreys, 2006). In other words individual items in the instrument consistently measure the same things, the cognitive, affective and behavioral subscales composing the construct of transcultural self-efficacy. These results are close to 1.0 and are acceptable for the purposes of this study.

**Validity of the TSET.** Jeffreys (2006) states that six nurses with PhDs and transcultural nursing certification were used to establish content validity for the TSET. Additionally, Jeffreys evaluated construct validity, “the degree to which the tool measures the construct being studied” (Jeffreys, 2006, p. 43). For this instrument, the TSET, Jeffreys identified that it did measure transcultural self-efficacy as she defined this construct.

**Study Design**

**Treatment and control group content.** Both sets of students were taught the same course content with the same topics and readings. The course proceeded week to week in the same manner. For two days the treatment group participated in web-conferencing with students in Ireland. Web-conferencing was the only difference in the course.

**Web-conference one: Native American spirituality.** The first web-conference was held on March 27, 2012 from 9:00AM to 10:00AM Eastern Standard Time U.S. and
2:00PM to 3:00PM in Dublin, Ireland. The host school was the American Private Catholic College in Ohio. The agenda, readings and video links were distributed to the entire group via email. The faculty member from the Private Catholic College in Ohio shared discussion prompts that she would be using with the faculty member at the University in Dublin, Ireland. The readings were a news article from The Salt Lake Tribune, *Tribe: Bald Eagle Permit a Victory for Tradition* by Neary (2012), and *Indigenous Traditions—North America* by Nelson (2009). The YouTube video was *One State Many Nations—Native American Spiritual Life* from Western Reserve Public Media (2004). Students were instructed to read and view all materials before attending the web-conference.

**Web-conference two: Irish Celtic spirituality.** The second web-conference was held a week later on April 3, 2012 from 9:00AM to 10:00AM Eastern Standard Time U.S. and 2:00PM to 3:00PM in Dublin, Ireland. This time the host school was the University in Dublin, Ireland. As established during the first web-conference, agenda, readings and a video link were distributed to both groups via email. The faculty member from the University in Dublin, Ireland sent discussion prompts to the faculty member at Private Catholic College in Ohio. The readings were *Miraculous Plenty: Irish Religious Folktales* by Suilleabhain (2011), *Following a Celtic Path* by Laurie (1995), and *Saint Patrick’s Confessio: Confession* by Royal Irish Academy (2011). A video from YouTube, the *Book of Kales – DVD Trailer* (2006) was assigned. All were to be read and watched prior to participation.

**Technology used.** There is a wide range of choices for web-conferencing. To use an analogy from the airline industry, web-conferencing equipment/systems range
from the economy seats in a commercial aircraft to a private jet. The private jet version of web-conferencing would be high definition rooms from companies such as Cisco’s Telepresence and Polycom’s RealPresence. Such video-conferencing rooms and systems offer such rich video and audio that participants state that they feel much like everyone in the same physical space. An example of the cost for the total system and room is approximately two hundred ninety-nine thousand dollars (Cisco, 2012). A dedicated high band-width connection ranging from five to seven thousand dollars per month (Mullins, 2011) is necessary. There is also the hidden one-time cost of approximately twenty-five thousand dollars in information technology [IT] staff in the set-up/deployment of each room (Helmbrecht, 2012). In contrast, the economy seat commercial jet version would be web-conferencing achieved through two laptop computers with built-in webcams for approximately two thousand dollars each, a high speed internet connection on both ends of the web-conference, and free accounts with SKYPE or Gmail.

This research was conducted in the “economy seat” manner. The web-conference technology was hosted by the Private Catholic College in Ohio. This college utilizes Gmail for .edu as its email client. An internal college email account was created for the faculty of the University in Dublin, Ireland. Web-conferences were conducted through GoogleChat, a free voice and video plug-in program that hosts web-conferencing between computers, both windows-based personal computers [PC] and MAC. Both institutions had high speed internet connection.

The IT staff at the Private Catholic College in Ohio provided support for both sites for the web-conferences. At Private Catholic College in Ohio, a desktop PC that was connected to a video screen in front of the classroom was used. A digital web-cam
that cost approximately one-hundred dollars was placed on a tripod and aimed at the
students in the U.S. IT staff zoomed in and out capturing student and faculty faces to be
streamed to the group in University in Dublin, Ireland.

The faculty member from the University in Dublin, Ireland used a University
laptop connected to a video-screen in front of the classroom. The camera that was used
was the built-in webcam from the laptop. Occasionally, audio was low, so students
would come to the front of the classroom and speak into the laptop. Ideally, dedicated
free-standing microphones at each site would augment audio with laptop computers, for
as little as thirty dollars each. Some support for the University in Dublin, Ireland was
also provided by IT staff at their institution. The faculty and IT staff at both institutions
tested the internet connection through GoogleChat before the actual class each day of
web-conferencing.

Sample selection for web-conferences. The sample frame, or the group from
which subjects were chosen (Fowler, 2002), were students in their first year of
undergraduate study taking a required Religion course, Humanities 110. These students
select which academic term/ semester they will take this course, either Fall or Spring
semester. There is just one section of the course each semester. In the Fall of 2011, 37
students enrolled in Humanities 110. In the second semester of the same academic year,
Spring 2012, 80 students enrolled in Humanities 110.

An intact class was used as a study group, the entire population of students taking
this course, Humanities 110, during Spring Semester. Simple random sampling was used
whereby “all members of the population have an equal and independent chance of being
included in the random sample” (Ary, et al, 2006, p. 169). Students within this class
electing to participate in this study were randomly assigned to one of two groups: a treatment group with web-conferencing as the educational strategy, or a control group without web-conferencing. Since students at this college all take the course together at the same time during the semester, there was no between group variability for the same academic term or differences within the group due to having different faculty. However, there could be differences between classroom groups of different terms.

**Power and alpha level balance.** There are a few terms to explain when determining the most appropriate sample size: effect size, alpha level and power. Effect size “is the strength of the relationship between two variables expressed as a difference between two means” (Ary, et al, 2006).

Alpha level, or type I error, or level of significance, are all terms used to state how far away from the hypothesized mean the sample mean is (Lomax, 2007). In the behavioral sciences the alpha level of .05 is commonly used (Lomax, 2007; Ary, et al, 2006). This means that the researcher rejects the null hypothesis five percent of the time, a false positive. Although many scientific disciplines utilize a much more strict alpha level of .01, such as when performing drug experiments, a .05 alpha level will be used in this research.

Power in research is the ability to find significant differences when they are truly present. A power calculation then is “a mathematical procedure for determining the sample size needed to reject the null hypothesis at a given level of significance with a given effect size” (Ary, et al, 2006). However, determining power is not a black and white process. Power is actually a delicate balancing act between the alpha level, or type I error, and sample size. Thus, although a .01 alpha level means that 99 percent of the
time the positive result will not be false; it also means that it will be necessary to obtain a larger sample size (Stevens, 2002). Ideally, power should be determined during study design, or before the research is undertaken, not after. This is known as a priori power. For this study the power level selected was .8, meaning that 80 percent of the time the researcher will find the significant differences that actually exist (Lomax, 2007).

There are tables in textbooks and software programs to determine the sample size for a given level of effect size and power. One such program used for this study is GPower3 (Faul, Erdfelder, Buchner & Lang, 2009). For aforementioned power, alpha level, and effect size the minimum sample size for this research was determined to be 34. However, to account for possible subject drop outs and non-responses, a sample size as large as possible was obtained from the class of 80. (See Appendix A: GPower3 output.)

Data collection. For the quantitative survey study a pretest/posttest control group design with simple random sampling as described above was used. Some students were in the treatment group, the class group with the web-conferencing. Other students were in the control group, the class group conducted in the traditional fashion without distant web-conferencing. The course used for web-conferencing was Human and Religion, a required course for all undergraduate nursing students. All 80 students in the course at the private college were given the opportunity to participate in the study. Thus, obtaining a sample size of at least 40 in the study seemed attainable. As an incentive to participate, students who participated in the study were entered into a drawing for one of four $50.00 gift cards to Amazon.com.
Quantitative Data Analysis

For both of the surveys, the IAPCC-SV and the TSET, the data collected from the Likert type surveys were considered dichotomous, ordinal and interval. Dichotomous, meaning only two choices are available, is the nature of the independent variable (IV). The IV, web-conferencing, whether the students were in a seminar group that participated or in a traditional group that did not, will be the same for both surveys. Each of the surveys is comprised of Likert response formats that can be viewed as ordinal or interval.

“Ordinal measurement is determined by the relative size or position of individuals or objects with respect to the characteristic being measured” (Lomax, 2007, p. 9). In other words, selecting strongly agree has a larger relative size than agree, but the distance between one descriptor to the next is not calculable or equivalent. Data obtained from these two surveys with Likert response formats are the dependent variables (DVs). The DV for the IAPCC-SV was the sum or total score of all responses on the instrument per respondent. For the TSET, the DV was the total score of all responses on the affective component of the tool divided by the number of subscale items per respondent.

There has long been debate in the literature regarding the treatment of data in Likert response formats (Carifio & Perla, 2007; Jamieson, 2004; Harwell & Gatti, 2001; Clason & Dormody, 1994). Some believe that data obtained from Likert style questions are most appropriately categorized as ordinal level (Jamieson, 2004). Others believe that for data which follows a normal distribution, or is not skewed, that Likert style questions can be appropriately categorized as interval level (Carifio & Perla, 2007; Harwell & Gatti, 2001). Quantitative data in this research obtained from the Likert response formats
from both surveys will be analyzed using ANOVA, a statistical procedure that compares the mean scores of several groups simultaneously.

The IAPCC-SV was purchased from Campinha-Bacote and the TSET was purchased from Springer Publishing Company. Both are paper and pencil surveys that were hand-scored according to author instructions. The TSET was scored by adding all item responses and dividing by the number of subscale items, producing a possible minimum score of 1 and a possible maximum score of 10 for each respondent. Missing data resulted in a lower denominator in the division problem. In the IAPCC-SV one item was reverse coded. This item response was re-coded by hand before adding up the score for all responses, producing a possible maximum score of 20 and a possible maximum score of 80. On the IAPCC, any item for which there was missing imputation was performed by using the mean of the subscale for that item as a substitute. Data were entered into an EXCEL spreadsheet before being loaded onto the Statistical Package for the Social Sciences software (SPSS). Data were cleaned, making sure all scales moved in the same direction. The total score in each of the surveys served as the dependent variable against web-conferencing as the independent variable.

Data were analyzed with the ANOVA statistical procedure to check for mean differences among a dependent variable, survey test score, with the dichotomous independent variable, web-conferencing or no web-conferencing measured both pre and post treatment. Line graphs were used to make visual representations of how the treatment and control group data related to one another.

**Advantages and disadvantages of quantitative design.** One of the strengths of this sample design is that the pretest scores of the treatment and control groups were
compared to see if they are equal with regards to the pretest information. Another advantage of this design is that the groups have matured over the same time, so that the results are not easily attributed to history but to the treatment. A final advantage of this study design is that the surveys were taken immediately at the conclusion of the web-conferences for each group in an attempt to minimize cross talk between the treatment and control groups before data is collected.

One of the disadvantages of this design is that the students may have been sensitized to the subject matter via the pretest, thereby making it less clear whether the results are due to the treatment or the heightened awareness from the pretest (Ary et al., 2006). However, it was difficult to ascertain whether any differences in survey scores were due to the actual web-conferencing or pre-existing differences among the groups without utilizing a pre-test.

**Qualitative Data Analysis**

Now it is important to turn to the second portion of this research which may reveal new awareness, the qualitative study. Although Campinha-Bacote’s survey, the IAPCC-SV, is quantitative, her recommendation is that the construct of cultural desire should also be studied with qualitative methods “to assure that we have captured the breadth of cultural desire that may not be captured by quantitative tools alone” (Campinha-Bacote, 2008, p. 146). Therefore, focus group interviews held during the same academic semester of the web-conferences were the qualitative strategy used to study the questions listed previously.

According to Glesne (2006), qualitative study can be conducted to comprehend a social experience from the viewpoint of the participants in their particular social, political
and cultural context. When conducting mixed methods research, investigators typically have “a dominant mode of gathering data” (Glesne, 2006, p. 8) but may supplement it with a method from the other. Hence, the qualitative method of conducting focus group interviews was used in this study in a supporting role to the quantitative surveys. Focus groups were led to gain insight into the views of the participants in their own words about the web-conferencing experience as it related to transcultural self-efficacy and cultural competence, encourage the self-examination of said views as they were being discussed, and discover the meaning students made of the experiences. Focus groups are best used when uncovering the “range of feelings that people have about something” (Krueger & Casey, 2009, p. 19), to discern the things that influence those feelings, and to give the group the chance to create new ideas about the topic together (Krueger & Casey, 2009). New perspectives were gleaned and different questions asked as a result of the insights from the focus groups, giving rise to further research, refinement and utilization of this form of experiential learning. This data is not accessible by quantitative measure. Focus groups can also serve to illuminate quantitative data previously collected (Kruger & Casey, 2009).

**Qualitative Questions**

The qualitative portion of the study was intended to answer the following six questions:

1. What do students feel they have learned about cultural differences and similarities by working with their distant colleagues through the process of web-conferencing together?
2. How do students believe that they will be able to use knowledge gained from the web-conferencing experience in their future nursing practice?

3. What do students think the value might be from working with a cohort from another culture as part of their nursing education?

4. How do students define intercultural competence in nursing?

5. How have students’ views regarding culture and nursing changed from participation in the web-conferencing?

6. If students’ views regarding culture and nursing have not changed, why not?

**Qualitative Data Collection**

There were two components to the qualitative data collection. First, there were two qualitative questions added to the quantitative post-treatment surveys. They were administered 14 days after the completion of the second web-conference. The questions were:

1. How have your views regarding culture and nursing changed from participation in the web-conferencing?

2. If your views regarding culture and nursing have not changed, why not?

Second, four focus group interviews were held between 14 and 22 days after the second web-conference was completed. Two focus group interviews were held one week and two were held the next. Following are the questions that were asked during each of the focus group interviews. (See Appendix D: Focus Group Script.)
1. What do you feel you have learned about cultural differences and similarities by working with your distant colleagues through the process of web-conferencing together?

2. How do you believe that you will be able to use knowledge gained from the web-conferencing experience in your future nursing practice?

3. What do you think the value might be from working with a cohort from another culture as part of their nursing education?

4. How do you define intercultural competence in nursing?

5. How have your views regarding culture and nursing changed from participation in the web-conferencing?

6. If your views regarding culture and nursing have not changed, why not?

**Participants.** For the qualitative focus groups, students were a part of an intact group, members of the same section of the course. This approach minimized differences within the group due to teaching. Four focus groups were held, determined to be sufficient when answers became repetitive, or data saturation was achieved.

**Focus Groups.** Focus group interviews were held after the web-conferencing and during the same academic term as the web-conferencing while the experience was fresh in students’ minds. A time lapse could impact their recollection of the experience (A. Errante, personal communication, August 27, 2010). (See Appendix F: Focus Group Script.) Students were invited to complimentary lunch just before the focus group. It served as motivation to arrive on time, as an incentive to participate, and as recognition that time and effort has been expended by the students (Kruger & Casey, 2009). Focus group interviews were held over the students’ lunch break.
According to Glesne (2006) three to five focus groups comprised of no larger than six to ten individuals is best. However, when the topic is important, and/or participants have strong feelings about it, the size of the group should be no more than five to six people (Krueger & Casey, 2009). Further, “If the questions are meant to gain understanding of people’s experiences, the researcher typically wants more in-depth insights. This is usually best accomplished with smaller groups” (Kruger & Casey, 2009, p. 68). Given the nature of this study, the group size was initially designed for four to five people in order to give all participants the time/ opportunity to contribute at deeper levels. Due to unexpected and last minute illness and change in student schedules, the focus group sizes ranged from two to five participants.

The focus group interview should last for no more than two hours and should attempt to cover a maximum of four to five questions, for a somewhat structured session (Glesne, 2006). The focus group interviews for this study were approximately 60 minutes long and covered all six of the qualitative research questions.

One data collection strategy employed in the qualitative component of this study was videotaping. Web-conferences were videotaped for later use during the focus groups. Select sections were played for students to help them to examine the experience and stimulate small group discussion around the research questions.

Action agenda for focus groups. Focus group interviews were conducted over the students’ lunch breaks so lunch was provided. Video clips of the two web-conferences capturing the most salient pieces of conversation, and that had sparked the greatest student engagement, were shown while the students were eating lunch. The total video time was 12:55 minutes. Clips from the first web-conference lasted 6:44 minutes.
and clips from the second web-conference lasted 6:11 minutes. The video clips showed
the students from Private Catholic College in Ohio only.

**Data collection.** In order to make the data as trustworthy or as valid as possible,
multiple methods of data collection were utilized. This is known as triangulation or the
use of a number of methods sufficient to offset any threat to validity by individual
techniques (Glesne, 2006), and to improve the richness and comprehensiveness of the
data. Direct participant observation, video tape of web-conference, focus group
interviews, and audiotape of focus group interviews were the data collection methods
used. For participant observation, watching with senses, review of video-taping web-
conferences and review of audio taping focus groups were used.

**Advantages and Disadvantages of Qualitative Design**

For the qualitative component of the study, focus groups were used. The goal of
focus groups is to look at a topic at a deeper level through open group discussion,
facilitated such that multiple perspectives are encouraged. It is planned and structured to
various degrees, and is also flexible enough to obtain greater information about a
particular theme (Bloomberg & Volpe, 2008). Potential drawbacks of focus groups are
that participants with minority opinions may feel less willing to share, those with extreme
views may be most verbal (Glesne, 2006), or group think can occur as members aim for
cohesion and minimization of conflict (Bloomberg & Volpe, 2008). Another challenge is
the need to balance the collection of data with facilitation of the conversation, which
requires skill (Bloomberg & Volpe, 2008; Morse & Richards, 2002). A strength of focus
groups is that the interactive nature of groups can foster further exploration and learning
as participants share multiple perspectives. “Group interviews are particularly useful in
action and evaluation research where participants can express multiple perspectives on a similar experience such as the implementation of a particular policy or curriculum” (Glesne, 2006, p. 102).

The focus groups were partially semi-structured with open-ended questions that relate to the quantitative data. Questions were asked in multiple ways in order to increase understanding. The sessions also contained a component allowing more interaction and free response from the participants in order to gain new insights into their thoughts and feelings about the experience in general. The role of the researcher was to listen, observe, provide support through nonverbal communication, facilitate group discussion, as well as to occasionally redirect the conversation to prevent one participant from dominating. Two possible consequences of this type of interview are silencing those who are in the minority in their beliefs or providing the opportunity for those who like to express opposing points of view, neither of which is helpful (Glesne, 2006). Therefore, careful examination of nonverbal cues that either support or contradict the verbal participation is necessary, along with occasional clarity checks with participants.

Sessions were audio-taped in order to provide an opportunity to increase understanding.

**Qualitative Data Analysis**

Qualitative data were analyzed using a thematic analysis method developed by James Spradley and further refined by Konstantin Bähr (1999), a qualitative researcher from Zurich, Switzerland. It is a way to analyze semantics around cultural categories or domains. Bähr (1999) explains, “If universal patterns are employed for the construction of sense, then it must be possible to employ the same patterns the other way round; that is, to use them to reconstruct the sense of unknown contexts” (p. 3). Nurse researchers
have used this method to analyze qualitative data from students, faculty and practicing nurses regarding information and computer literacy skills and integration of these skills in the work place. “Spradley’s ethnographic method is a tested and well respected process that can be successfully adapted for use in analyzing focus group and open-ended survey questions” (McNeil, Elfrink, Beyea, Pierce & Bickford, 2006, p.55).

There are three components of the qualitative analysis using the Spradley ethnographic method: included terms, semantic relationships and cover terms. The words people use, coined included terms, are first identified. Then the relationship from one included term to another is found, also called semantic relationships. Spradley identifies nine semantic relationships:

1. strict inclusion – X is a kind of Y,
2. spatial – X is a place in Y,
3. cause-effect – X is a result of Y,
4. rationale – X is a reason for doing Y,
5. location-for-action – X is a place for doing Y,
6. function – X is used for Y,
7. means-end – X is a way to do Y,
8. sequence – X is a step or stage in Y, and
9. attribution – X is an attribution or characteristic of Y (Spradley, 1979, p. 111).

Cover terms are generated and are used to link the included terms and semantic relationships identified from the interviews. Whenever cover terms, included terms, and their semantic relationships are linked, this creates a taxonomy to help explain what is
known and unknown in the research (Bähr, 1999). Keeping count of occurrences helps to discover patterns (Glesne, 2006).

**Ethical Considerations**

Fowler (2002) states that participants should not be adversely affected whatsoever in their role as study respondents. While participants may feel intrinsic and other benefits from joining the study, care should be made not to exaggerate potential benefits when researchers opt to explicitly express them. Further, no one except the researchers should be able to identify participants from non-participants to protect those who do decide to join (Fowler, 2002).

For this study students completing the quantitative surveys were advised that: participation in the study was optional; they could drop out at any time; their responses were confidential; and becoming a study subject would not be part of or impact their course grade. Students participating in the qualitative focus groups were advised that: participation in the study was optional; they could drop out at any time; their responses during the interviews would not be confidential to the group but would be de-identified and anonymous after transcription; and that focus group participation would have no impact on their grade. Students who elected to participate in the study were told how their data would be used and by whom. They were aware that their names would be replaced with numbers immediately after data collection and that the researcher would be the sole person with the key maintained off-site to ensure confidentiality. The previous actions created informed consent for the students. An IRB approval for this research was obtained from the State University at which the doctoral candidate studied. (See Appendix B: IRB Approval.)
Bias

There are several different types of potential biases that must be avoided in research, although the types discussed here are the ones that are anticipated for this research design. One type occurs when respondents dodge extreme responses. This could happen when discussing the topic of cultural differences. Students may not want to appear extreme or prejudiced in any way (Ary, et al, 2006). This can be minimized by explaining to the students that their responses are confidential and that their names and any identifying information will be removed before any data is shared. Creating an atmosphere of acceptance is also important in preventing this bias.

Social desirability bias is related and may also occur. This happens when students want to satisfy the researcher or teacher and give responses that are more socially acceptable than how they truly feel (Ary, et al, 2006). In addition to an attitude of acceptance, listening to responses without giving either approval or disapproval, and ensuring that study participation will never be connected to grades would help to curtail this bias. Establishing ground rules for group behavior and tolerance is also advantageous and was used during the focus groups.

A novelty effect, or artificial good will about the study, could also occur as this is an educational innovation (Ary, et al, 2006). Nursing students are not typically exposed to transatlantic, or any other, web-conferencing. This effect can only be reduced by repetition, not possible considering the academic calendar.

During the focus groups it was helpful to ask open-ended questions and facilitate, rather than control, the discussion. Staying on the sidelines and demonstrating appreciation for the students’ process and work aided in decreasing researcher bias.
Additionally, journaling about the experience and topic as the researcher served to illuminate personal attitudes and feelings that may impact the experiences. Asking the students for clarification and checking meaning through reflecting back to them assisted with accurate interpretation, as do verbatim transcriptions (Ary, et al, 2006).

One of the biggest threats to qualitative study validity is researcher bias, resulting from “personal attitudes, preferences, and feelings to affect interpretation of data” (Ary, et al, 2006, p. 507). Therefore, several techniques were used to counter this as much as possible. Self-reflection through journaling was conducted including discussion of scheduling and logistic details; description of rationale for methods selected; and an examination of “thoughts, feelings, ideas, questions, concerns, problems, and frustrations” (Ary, et al, 2006, p. 507). This reflection is necessary to uncover the perspective of the researcher. Negative case sampling, or intentionally selecting cases that may refute the personal opinions of the researcher (Ary, et al, 2006), can also be used to reduce researcher bias when feasible. Video-tapes of web-conferences were used to clarify, add to or confirm what was discovered in the notes of the actual web-conferences. Use of various techniques to approach and ask the research questions in slightly different ways was performed to obtain multiple perspectives of the same phenomenon (Morse & Richards, 2002).

Credibility

A technique called peer debriefing was used in order to establish credible findings. Peer debriefing can be defined as “exposing oneself to a disinterested peer in a manner paralleling an analytic session…exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer’s mind” (Lincoln & Guba, 1985, p.
There are a few important functions achieved through the utilization of peer debriefing. A peer debriefer attempts to play devil’s advocate, exposing researcher bias, examining meanings and bringing interpretations into focus. It is an investigation and illumination of the researcher’s “posture and process” (Lincoln & Guba, 1985, p. 308) allowing opportunity for full awareness. These session(s) may help the researcher to test working hypotheses and possibly suggest next steps to be taken. Catharsis is a positive outcome of using peer debriefing because it allows the researcher to talk through feelings and emotions surrounding the research that may impede judgment or movement toward next steps. The debriefer(s) were peer(s) knowledgeable in qualitative inquiry, prepared to take role seriously, and lateral in position so as not to impose authority. Records of the peer debriefing were kept to establish how the inquiry developed.

**Limitations of the Study**

The most obvious potential limitation is the timetabling with the cohort in Ireland as they are five hours ahead of Eastern Standard Time in the U.S. and currently operate on a semester system. This was overcome by planning ahead and strong communication with the faculty and student group from the University in Ireland.

Another limitation is type of study. It is a small, mixed methods study with an experimental design pre-post quantitative component. Students from Private Catholic College in Ohio were the participants. Thus, the results are not likely to be applied to dissimilar cohorts of students.

**Summary**

The population of the United States is becoming increasingly diverse. Nurse educators must prepare students for working with and caring for global citizens in all
their variety. Web-conferencing across continents is one method that may assist educators and students in moving forward with this aim. Studying pedagogical practices of a complex construct such as cultural competence requires a mixed methods research approach. Using surveys that have been developed and tested for this construct, as well as holding focus group interviews revealed gaps in our current knowledge and added new information.
Chapter 4: Interpretation of Data

As presented in chapter three, both quantitative and qualitative research methods were used to answer the research questions. The primary research method was quantitative. This chapter will begin with a report of the participants and their level of participation. Then it will describe the content covered in each of the two web-conferences, leading to an evaluation of the quantitative survey results. Two surveys, the *Inventory for Assessing the Process of Cultural Competence Among Health Care Professionals – Student Version* (IAPCC-SV) and the *Transcultural Self-Efficacy Tool* (TSET), were used to obtain quantitative data pre-post teaching strategy. To refresh from chapter three, the IAPCC-SV is a 20 item self-reporting Likert scale instrument that measures levels of cultural competence incorporating items from five subscales: (1) cultural awareness, (2) cultural knowledge, (3) cultural skill, (4) cultural encounters and (5) cultural desire. The TSET measures levels of transcultural self-efficacy among three sub-scales: (1) cognitive, (2) practical and (3) affective. For this study, the affective sub-scale of the TSET was used. It is a 30-item self-reporting Likert scale instrument that measures levels of self-efficacy related to students’ attitudes, values and beliefs. Following the quantitative results will be a discussion of the qualitative focus group findings. The chapter will end with a synthesis of both quantitative and qualitative research results.
Participants

The participants in the web-conferences were students from Private Catholic College in Ohio and University in Dublin, Ireland. The students in Ohio were all freshman nursing students in a survey religion course, *Human and Religion*. The students in Dublin, Ireland were also freshman, but were multidisciplinary health care students in a *Spirituality, Religion and Health* course. Only the U.S. students were participants of this research as the survey instruments have not been tested for reliability and validity in Ireland.

The total possible population was all 80 students taking the only section of a mandatory freshman-level *Human and Religion* survey course during Spring Semester 2012 in the Private Catholic College in Ohio. Of that group, 35 students or 43.7 percent elected to participate in the research. The research group was randomly divided into a web-conferencing group of 18 students or 22.5 percent of the total population, and a control group of 17 students or 21.2 percent of the total population. All students were presented the same content, with differing pedagogies, either web-conference with the group of students and faculty from University in Dublin, Ireland or traditional lecture format with their classmates in Private Catholic College in Ohio. Students could drop out of the study at any time. No students in the treatment group dropped out of the survey portion of the study. Two of the control group students dropped out before completion of the surveys, leaving a control group size of 15 or 18.7 percent of the total population. The number of students completing the entire quantitative research project was 33, 94.2 percent of the original research group, or 41.2 percent of the total *Human and Religion* class population.
From the treatment/web-conferencing group of 18 students, 13 chose to participate in the qualitative component of the study, the focus groups. Some could not participate due to work conflicts and illness. Others simply did not respond to the email invitations to participate. Student participants were assigned to one of four hour-long focus groups using these criteria: (1) scores from both the TSET survey and the IAPCC-SV survey to get a mix of both high and low scoring students from each survey in each focus group, (2) student class and work schedules, and (3) unexpected events for students, such as one family death, student illnesses and simple forgetfulness. Resultant focus group sizes were as follows:

- Focus Group One – four students
- Focus Group Two – three students
- Focus Group Three – four students
- Focus Group Four – two students

During the introduction to the focus groups, students were asked about any previous study abroad, service/mission trips, or vacations outside of the U.S. (See Table 1, Focus Group Participants’ Experiences Outside of U.S.) Two of the students had significant time abroad in an intensive manner. One of the 13 focus group participants, 7.6 percent, had participated in a 3-week studied abroad experience. One student, 7.6 percent of the focus group, had participated in a service/mission trip outside of the U.S. The majority of students in the focus groups, 8 or 61.5 percent, had vacationed outside of the U.S. The most frequent destination was the Caribbean islands. Four students, or 30.7 percent, had never been outside of the U.S. for any purpose. A discussion of any
differences among these small subgroups with regard to their previous experiences outside of the U.S. will occur later in this chapter.

Table 4.1

*Focus Group Participants’ Experiences Outside of U.S.*

<table>
<thead>
<tr>
<th>Alias</th>
<th>Service/Mission Trips Outside of U.S.</th>
<th>Studied Abroad</th>
<th>Vacationed Outside of U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashley</td>
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<td>No</td>
</tr>
<tr>
<td>Brianna</td>
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<td>No</td>
</tr>
<tr>
<td>Courtney</td>
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<td>No</td>
</tr>
<tr>
<td>Elizabeth</td>
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</tr>
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<td>Gabrielle</td>
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</tr>
<tr>
<td>Hannah</td>
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</tr>
<tr>
<td>Jennifer</td>
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</tr>
<tr>
<td>Lauren</td>
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</tr>
<tr>
<td>Madison</td>
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</tr>
<tr>
<td>Nicole</td>
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</tr>
<tr>
<td>Samantha</td>
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<td>Yes</td>
</tr>
<tr>
<td>Tiffany</td>
<td>No</td>
<td>No</td>
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</tr>
<tr>
<td>Victoria</td>
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<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 4.1

**Discussion Topics from the Web-Conferences**

The conversation that evolved during the web-conferencing session is described in order to set the stage for the research. Twelve topics evolved from the first web-conference among both the American and Irish groups listed in order of frequency of mention: (1) politically correct, (2) government control, (3) history of genocide and ethnic cleansing, (4) problems will always exist, (5) mutual respect, (6) more money and
wealth, (7) environmental genocide on Indian reservations, (8) overlooked poverty, (9) must be able to change, (10) tradition not always right, (11) differences among U.S. population, and (12) marginalized Native Americans. By far, the topic that was the most thought provoking and caused the greatest discussion among the students in Private Catholic College in Ohio focus groups was exemplified in two statements made by a female student from University in Dublin, Ireland. She said, “In Dublin, Ireland, and maybe the world’s view over here, might see Americans going in as ‘It’s your way or the highway.’” After interaction with the U.S. students and faculty, this same student added, “Good that not everybody thinks like that in the U.S.” The discussion that emerged from these two statements are explored in greater detail later in this chapter.

Six main topics evolved from the student and faculty discussion during the web-conference presented in order of frequency of mention: (1) St. Patrick never on the side of the aggressor, (2) move away from the Catholic church in Dublin, Ireland, (3) religious practitioners or just religious people, in general?, (4) St. Patrick’s Day celebrations in Dublin, Ireland and America, (5) percent of each nation that attend Mass regularly, and (6) St. Patrick criticized? The topics that appeared to elicit the most discussion during subsequent focus groups were numbers four, one and two previously listed.

Quantitative Data Analysis

Quantitative Research Questions

1. Do students’ cultural competence scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences? This was measured with the Inventory for Assessing the Process of
2. Do students' transcultural self-efficacy scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences? This was measured with the affective subscale of the Transcultural Self-Efficacy Tool, TSET.

**Missing Data**

There were 20 items on the IAPCC-SV. Thirty-three students completed both pre and post-test surveys. Five students left one item blank on all of the pretest surveys and two students left one item blank on all of the post-test surveys. This equals seven missing items out of the possible 1,320 items for all 33 students on both pre and post IAPCC-SV surveys, or 0.5 percent. The survey scoring instructions are to add the scores for all items. Hence, a missing score would equal a zero for that particular item. This, in turn, may cause the final sum not to reflect the actual score/ level of cultural competence of the respondent, or to artificially lower the score/ level of cultural competence of the respondent. Since there were relatively few items missed compared to the total number of items, each missing item was imputed by using the mean of the subscale for which that item was a part for the individual respondent. “Imputation causes the least distortion when the proportion of missing data is small, and data are available for variables that are strongly associated with the variable being imputed” (Schoenbach, 2004, p. 461).

There were 30 items on the affective subscale of the TSET. Thirty-three students completed both pre and post-test surveys. Four students left one item blank on all of the pre-test surveys and four students left one item blank on all of the post-test surveys. This
equals eight missing items out of a possible 1,980 items for all 33 students on both pre and post TSET surveys, or 0.4 percent. The survey scoring instructions are to add the scores for all items and divide by the total number to get the final score for each respondent. Thus, for those surveys with no missing data, the denominator was 30. Instead of imputing data for those surveys with one missing item, the total number was divided by 29 instead of 30.

**IAPCC-SV Results**

To recap from chapter three, the Inventory for Assessing the Process of Cultural Competence Among Health Care Professionals – Student Version, IAPCC-SV, is a self-reporting Likert scale survey used to measure the level of cultural competence among students in health care disciplines. All students who completed the study took the IAPCC-SV survey twice in a pre-post fashion. This included 18 students in the web-conferencing (WC) treatment group and 15 students in the control group. The group mean pre-test IAPCC-SV scores were: WC 60.00 and control 61.07. The group mean post-test IAPCC-SV scores were: WC 65.28 and control 61.20. There was a larger range of scores within the web-conferencing group as evidenced by the larger standard deviation compared to the control group. (See Table 4.2, Descriptive Statistics, for mean and standard deviation figures for each group.) The WC group made the greatest gains in IAPCC-SV scores, 5.28, compared to the Control, 0.13. In other words, the WC group post-test IAPCC-SV scores were 9 percent higher than their pre-test IAPCC-SV scores. Whereas, the control group post-test IAPCC-SV scores were 0 percent higher than their pre-test IAPCC-SV scores.
A one factor repeat measures analysis of variance statistical analysis (ANOVA) was performed through SPSS to compare the effect of the independent variable, group, on the dependent variable, IAPCC-SV score. The factor was time, pre and post web-conferencing. Assumptions for ANOVA were met. There was a significant interaction effect of group and time ($F(1,31) = 6.521, p = 0.16$). Thus, students who participated in the web-conferences had significantly increased cultural competence scores compared to their baseline. In contrast, students who did not participate in the web-conferences did not demonstrate a statistically significant increase in their cultural competence scores. Power was 0.697, slightly lower than the 0.8 as planned, since the final number of participants dropped to 33. Thirty-four students would have been required to maintain power at 0.8 level. (See Table 3, IAPCC-SV ANOVA – one factor repeat measures design; Graph 4.1, IAPCC-SV Group Means – Pre-Post; and Appendix A: GPower3 output)

The author of the IAPCC-SV provides labels for score ranges: (1) culturally incompetent is from scores 20-40, (2) culturally aware is from scores 41-59, (3) culturally competent is from scores 60-74, and (4) culturally proficient is from scores 75-80. The pre-treatment mean scores for both web-conferencing and control groups were just inside the culturally competent range. The web-conferencing group’s mean post-test IAPCC-SV scores rose five points, whereas the control group’s mean post-test IAPCC-SV scores stayed the same. The standard deviation was similar between control and treatment group in the pre-test IAPCC-SV scores. There was greater variation among post web-conferencing scores in the treatment group compared to the control group. (See Table 2, IAPCC-SV Descriptive Statistics, for standard deviation values in each group.)
Table 4.2

**IAPCC-SV Descriptive Statistics**

<table>
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<th></th>
<th>PRE-WC</th>
<th></th>
<th>POST-WC</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
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<tr>
<td>Web-Conferencing/</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Treatment Group</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>n = 18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>60.00</td>
<td>4.839</td>
<td>65.28</td>
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</tr>
<tr>
<td>Control Group</td>
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</tr>
<tr>
<td>n = 15</td>
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<td></td>
<td>61.07</td>
<td>4.949</td>
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</tr>
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</tr>
<tr>
<td>n = 33</td>
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<td>60.48</td>
<td>4.842</td>
<td>63.42</td>
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</table>

Table 4.3

**IAPCC-SV ANOVA – one factor repeat measures design**

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<thead>
<tr>
<th>Measure:MEASURE_1</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power*</th>
</tr>
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<tbody>
<tr>
<td>Sphericity</td>
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<td></td>
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</tbody>
</table>

a. Computed using alpha = .05
Graph 4.1

*IAPCC-SV Group Means – Pre-Post*

**Significant experience abroad and no experience abroad.** There were two students in the focus groups that had significant experience abroad. One participated in a three-week long study abroad and the other participated in a mission trip. In addition, there were four students who had not traveled outside of the U.S. for vacations or any type of learning or service experience. It was interesting to compare these groups.

Of the two students who had a significant experience abroad, one had no change in score from pre to post-test IAPCC-SV and the other had a gain of two points on the post-test IAPCC-SV compared to the pre-test. This resulted in an average 1 point gain for
this small group. The change in scores of the four students who had no experience outside of the U.S. ranged from -1 to 11 from pre to post-test IAPCC-SV. The average change in scores of pre to post-test IAPCC for these four students was 3.5. The scores of the 12 students with some experience abroad within the context of a vacation changed by -1 to 13 points pre to post-test IAPCC with an average increase of 6. Overall, the entire group had an average IAPCC-SV post-test gain of 5.28. See Table 4, Experience Abroad Pre to Post IAPCC-SV Score Comparison, for range of change and average increase in IAPCC-SV pre to post-test scores. Thus, it could be that the web-conferencing experience was most influential for the students with none or some experience abroad within the context of a vacation, and was less impactful for the students with significant experience abroad.

Table 4.4

*Experience Abroad Pre to Post IAPCC-SV Score Comparison*

<table>
<thead>
<tr>
<th>Group</th>
<th>Range of Change in Pre to Post IAPCC-SV Scores</th>
<th>Average Increase in Pre to Post IAPCC-SV Scores</th>
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</thead>
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<tr>
<td>Significant Experience Abroad</td>
<td>0 to 2</td>
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</tr>
<tr>
<td>No Experience Outside of U.S.</td>
<td>-1 to 11</td>
<td>3.5</td>
</tr>
<tr>
<td>Vacation Experience Abroad</td>
<td>-1 to 13</td>
<td>6</td>
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</table>

Table 4.4
TSET Results

All students who completed the study also took the TSET survey twice in a pre-post fashion. This included 18 students in the web-conferencing (WC) treatment group and 15 students in the control group. The group mean pre-test TSET scores were: WC 8.16 and control 8.52. The group mean post-test TSET scores were WC 8.64 and control 8.66. (See Table 5, TSET Descriptive Statistics, for mean and standard deviation figures for each group.) While the control group TSET mean started and ended higher, 8.52 pre-test and 8.66 post-test, the WC group made the most TSET raw score gains, 0.48, compared to the Control, 0.14.

A one factor repeat measures ANOVA statistical analysis was conducted through SPSS to compare the effect of the independent variable, group, on the dependent variable, TSET score. The factor was time, pre and post web-conferencing. Assumptions for ANOVA were met. There was not a significant interaction effect of group and time ($F(1,31) = 2.222, p = .146$). In other words, there was not a significant interaction between the group with the different teaching pedagogies, web-conferencing or traditional face-to-face lecture, and transcultural self-efficacy scores. (See Table 6 for the TSET ANOVA – one factor repeat measures design results.)
Table 4.5

*TSET Descriptive Statistics*

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<th>PRE-WC</th>
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<th>POST-WC</th>
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<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
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<td>n = 15</td>
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<td>n = 33</td>
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<td>1.023</td>
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Table 4.5

Table 4.6

*TSET ANOVA – one factor repeat measures design*

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<tr>
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<td>.465</td>
<td>2.222</td>
<td>.146</td>
<td>.067</td>
<td>2.222</td>
<td>.303</td>
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<tr>
<td>Sphericity Assumed</td>
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<td>Huynh-Feldt</td>
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<td>Lower-bound</td>
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<td>.465</td>
<td>2.222</td>
<td>.146</td>
<td>.067</td>
<td>2.222</td>
<td>.303</td>
</tr>
</tbody>
</table>

a. Computed using alpha = .05

Table 4.6
Qualitative Data Analysis

Qualitative data was collected from open-ended questions attached to the two post surveys, the IAPCC-SV and the TEST, and four focus group interviews held within a month of completion of web-conferencing. This research process served to triangulate the quantitative data and to provide a well-developed and deeper understanding of the students’ learning experiences.

Interestingly, some students had different responses in their immediate feedback provided on the open-ended survey questions than they did to the same questions asked during the focus group interviews. This will be explored later in chapter five under the impact of debriefing in experiential learning.

Qualitative Research Questions

1. What do students feel they have learned about cultural differences and similarities by working with their distant colleagues through the process of web-conferencing together?
2. How do students believe that they will be able to use knowledge gained from the web-conferencing experience in their future nursing practice?
3. What do students think the value might be from working with a cohort from another culture as part of their nursing education?
4. How do students define intercultural competence in nursing?
5. How have students’ views regarding culture and nursing changed from participation in the web-conferencing?
6. If students’ views regarding culture and nursing have not changed, why not?
Questions five and six were addressed in two ways: (1) as open-ended questions attached to the paper and pencil surveys, and (2) as questions asked during the face-to-face focus group interviews. The written open-ended survey responses will be addressed first, followed by the responses from the focus group interviews.

**Open-Ended Survey Responses**

After the web-conferences were completed, students in the treatment group wrote answers to two of the six open-ended research questions, question five and question six, along with the post IAPCC-SV and TSET surveys. From the written answers to question five, “How have your views regarding culture and nursing changed from participation in the web-conferencing?” the following five themes evolved and are listed in order of most to least frequently mentioned: (1) eye-opening, (2) more effective nurse, (3) verifying assumptions, (4) stereotyping, and (5) continuous learning. Five students from the treatment group, but who elected not to participate in the focus group interviews, answered the open-ended survey questions. They are identified here as Student 1, Student 2, Student 3, Student 4 and Student 5. Students who later participated in focus groups are represented using alias.

**Eye-opening.** Students who answered this open-ended question on the survey believed that the web-conferencing experiences with the students in Ireland opened their eyes and made them interested in building relationships with culturally diverse people in the future. Emily wrote,

Web conferencing with students and faculty of [University in Dublin, Ireland] was very intriguing and thought provoking. It was fascinating to interact face to face with students across the world in understanding their thoughts and
perspectives on their own country as well as ours. This activity opened my eyes greatly in becoming more open to build relationships with people from different walks of life. I learned that these people experience joy, pain, and suffering the same ways I do. I believe I gained a broader perspective on people of all cultures simply through listening to the views of others.

Student 1, not in a focus group, shared about new awareness related to her own culture,

From the web-conferences I actually learned to pay more attention to my own culture. I also found that both cultures seemed to be very interested in topics at hand. As for nursing, the web conferences help me realize that just because people may sound different or be from different places, it doesn’t mean their views are different.

Again, the awareness of how American culture can be perceived was discussed. Brianna wrote, “I saw that the other students viewed the American culture as very one way. That was pretty eye opening, Americans aren’t just, ‘My way or the highway.’”

In response to this fifth research question in the post survey, a strong theme of appreciation of the role of other cultures developed. Most of this cultural appreciation was expressed as an eye-opening recognition of the differences and similarities between the students from Private Catholic College in Ohio and the University in Dublin, Ireland. Students conveyed that the experience of web-conferencing with the students from Dublin, Ireland allowed them to foster this appreciation. Student 3, not in a focus group, said,

I never really appreciated the role of other cultures until I did the web conferencing. We really are worlds apart in different countries. It just seems that
we are a lot alike but very different at the same time. It was shocking to hear how they perceived the U.S. and our culture/practices here. It was a great learning experience! THANKS! 😊

Courtney explained,

The web-conferencing just helped me understand the culture of the people in Dublin, Ireland and the differences and similarities to the United States. It shows that sometimes other people and cultures aren’t as different as some people make them out to be. During the web-conference has made me excited about caring for people of other cultures so I can learn about them and grow in knowledge and understanding.

Jennifer wrote, “That people from different countries and cultures have different views than others. That fact must be embraced.”

**More effective nurse.** Students said they were able to apply the lessons learned about appreciating the role of culture to their future practice providing patient care to diverse others. Student 4, not in a focus group, said,

They [my views regarding culture and nursing] have changed so much. Cultures are very different among different places even if the people seem similar. Also I see how great health care in the United States is so highly thought of in other countries. You must learn to be able to respect each culture in order to make them comfortable and for them to trust us as professionals. I would want to be treated based on my culture and views and so would our patients.

Victoria also made reference to using the lessons learned about culture in her future nursing practice. “Interacting with a different culture is interesting because you get to
hear and understand views from another culture from the culture. Culture plays a big role in Nursing because as a nurse you interact with people from different cultures all the time.” Student 5, not in a focus group, wrote, “I feel like it was a good experience that will be useful to my nursing career.”

Samantha described what she perceived as helping to improve effectiveness in her future nursing practice through communicating and working with culturally diverse colleagues,

In general, [my views regarding culture and nursing have changed] quite a bit. But specifically, I never thought I would ever work with a diverse group of nurses in the future hospital I work at, but when all of them stated they wanted to work here, that opened my eyes. Also, it taught me to regard every person as an individual and not defined by their culture, alone. Culture plays an important role in shaping our lives, but every individual has their own set of beliefs and goals.

**Verifying assumptions.** For some students, the communication exchanges with the students in Ireland made them aware that what they read is not always accurate, and that it needs to be verified with people from that specific culture. Madison expressed, I think that, I mean they even said, ‘That’s good to know.’ To realize that we aren’t exactly how our government is, and how the Internet, and textbooks, just reading about Andrew Jackson would make them think, oh we’re, we enjoyed doing, like we did this on purpose. And that we all agree with it, and support it. When, necessarily, I mean, we weren’t around then. So, it’s not like we were all for this, let’s kill off Indians movement. So, I think that they realized that what they read in textbooks isn’t always necessarily true.
Stereotyping. The experience of feeling initially misjudged by the Irish female student enabled the American students to consider how they view diverse people. Elizabeth shared,

Throughout the web conferencing experience, I learned that there are misconceptions about Americans. With this it became more obvious that often, as humans, we think we know more than we actually do. It is important to be extremely open-minded to various cultures, because our knowledge may not be correct. I now have a greater appreciation for cultures worldwide.

Gabrielle spoke to this as well when she wrote, “It helped me see that if we just listen to those people from different cultures we can remove the stereotypes. If we would just take the time to understand those people life would be less stressful for both parties.”

When the sixth and final research question asked on the open-ended survey question, “If your views regarding culture and nursing have not changed, why not?” only five written comments were made from students in the web-conferencing group. Three students who had vacationed outside of the U.S., Victoria, Jennifer and Nicole, answered this question. Victoria felt that she was already open-minded. She wrote, “I always thought it was important to understand different cultures.” Jennifer shared that previous coursework about providing nursing care for diverse patients provided the same information. Nicole became more confident as expressed in her comment, “My ability to remain open-minded [during the web-conferences] has only left me more confident in my nursing and cultural abilities.” Ashley, who had not been outside of the U.S., explained that the web-conferencing experience did not change the relationship between culture and nursing for her. Finally, the fifth statement suggests that Gabrielle, who had participated
in a service/ mission trip outside of the U.S., did not make a connection between nursing and culture from the web-conferencing experiences because the subjects of nursing and culture were not explicitly joined. Gabrielle states, “My views of nursing haven’t changed because we didn’t really relate any of our discussions to nursing.”

**Continuous learning.**

Lastly, students verbalized that the web-conferencing experiences sparked a desire to learn more. Student 2, not in a focus group, responded to the fifth research question in the post survey in this way, “It made me want to learn about other cultures even more -- made me very interested in how other cultures live on a day to day basis.”

**Qualitative Research Question Themes and Categories**

Within a month of the completion of the web-conferences, four focus groups were held with students who participated in the web-conferencing, the treatment group. During the four focus groups, students were asked each of the six research question in order. Eight themes emerged from the conversations weaving in and out of each group listed here in order of greatest to least frequently mentioned. Quotation marks indicate participant language: (1) “verifying assumptions/ open-minded,” – “need to be careful,” “accepting,” “adaptable,” “flexible,” “taking opportunity to learn more;” (2) “eye-opening,” – new knowledge and awareness of one’s own and other cultures, revised understanding within the same culture, “changing experience,” “shocking,” “not how we see ourselves,” “similar and different than us;” (3) experiential pedagogy – “interactivity increases learning,” appreciation for personal experience and human interaction, “ability to see and hear the other;” (4) continuous learning – learn past initial perceptions, enthusiasm to learn and experience more; (5) more effective nurse – develops ability to
provide “personalized health care,” “accept and understand different cultures to care for them;” (6) stereotyping – interaction decreases stereotypes, “need to know a person to remove bias;” (7) “inner conflict” – recognizing and separating nurse’s beliefs from patient’s beliefs, not imposing one’s values on patients, push-pull between “obligation to patient and personal values,” understanding personal limits when providing care; and (8) “culture and religion connected with healing” – care and understanding have to precede medical treatment, respect and support of belief system/religion fosters healing. Further, these individual themes could be grouped into the broader categories of cultural awareness, impact of pedagogy and development of cultural competence in nursing.

The data categories and themes, discussed within the context of each research question, are presented in Table 4.7. A discussion of each of the eight research themes follows within the context of the categories. This was the result of the analysis guided by the Spradley method. If the data categories are connected more directly to Spradley, it could be read as such. For the data category of cultural awareness, the students’ words and explanations for their thoughts indicated a cause-effect semantic relationship where “x is a result of y” (Spradley, 1979, p. 111). For the data category of impact of pedagogy, the rationale semantic relationship of “x is a reason for doing y” (Spradley, 1979, p. 111) fit the students’ words and descriptions the best. Finally, for the category of development of cultural competence in nursing data category, “x is an attribution or characteristic of y” (Spradley, 1979, p. 111), or attribution semantic relationship could be appropriately ascribed to the students words and explanations.
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<tr>
<th>Category</th>
<th>Theme</th>
<th>Informants' Words</th>
<th>Qualitative Research Questions</th>
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</thead>
<tbody>
<tr>
<td>Cultural Awareness</td>
<td>Verifying Assumptions/ Open-minded</td>
<td>Open-minded, Adjustable, Better Understanding, Verifying Understanding, Careful, Perception Changed</td>
<td>Q2 Q3 Q4 Q5 Q6</td>
</tr>
<tr>
<td></td>
<td>Eye-opening</td>
<td>Eye-opening, Interesting, Important, Similar and Completely Different, Real People Like Us, Comparing</td>
<td>Q1 Q2 Q3 Q5</td>
</tr>
<tr>
<td></td>
<td>Stereotyping</td>
<td>Stereotypes, Bias, Admire our Culture, Not How We See Ourselves</td>
<td>Q1 Q5</td>
</tr>
<tr>
<td></td>
<td>Continuous Learning</td>
<td>More Motivated, Learning and Sharing with Different People, Taking Opportunity to Learn about Culture, More Value with More Diverse Groups</td>
<td>Q2 Q3 Q4 Q5</td>
</tr>
<tr>
<td>Development of Cultural Competence in Nursing</td>
<td>More Effective Nurse</td>
<td>More Effective Nurse, Aware of Own Cultural History and Biases, How You Should Respond, Communication</td>
<td>Q3 Q4 Q5</td>
</tr>
<tr>
<td></td>
<td>Inner Conflict</td>
<td>Can't Force Your Beliefs on Someone Else, Inner Conflict, Stand for What You Believe In</td>
<td>Q4</td>
</tr>
<tr>
<td></td>
<td>Culture and Religion Connected with Healing</td>
<td>Culture and Religion Deeply Connected with Healing</td>
<td>Q3</td>
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</tbody>
</table>

Table 4.7
Cultural awareness. There were three themes emanating from the focus group interviews that described cultural awareness: (1) verifying assumptions/open-minded, (2) eye-opening, and (3) stereotyping.

Verifying assumptions/open-minded. Multiple students in each focus group expressed the importance of remaining open-minded and careful in their future nursing practice. Elizabeth explained,

I think it emphasized, reemphasized the fact that I need to be open-minded and sort of careful. Because although maybe some of the things they said to us that we took as stereotypes, they may not have meant those offensively, but we read into them. So it also, it made me think. On my end, I have to be kind of careful. Even if you would say something really minor to someone, that may be totally offensive, and, they may take it totally differently and maybe on a negative note.

From this experience, students stated that avoiding judgment was important in their future nursing practice. Nicole explained, “I think it helped to like really not pass judgment until you’ve kind of gotten a sense of who they are. And I think that’ll help with like treatment, and the thing, and the things that make them comfortable when they’re in like, kind, kind of times of stress and stuff like that. I think it will be really beneficial.” In the same focus group, Madison described how her own feelings of being misjudged by the Irish female student helped her to understand this. “I thought it showed not to be so quick to judge because just how we were all kind of offended, I would say. And the fact that they immediately thought that we were some like killing machine where we just took all the Indian’s land and, and didn’t care. Whereas, that’s not how we felt.”
Courtney noted that the web-conferencing experience helped her to learn how to handle what she described as normal stereotypes in future patient care,

I think when a lot of people have stereotypes, I know everyone has them, which is a natural human characteristic. And, I think this helped me like when I do, like in the future when I do go into a room with a patient, have an open mind. You know, they’re not, not all people from one country are going to be the same. They’re all going to be different. They’re all going to have their different opinions.

Taking the time to get to know people of another culture before making assumptions was identified as an important takeaway message from the web-conferences when providing future nursing care. Victoria shared,

You need to make sure when people of a certain culture come in, you need to respect and see how exactly they believe before you, you know, make assumptions… Make sure you’re doing just what their faith allows you to do. That way you don’t offend anyone by over-stereotyping or under-stereotyping, I guess.

Courtney takes the idea a step further and addressed the need to understand the individual within the culture, “You have to wait until you hear, you know it from their mouths to like really judge a person. Or, get to know what they’re going through, and what they how they really are like.” This was also expressed by Madison who identified that individuals cannot all be lumped together within a country, “Just because they’re from India doesn’t mean that they don’t believe in a different religion or agree with anything that’s happening in their country…There’s multiple different religions that we can all convert to and believe in, regardless of where we’re from.”
Nicole also noted the need to understand the variations in beliefs within the same culture,
Everyone, not just people from like all different cultures, but within the same culture. Everyone experiences life in a different way, and has different perspectives on everything. So I think that to work with someone that was from a different culture, they would probably have similar but very different beliefs and different aspects of everything. And so I think it would make you a much more well-rounded person to be able to see those different aspects. And it would make your nursing career better and more beneficial to the patients too, because you wouldn’t be always going by the way you grew up and things that you believe. You would have other thoughts and perceptions on things.
The students realized that through the web-conferencing experience, how others think of them may have changed. Courtney explained,
Oh yeah. I think, you know, their reactions to the, their, you know they were saying how Gabrielle said earlier, ‘Oh well, it’s my way or the highway. That’s how all Americans think.’ They were just like, they were like, ‘Oh! Like, I guess you guys are kinda nice. Like, I guess you guys do kinda care, you know. Not all of you are the same.’ And so that was like comforting to me, like, knowing like, now their perception has changed. And, now they know that, you know, we’re, we’re like them too. Even though we’re in a different country...I really didn’t think that they would all have that thought of all Americans.
Samantha recognized that the web-conferencing experience could also assist in future practice with colleagues from different cultures and the need to verify understanding. She states, “Verifying your understanding within a culture…We could be
working with people from another culture…in the future with my fellow colleagues, just making sure we’re, you know, I’m not like accidentally offending them or something like that and making them feel like an outsider.”

One student, Elizabeth, shared a negative hospital interchange she witnessed between a culturally diverse patient and the nurse. She described the nurse’s method of providing care to this patient and her lack of ability to remain open-minded and willing to learn.

I don’t think that it’s fair, um, what I saw when I was in the hospital was a Hispanic individual. And it wasn’t that he was speaking a foreign language. It was that he had a harsh accent and the, it was early in the morning and the nurse was just like very rude. And she was just kind of like, ‘I’m gonna go get the whatever they call the computer.’ And they brought in this computer and had him talk to the computer. And the computer asked him, you know, the normal questions in the pre-op room. And I was appalled by that. I mean, I just, I remember, this was before I was even in nursing school thinking, ‘Oh my gosh, like that’s totally not fair that he’s sitting there talking to a computer who has no emotions, no feelings, no feedback to offer when I’m sitting here with a nurse who’s understanding what I’m saying.’ And, I think that we need to keep that cultural acceptance and the willingness to be able to sit down and be patient and talk to a, your patients, and understand them for who they are.

Thus, Elizabeth believed that the web-conferencing was a positive effort to teach cultural competence to nursing students. She believed this pedagogy may improve nursing practice with diverse patients instead of letting technology take over.
I think that this is awesome because…if you’re willing to be open minded to these
type of learning experiences, you are maintaining like that type of personalized
health care mindset…I mean as American nurses…accept the different cultures
and learn so that we can take care of them…I mean that I think that it’s important
that we keep this going so that we can stay with our patients instead of letting
technology take over.

Students explained that the web-conferencing experience allowed them to
understand cultural differences better than they had previously. Lauren said,

I think it just like helps us to like better understand the different cultures. Like,
when we actually get out and are like helping people in the hospitals, like if they
are from a different culture we can like understand like their beliefs on like
healing and medicine. And like how their family like views everything. And it’s
just better than just knowing like our like if we’re Christians. Just knowing
Christianity we know like the variety of religions that we could encounter, like
throughout our careers.

Jennifer shared that she valued the web-conferencing experience as part of her nursing
education because it improved understanding of other cultures, “I think that begins with
at least a moderate understanding. And, I think through this you get a better
understanding than you had before.”

Students recognized that nurses must be open-minded and able to adjust their
thinking to accommodate different patient cultural beliefs and practices. Gabrielle said, “I
think it’s all about awareness, open-mindedness.” Hannah expressed,
Accept that others aren’t gonna always think and wanna practice the same healthcare methods that you do. So being confident enough to just accept that and move on, and take care of them based on their beliefs. Like, being open-minded and adjustable, I would say are two important things.

The students discussed the notion that open-mindedness is to be applied to their relationships with their patients, as well as with their colleagues. Jennifer voiced that,

I mean, I would say with patients and the, our colleagues, we’re all different. Um, to figure out a way to get a common goal and mission accomplished through similarities. Um, and try to understand as best you can. Of course, you’re not gonna know everything about every culture but approach it with an open mind, understanding and try to all get the people healthy.

Samantha believed that a willingness to learn and understand were of paramount importance for culturally competent nursing care. She said,

I would think that, for me, it means, like, understanding the cultures that you’re working with as best you can in your nursing field. And, if you don’t, like, learn, being willing to learn and like adhere to like basically your patient. Or like I said, like possibly your colleagues, just having, trying to have a common ground of communication and like understanding each other.

Elizabeth concurred and added,

Just the willingness to be open-minded and then always being willing to like learn. So if a patient is trying to explain why he feels a certain way and why he’s doing something, that he’s doing, he or she. Just being able to accept that and take
it for what it is and maybe use that later in your career. Um, I mean, just always being willing to learn and take in what other people have to offer.

The students’ awareness of how they were initially perceived in a negative way and how that felt was impactful. They voiced a new determination to avoid that pitfall in future interactions with other cultures. When asked how her views of culture and nursing had shifted as a result of the web-conferencing experiences, Victoria expressed,

It just maybe like what Madison says, more aware of how indifferent some of your views are, I guess. It just makes you aware of how important it is to understand and kind of respect what other people say. And not, not try to take it too literal, I guess... ‘Cause, cause what they, when they talked about the whole, the Indians and the killings, it kind of like, feel like they read about it in textbook, probably or read about it somewhere. Whereas, here we don’t talk about it not as looked upon as if it was bad. I feel like those countries look at the bad thing more when it comes to too, the good things always. It just kind of makes you more aware of, to realize that not everyone just thinks the same way, along those lines.

Eye-opening. Eye-opening was a theme that surfaced among all focus groups. Students felt that the experience of web-conferencing with their peers from the University in Dublin, Ireland opened their eyes to things they did not previously have an awareness of or know. Additionally, some took this a step further and recognized that their individual and collective actions could have an impact on how others throughout the world view people in the United States. This was expressed by Brianna, “I kind of saw that and I was like a little bit eye-opening…Like, it makes you more aware of how people
view you. And, the actions you take, or that your government or society as a whole takes really impacts the way that others think about you.”

This exchange even caused some of the students to feel shock as they realized that people in their own country are not always perceived in a positive manner. Jennifer said, “I was totally shocked that they just thought that we all want to like run the world, and we think, ‘It’s my way or the highway.’ And I was like, ‘That’s not what we think.’ ”

This experience sparked interest among the students to continue investigating different cultures. “…would be cool to talk to a Native American and see how they really feel about it, or about how they feel about being discriminated against, instead of just everyone’s general opinions or a specialist who studies that opinion,” said Elizabeth. They identified the importance of learning about culture and were able to apply things they learned through this experience to other cultures. Elizabeth expressed, “I think it’s really important that we do things like this so that we can know about maybe some of the smaller cultures. I just, I mean, I guess, personally, I don’t know much about Celtic culture, and that was awesome to me because now I do. And now my eyes are open to their opinions. It’s just, I just thought it was cool.”

Victoria stated that learning with others through web-conferencing broadened her perspective, “I guess just to see someone else’s point of view.” In a different focus group, Tiffany explained that learning and sharing with diverse students helped her to recognize that there are other people in the world,

The values of everybody, you know, changes with the individual person along, you know. And then it goes to the family, and then their belief system. So it helps,
it helps you learn. You know, if you’re not allowed to touch this person or be around this person during this ritual, or you know this family member’s there or something of that nature. It helps you realize that there are other people in this world besides you.

The web-conferences allowed students from Private Catholic College in Ohio to compare and contrast themselves with their peers in the University in Dublin, Ireland. They found similarities and differences and thought that this was both eye-opening and fascinating. The range in understanding was apparent. Speaking about the Irish students, Hannah said, “…they dress kinda similar to us. They, they have like, have feelings and think kind of similar to us.” Whereas, Madison said, “Yeah, I think it was easier to learn about the similarities between like, I mean, they’re obviously a lot like us. But, at the same time it, they were completely different because it, they looked at us in ways we don’t necessarily view ourselves.” They were surprised by and appreciated the similarities over the distance, as explained by Courtney,

I saw similarities in culture. Like, with my culture, I’m, my whole family is like, we have a big family and we’re all like very, like they’re all very proud of their Irish heritage. So, like when they were talking about St. Patrick’s Day, like for us, it’s very similar. We all get together with my family. We, like spend the whole day with each other and just, you know, like eating and laughing and, like that’s how it is for us too. I thought it was cool that like they did the same thing over there, kind of.

Students were able to compare and contrast the history of the native Irish population with the history of the Native Americans. This was new information for many
students in Private Catholic College in Ohio. “Comparing it to ours, I understood it a little bit better. But there’s was different because Christianity was not brought upon them in a forceful manner, so they had more of a choice to convert than the Native Americans here did,” stated Ashley. They discussed the integration of Christianity into cultures and that it was not always a free choice. Tiffany said, “But seeing that, you know, other cultures, you know, see our culture, you know, and the similarities between the two kind of let you adapt that we weren’t the only ones. Everybody has had some sort of integration of that religion, either forcefully or voluntarily.”

American students recognized that the Irish students had similarities and differences compared to themselves and felt that this understanding could be applied to experiences with other cultures. Jennifer said,

I think that it was very nice…to realize they are real people, and they are really just like us, even though we had no idea. Because I remember when we first saw ‘em, we were like chatting, like, ‘They look like us, except they don’t look like bums’ ‘Cause we go to school like bums, but they were like, it was nice to relate to. Because if you’re alike in that culture, you can be alike in many others.

The web-conferencing experience allowed students to understand the individuality within another culture. Hannah shared that not every student from the University in Dublin, Ireland held the same opinions,

When you heard…the different students on their end, they had different things to say. They didn’t all just have one opinion. And they all brought up different points and had interesting things about them…you learn…they’re just completely individual, just like we are.
Through the web-conferencing experiences, students realized that they will need to be aware of cultural differences and similarities in the future. They were sometimes surprised to find the similarities as much as they found differences between their culture and the Irish students’ culture. Tiffany shared,

It made me realize a little bit more. Um, now we just need to be aware of everybody else, um, and like talking with them from Dublin, Ireland you get to see like Jessica said, their third party view. ‘Cause even when we were talking about St. Patrick’s Day, you know, something simple. Having, you know, the young culture view here in America. You know, to drinking and green beer, and green milkshakes or whatever. And, the young adults over in Dublin, Ireland are talking pretty much the same thing, drinking.

Students acknowledged that negative perceptions are highlighted more than positive perceptions in intercultural exchanges. As a result of this awareness, they believed a nurse must be cautious and aware of the accuracy of sent and received communication messages to be respectful of cultural differences.

I think that it changed because I became more aware of how important it is to make yourself more adapted to different religions and different cultures. Like, it’s important to know about a variety of them so that you’re not put into uncomfortable situations. Much like I think that the Dublin, Ireland web-conference, at first, was uncomfortable because when they are trying to tell you how they believe about you, you don’t know how to respond without coming off disrespectful, or mean, because you don’t know exactly how they take it. You don’t because, I mean respect can be a variety of different things in different
countries. Like, you don’t, there’s just a strict, not a strict, a very defined line between what one country may think is respectful and what one, another country thinks is respectful…Like you had to logically determine how you should respond so you don’t offend anyone, said Madison.

Stereotyping. During our web-conferences there was a statement from a student from University in Dublin, Ireland expressing relief in what she found from her interactions with the students from Private Catholic College in Ohio. She said, “I think it’s great to hear students saying that…How you think, you know, not all of, in Dublin, Ireland, and maybe the world’s view over here might see Americans going in as it’s your way or the highway…So, it’s good that not everybody thinks like that in the U.S.” This struck a chord with the students from Private Catholic College in Ohio and triggered feelings about bias and stereotypes. Students recognized bias and stereotypes that they held toward Irish people and also bias and stereotypes held about them from some of the students from University in Dublin, Ireland. Elizabeth expressed this well,

I felt like they had certain bias towards Americans as a whole. And, we had maybe some certain bias towards them as a whole. And it took us kind of giving our insight on separate situations for them to be like, ‘Oh, well, not everyone thinks that Indians should be massacred.’ Like the situation where they talked about, um, Andrew Jackson being on the twenty dollar bill. They kind of make us seem like everyone was okay with that because we still have him on our twenty dollar bill. And it took, I forget what student, to say, ‘No we realize that that’s not a great thing, um, but it’s just something that we don’t really have a lot of control over.’
Students became aware that discussing course content together and exploring preconceived notions impacted their new understanding of one another. This was shared by Gabrielle,

But them hearing from us. No, there are people here that care. It’s not, ‘My way or the highway.’ You know, that dispelled that from them ‘cause they heard first hand. Whereas if someone comes, they’re just saying, ‘Oh I heard Americans aren’t one way or the highway.’ How do you really believe? You know, it’s just hearsay. When you hear it from the horse’s mouth, you’re like, ‘Hey this is the real deal.’ You know?

Through the focus groups, it became apparent that some of the students had never, or at least not often, experienced bias directed towards themselves. Samantha shared her thoughts about this new experience,

I’m fortunate enough to say that, maybe (laughs), that I usually don’t feel stereotyped? Like, I’m usually, well, we’re not like the minority. So I never feel like I’m being stereotyped. But I did feel like that in that situation. Which, it wasn’t, it wasn’t necessarily like a negative thing. It was just like, it was eye-opening, I guess, for me as well.

There was some discussion throughout a couple of the focus groups around the topic of government and how government policies and statements affect stereotypes. Students from Private Catholic College in Ohio felt that in the absence of experience with Americans, others may assume that all people in the United States feel the same way that the U.S. government does. Madison expressed, “They were looking from an outside
perspective of what they’ve read, based on our government. Whereas we don’t always identify with our government, because it’s not always what we believe.”

As a result of this experience, some of the students began to understand that their conversation and actions during the web-conferences could be eye-opening and may impact the current perceptions held by students of the University in Dublin, Ireland. Students did not believe that all people in the U.S. agreed with the government and they hoped that they were able to communicate that to their colleagues from the University in Dublin, Ireland. Nicole shared,

It might also open their eyes to the fact that we aren’t really exactly what we’re made out to be. As like individuals, we don’t all think, and we don’t all follow by the book what the government believes. So I think that like they might, it might have been an eye-opener to them too. To see that like, ‘Oh not everybody is like that,’ you know?

Students believed that this interactive, firsthand account prevented them from assuming that the Irish students believed the same things as their government does. Madison shares, “I feel that it was different being able to interact and get their actual views on things. Rather than saying, ‘Well you’re government did this, so that means you must believe in everything that your government’s done.’”

There was some free discussion between the two student groups. One question that was asked by the American group was if any of the Irish students wanted to come to the U.S. to work. The majority of the responses were affirmative. Therefore, admiration of American culture was a common theme, as expressed by Elizabeth,
They did seem sort of envious of American culture... It seemed like there must have been something that they’ve learned like through schooling, or in college, or that they’re learning right now that has made them admire our culture a little bit... Maybe, world-wide, America is obviously like kind of popular. Like a lot of people know about our culture.

Students spoke again about seeing themselves from a diverse other’s perspective. Their views of culture shifted because of the web-conferencing experiences. Lauren shared,

I think I realize more, and like learned more about like another culture’s views on us, and it maybe changed our views on them a little. Like, with them saying like, we’re money hungry and like all this. Like, I never thought of it like that, and it was like kinda weird, like seeing what other people like saw us as, because that’s not how we think of oursevles.

The students were able to be introspective and evaluate the perceptions of the diverse group. They did not always like what they saw when they looked through the eyes of the Irish group at their own culture. Jackie explained,

I thought it was surprising when that girl said that, uh...she believes that Americans think that, ‘It’s my way or the highway.’ When, when she said that I think that everyone in the class was like, ‘What?’ Because we don’t, here we don’t see it that way. But I think it’s, it’s more of a socioeconomic thing, than it is a belief system. Because, here in the States, rather than in other cultures, money is our number one thing. We’ll do anything for money. More money, you know, take over the Native American’s land for more money. We’re a money-based
system. (laughs) I’m like, in Dublin, Ireland, you know, you don’t really hear them talk about their poverty levels. Like the girl was talking about Dublin, Ireland how we have high poverty, right and everything like that. It’s more of, there I think they’re more concerned about their relationships with each other, rather than being money hungry like we are here. So, I was really surprised to hear that she thought that it’s our way or the highway, because we don’t think that. (laughs) We don’t. You know, actually say it out loud. And for somebody from a different country to, you know, come outright and say it was kind of like a slap in the face. (laughs) ‘Cause, it’s kinda one of those things you just put back, in the back of your mind and don’t really think about. Because everyone thinks that way, you know.

For many students, it was their first opportunity to have a discussion with peers from another country. It was their first chance to discover how the U.S. society can be perceived.

I think it just, I’ve never thought about it that way, but when she said that, I kinda realized, well yeah. ‘Cause, I mean, when other countries don’t do it our way. Like with the war on communism, we sought out to destroy it because we didn’t want that affecting our economic system. and so we went over there and it was basically, ‘It’s our way or the highway.’ We went over to force them to do it our way, not their way, said Ashley.

One response from the same question asked in open-ended fashion on the survey echoed the sentiment of discovery. Taylor wrote, “I now have a better understanding of
the way our culture can be perceived. It allowed me to see firsthand what it is like to be disliked due to where you are from.”

**Impact of pedagogy.** There were two themes arising from the focus group interviews that described impact of pedagogy: (1) experiential pedagogy, and (2) continuous learning

*Experiential pedagogy.* Students stated that this personal type of learning was beneficial to their learning. The ability to see, hear and interact was paramount. As expressed by Nicole,

I thought it was very beneficial to actually see somebody instead of read it on paper. We’re so like, as students we’re so, like adapted to that type of learning. So it was really interesting to be interactive kind of. And not just the sense of like religious aspects, but them as people too in their culture. It was really awesome to like get to see them for myself instead of just read about it. It’s just a lot more interactive learning, I guess.

The students verbalized an ability to apply the lessons from this interactivity to their future nursing practice. Hannah states, “…once you get personal with somebody, it, I think it would be more like, you could be more empathetic in your career instead of just taking a look at a distance of who they are.”

Students shared that they preferred interactive learning to reading in a textbook. “Good to hear firsthand from somebody their opinion and their knowledge about a culture as opposed to reading about it in a textbook or reading about it online,” said Elizabeth. Additionally, appreciation of culture was conveyed with personal, interactive
learning. “You get their personal opinion and their personal feeling and what certain aspects of their culture mean to them,” stated Elizabeth.

A recurring thread, students expressed their preference for interactive learning with students from another country compared to reading about their culture in textbooks, largely because it helped them to remember better. Victoria stated,

Doing the web-conferencing, doing it with interactions but with different cultures instead of just reading about what they do in like a textbook but interacting with them even more you can remember it better. Plus, it’s just more, once you become in view with like someone who’s like a Buddhist or something, someone from Asia you talk to like over web-casting or something, and then you have somebody in hospital that’s Buddhist, then you kind of already have a[n] idea of what they’re doing because you’ve interacted with somebody before.

Hannah expressed that despite the relatively short time spent learning with the students from the University in Dublin, Ireland, it was valuable,

I think just even though we only spent like a total of two hours? Just that little amount, like two hours, like got us an idea of what it’s like to talk to someone totally different from us. Cause, like most of the people who are studying health care and stuff haven’t like been around people who are different. And they’ve just been brought up in the same ways. So just being exposed, like early on through web-conferencing, I, I think it would be helpful.

Madison believed that working with Irish students via web-conferencing during her nursing education was valuable because it taught her how to reach out to diverse
others, including coworkers, to help her to understand cultural differences to improve patient care.

I think that as coworkers you should be able to share certain things with each other. So by working with someone, it’s not like you’re taking care of them. So you can ask their opinions on how would you approach this person if they’re of the same religion or from the same country. Just so, because they may know better than you that it’s okay for this woman from, I don’t know where anywhere, to have a female nurse or a male nurse. Whereas, you may not know. So, having someone from different countries, it can help you broaden your view and what you can learn about from them because it’s easier to ask a coworker than it is to ask the patient.

Students in all groups believed that the experience of web-conferencing with the students from the University in Dublin, Ireland as part of their nursing education was better than reading about their culture on paper. Nicole expressed it best,

It’s always so much more interesting to hear from someone else and not to just read it on paper, because you don’t get that interactive experience and you’re not really interested in learning more about a person. When you’re face to face with them you’re really interested in like what they believe and what they have grown up with and the things that they’ve learned throughout their life. And it’s kind of interesting to compare like your life to theirs. When on paper, you don’t really think about that things, those kind of things as much. You more or less just read what’s on the paper and nothing further.
The opportunity to ask questions and get to know the culturally diverse group appeared to enhance student learning. Ashley explains,

I like it a whole lot more than just reading about it. ‘Cause you actually get to ask them questions. Like ask questions to people who know their culture instead of just reading about it out of a book from, you know, I don’t know the people who wrote the book. Never met ‘em, probably never will. So I mean, I don’t know their spiritual views, or any, or their cultural views on, on any of these religions. And so speaking with somebody who is that religion and from a different culture kind of allows you to learn even more. It widens your learning experience.

Lauren agreed and suggested that this opportunity to learn in an interactive, personal fashion be extended to include more diverse groups instead of reading about them,

I think it was helpful too. Like it was helpful to like interact with them. And I think that it would be nice, like, like Tiffany was saying earlier to like interact with like even nurses from like other cultures, like a Hindu nurse or something. Like then you could ask them questions and like you could learn more about them, like personally rather than just like reading out of a book. It’s like, more personal, more like interactive learning than just reading a paragraph about it.

Students identified that the less structured personal interaction that occurred during the web-conferencing helped them to remember the information compared to lecture and readings. Madison stated,

I think the lack of structure also tends to make things more interesting. Because, when you feel free to ask someone from another culture what they believe or how they view something, it tends to strike your interest more than being told you are
to learn about their government and what they believe in and like specific things. When we’re told these specific things we’re to learn about then we’re not interested in, sometimes you just tend to forget. Whereas if you ask them questions that you actually have, find valuable, then sometimes in a roundabout way you can learn about their government if you’re talking about their religion. Or asking them questions about other things having to do with their culture. So, it doesn’t always have to be so strict when learning about religion. I think that when you interact with someone, you tend to remember more.

Tiffany shared that the being able to relate to someone through the personal interaction of web-conferencing assisted her learning.

I think it was a great experience, ‘cause you get you get the, the human experience and the human interaction. You know, like Ashley said, you can ask them questions. You, you know, you can get more into depth with that actual personal person than re-reading a paragraph 20 times. Rather, you know, cause it, for our anatomy class like to understand the reproductive system like we’re learning now the body doesn’t change. But, people’s views on things change. People’s view on how they do things change. So you get that personal interaction with somebody of how they believe and how they do things and I think you, I think as humans we learn more with the personal interaction, the speaking, the touching, the feelings, stuff like that. So you can, can relate to that person.

Students believed that being exposed to the students and faculty from the University in Dublin, Ireland was a positive learning experience. “Yeah, it was just good
exposure over all, and a good experience. It’s definitely something I will keep in mind with the rest of my nursing career,” said Samantha.

Jennifer agreed that the cultural exchange via web-conferencing was positive exposure. She added that it was memorable and simple.

   I think that this is really good because like Hannah said, it gives us exposure. Um, we didn’t have to do a lot to get it. I mean, we just came to class. It was very convenient. It was very, um, easy for us to get it through webcam. Um, we didn’t have to study abroad and we got, I mean, I’ll remember what I learned from that, so…and it was simple. We just used technology to see each other and talk.

   Some of the students saw the web-conferences as reinforcement of themes they were currently learning in college about diversity and difference. Nicole stated,

   I think, um, it is more valuable because it served as a reinforcement than it did a change. I think that [since college], I’ve learned a lot about like diversity and people of all different areas. And I think that this was just another instance where like I saw how much or how different people really were. And how to kind of embrace that difference and deal with it in different manners, I guess.

Brianna also saw the experiences with the students from the University in Dublin, Ireland as reinforcement of the notion of respect. Additionally, she pointed out that each interaction with diverse others is an opportunity to reinforce their beliefs about Americans.

   Um, I think it enforced what I kind of already had been learning about. You know, the whole respect differences, and things like that, the holistic individual.

But it also kind of reinforced like, on the negative side, that people are going to
look at the negative more so than the positive when it comes to like judgmental things. So, just as much as we need to watch out for that when it comes to like people of different races, or different, um, religions, areas of the world, we need to also realize that they’re gonna look at us that way too. So, our actions are going to enforce their beliefs on us too.

Students voiced that the web-conferencing sessions were new, changing experiences. They paid attention to course content and also subtle nuances in how students and faculty from the University in Dublin, Ireland dress and behave in a classroom setting. Nicole said,

And it was very interesting. It was definitely a new and kind of changing experience because I had never web-conferenced with a group from a different country. So, it was just really interesting to see the way, even like the way they conducted their classroom and things like that. It was just really interesting to see how different it was.

The experience caused some students to re-think their prior beliefs about the role of culture in health care. It seemed to change their understanding. The began to process that variations among the same culture make it imperative for nurses get to know the individual, and not to rely on broad religious and cultural practices. Courtney said,

I think that, especially like take through this whole religion class, and especially like this study, I’ve learned like not everyone has the same beliefs just because they’re in the same religion and just because they’re in the same culture. So, like you need to actually get to know the individual as a person, instead of just the culture that they’re in or the religion that they practice…I didn’t, I didn’t really
think about it at all. Like, relating to nursing before. Like, I knew, you know, certain religions didn’t want certain things, couldn’t do certain things, but I never really thought that would be a huge issue. But now I realize that it is really a big part of nursing.

Students appreciated the experience because it expanded their world view, preparing them for real world practice with multicultural patients. Madison said, “It was interesting to interact with different countries, as well. To make it more of a well-rounded experience while we’re in school. To be like exposed to it before we’re thrown into having to practice on these patients.” In response to the same question asked on the post survey, Hannah answered, “I feel I will be more empathetic towards other cultures since I realize now that they are people just like me.”

A brief and interesting conversation evolved towards the end of one of the focus groups. The students were discussing changes in themselves regarding their perceptions of culture and nursing due to the web-conferences with students and faculty at the University in Dublin, Ireland. They were expressing the wish to do more, see more, study together more with culturally diverse groups.

Victoria said, “I just thought it was kind of a fun experience to be able to just to do that…to be able to see them.” Then Madison said, “It was interesting to interact with different countries, as well. To make it more of a well-rounded experience while we’re in school. To be like exposed to it before we’re thrown into having to practice on these patients.” Victoria replied, “I feel like studying abroad would be something fun to do, but sometimes it’s not (long pause).” Nicole finished her sentence with “logical.” Victoria responded, “yeah.” Then, Brianna answered, “attainable.” Victoria completed her
thoughts, “So, like doing the web-conferencing thing, it makes it more kind of like studying abroad but especially interacting with people from different countries, except you’re not actually going there.”

**Continuous Learning.** Students felt that the experience began to prepare them to care for diverse patients in their future nursing practice. In addition, students from different focus groups recognized the need to extend past the group from the University in Dublin, Ireland, to work with patient groups they would encounter in their current city of residence. Tiffany explains,

I think if we were to have…like web-conference from a different culture that is more based on what is integrated into like [city]…you know…somebody from maybe, you know of the Muslim faith from you know the Middle East or something. Um, because there’s such a high population of Muslims here in [city, that would be helpful].

The web-conference experiences allowed students to recognize the need to be aware of culture to provide appropriate nursing care. They described how they may approach caring for culturally diverse patients in the future.

If I come across people who are like culturally, culturally different…I’ll think about what I know about their culture and how they might have been raised. But, I’ll also, like make it like important to get to know like them as a person, because everyone’s beliefs…can be different, how they were brought up or what they were around. So, I think just getting to know people, and figuring out how you’re going to treat them is important, stated Hannah.
They understood that nursing care with consideration of culture allows the patient to feel more comfortable. Tiffany shared, “I think just being aware of cultural history can help, ‘cause the cultural history comes into practices and certain beliefs, and knowing that can help the patient feel more comfortable and relaxed.”

Students believed that the web-conferencing in the context of their class, Human and Religion, would make a positive impact on their nursing career.

Yeah, I think like knowing about like the different cultures will help with our nursing. Like if we did have like someone from Dublin, Ireland, it would be nice to like know their history. Or if we know like the history of other cultures, like going through this class. So, I think it will definitely help with like our nursing career and being able to interact with like students from another country was nice and different. It was a good experience, I think.

Students believed that the value of web-conferencing helped them because they were able to learn from different people and carry that knowledge with them. Hannah explains, “You might wanna take something from them and use it with you. And just being able to deal with another kind of person and take that home. Like, you have a lot more practice with, if you would come, come across someone of different background.” Elizabeth concurred and offered that they may have something to share with the diverse others too, similar to her experience with mission trips.

I think it’s also rewarding to work with other groups of people, because, like Hannah was saying, it, there’s always something to learn from a different group of people, and you always have something to share. Like we’re going on mission trips and stuff, I always felt like it was awesome to work with different groups of
people because they were able to share knowledge. And, you kind of go into a situation where you’re trying to help rebuild their lives, but they still have so much to offer…And I always thought that’s really neat. And so, there’s definitely a rewarding aspect too. And, I think that’s something you can keep with you as a nurse.

Students explained that they valued the web-conferencing as part of their nursing education because it helped them to see the role of the family in different cultures. This is illustrated by the following exchange by two students in one of the focus groups. “You’ll see the role of family mostly with different cultures. ‘Cause family for our culture may be different for the family in another culture,” said Ashley. Tiffany replied, “‘Cause family is a major value in almost every religion.” Ashley said to Tiffany, “I think today’s culture like, all around, their, we’re more aware of how our decisions are going to affect our family.”

The idea that greater diversity would lead to greater learning value was shared by several of the students in a few focus groups. Ashley believed that learning and sharing with different people could be enhanced by web-conferencing with non-Christian groups, thereby increasing the diversity and learning potential. She stated,

I think more value would come out of it if we saw more diverse groups. Because just like Tiffany said, Dublin, Ireland is Christian and so we were just speaking with other Christians about kind of Christian religions. So, if we spoke with like a Muslim or a Hindu and if we actually spoke to nurses in their culture and saw how they do nursing there. ‘Cause then we can learn nursing practices from actual nurses in that culture.
Tiffany expanded this idea of diversity and thought the value of web-conferencing would increase by learning from practicing nurses in a different culture, “Yeah, instead of just students and a teacher you would actually like have more of colleagues who’ve been in the field and who have seen and done things, you know, relating to their culture rather than just talking to other students who are learning the same things as well.

Students felt that part of intercultural competence in nursing is taking the opportunity to learn about culture instead of acting based on assumptions. Courtney explained,

Getting to, taking the opportunity to learn about the culture, to have a patient from another country. And, you know, educating yourself about it before you go in there saying, well, you won’t want this, you won’t want this. So, you know, giving them options of the treat[ment], like, all the options that they have instead of just assuming that they wouldn’t want something.

Gabrielle agreed and stated, “How can you give someone really good care if you know nothing about them?...I mean, you can’t go into a room and say, you’re really sick. Let me give you medicine A, B, C. You need open heart surgery. Have a nice day. You know what I mean?”

According to the students, web-conferencing with the students from the university in Dublin, Ireland made them more motivated to be prepared to study together and also to learn about other cultures independently. Gabrielle said,

I feel more motivated. Like, I don’t wanna let the other country down. Like, like the whole country of Dublin, Ireland would be let down if I don’t do the reading before class or something. Like, like, you know what I mean? You just feel like,
because what I do plays a big role in how they see America, because this is all that they’re seeing of America. This might be the only experience they have with Americans. And then, you know, I don’t wanna not do the reading and then, them be like, they don’t know what they’re talking about. Then tell all their friends, ‘Americans don’t know what they’re talking about. They don’t do the reading before class.’

Lauren shared, “I think we just like realize more and it like made me wanna learn more.” Courtney expressed that this sparked a new excitement to learn about other cultures.

I think, I think it’s exciting also to learn about other people’s cultures and, you know, their belief system and like the similarities and differences between ours. Like, maybe everything’s different. Maybe everything’s the same. And you could have never known that if you didn’t like take the opportunity to ask questions and get, you know, get to know them as a person instead of just stereotyping them into one culture or religion.

The web-conferencing experience ignited a desire to continue to interact, study and learn with and from students and faculty in other countries. Gabrielle said, “I wish we did more than two sessions. I mean, I really do.” Courtney replied, “I wish we did this in more of our classes. (laughs) I thought it was really neat.”

**Development of cultural competence in nursing.** There were four themes emanating from the focus group interviews that described development of cultural competence in nursing: more effective nurse, communication, inner conflict, and culture and religion are deeply connected with healing.
More effective nurse. Students valued this experience because they felt the cultural interaction from the web-conferences would help them to be a more effective nurse, allowing patients to feel more comfortable and be more truthful. Nicole stated,

I think to be more, um, to be a more effective nurse, I guess. Um, when you understand someone and understand where they come from, to an extent they feel more comfortable with you. And they’re more likely to tell you the honest truth and how they really do feel and how much this really does hurt. Or, something like that and so you get, um, like the more open relationship with that patient. And then that, in turn, will make you a more effective nurse because you will be able to better treat them because they’re being honest with you. And they’re not just trying to run out of the hospital because you, that you don’t understand what they’re going through.

Victoria was able to link the web-conferencing experiences to her student shadowing experiences in the hospital, believing both would help her patients to feel like they are receiving competent care.

I feel like as a nurse you’re gonna be interacting with many different types of people. Um, it depends on who you’re working with too. Um, you know I shadow people at [hospital] and all the Somalian’s that are there. So, it’s kind of important to have, kind of their background or understand where they’re coming from. Or, just how to interact with them so they feel comfortable as possible. They don’t feel unsafe, or just not comfortable. ‘Cause it’s important to have your patient feel, like they’re in good hands.
The students determined that for intercultural competence in nursing, one must become introspective, aware of own cultural history and biases. Ashley asserted,

I think you need to be aware of your own personal cultural biases and prejudices you’ve got. Because being aware of those you can help yourself not show them if you’re going to still have them. And, because if you do show them, your patient’s not going to feel comfortable being around you. And I think knowing cultural history and that kind of information will help you understand your prejudices more.

Like Ashley, Lauren also believed that awareness of personal views helps to make patients comfortable and thought that the inability to become culturally competent could have negative consequences for the patient and also the nurse, creating a bad professional reputation,

Like, you have to be aware of like the other cultures and their views on things, but also know what you believe and make sure you don’t, like. If you are biased towards them or have a prejudice, that you make sure you don’t show it because part of your career is caring for everyone, so you can’t, like, make a patient feel uncomfortable…make them feel, like, uncomfortable in the hospital, and like, it shows like a bad reputation for you and it could like affect your career. And like, I think you just have to understand like all the cultures and their views in order to be like a good nurse in your career.

Lastly, students identified the need to be compassionate with diverse patients and care enough to find out about their history in order to provide culturally competent care.

“Yeah, you have to bring in care. You have to bring in compassion, along with, you
know, knowing, getting to know what their background is and what they, what they want before you, like start treating them medically,” stated Courtney.

**Communication.** Students were able to discern that without clear communication about cultural preferences with their nurses, patients may undergo treatments and procedures that are not congruent with their beliefs. They verbalized an understanding that this communication was critical to effective nursing practice. Madison explains from a patient perspective,

So, you have to understand that when, regardless of what you want, may not match what someone else wants. And, it’s important to know what you would do in that situation so you can accurately convey to that, convey that to your own nurse. Because if you don’t tell someone what you want, sometimes they may try to go with their own beliefs. Just like some people might not want a c-section, whereas you might think it’s necessary. If you don’t say, no I don’t want an emergency c-section, things like that. If you don’t have communication with your nurse then that’s when things can be done that you don’t agree with. So, that’s why being comfortable with your nurse and understanding your patients can be important. Because you don’t want anything to happen that you don’t agree with, just because you weren’t able to tell your nurse.

Victoria added that effective intercultural communication with patients required an awareness of nonverbal such as timing and other factors regarding the patient’s situation in the moment, “I guess it’s in the right timing, I guess. I don’t wanna input what you think to the patient. But it’s one of those, I feel like, you need to know when it’s right or
not right to be able to do that, depending on what the person’s going through or what the person’s personality is.”

**Inner conflict.** Students discussed the idea that in order to demonstrate intercultural competence, nurses cannot force their own beliefs on their patients.

I think it means just being aware of an individual’s beliefs and being sensitive to the way that they wanna do things, and how they want to practice, and how they wanna heal, and get better, or how they wanna die, either way. You can still have your own beliefs and that you can still be competent. It’s a matter of awareness and accepting the fact that you can’t force your beliefs on someone else, said Brianna.

Nicole concurred with Brianna and added how challenging this may become in examples of patient care situations,

There are going to be times in nursing where you want to do a certain thing. And, for example, if someone had, believes in a religion that they don’t believe in blood transfusions, and you want to give them a blood transfusion because they won’t survive and, something like that. You still have to, even if you want to because your job is to save someone’s life you need to respect what they believe in. And, if they don’t want that, you don’t do that because it’s not what they feel is right. So I think, like, to be competent and to be able to serve people the best you can, you do need to be well-rounded and well-versed in the differences in people and what they believe. And very sensitive to the way they believe.

Madison shared that understanding everyone and knowing their differences will help to prevent nurses from pushing their own beliefs,
I think that you have to understand everyone because you never know what you’re going to come across. And, so to have a more…widened perspective on how everyone is different and that. You’re not going to be able to give everyone the same treatment because of their beliefs…Everyone’s gonna have their own set of beliefs when it comes to the proper thing to do. But, just because you think it’s okay, doesn’t mean that everyone else is going to agree with you.”

While defining intercultural competence in nursing, students decided that inner conflict was inevitable. They determined that dealing with the discrepancies between the nurse’s individual beliefs and the patient’s individual beliefs would be a requisite component of intercultural competence. Victoria explained the inner conflict this way,

Just having that respect for your patient and knowing what they want. And I think to help with the inner conflict, it is important to know your own beliefs and try not to get them mixed with the patient’s beliefs. That can cause, just, you can get something wrong with the patient. If the patient wants something, like the whole, like the whole abortion thing, or the if the baby or whatever, you don’t wanna get your thoughts mixed all up. It’s about the patient and trying to make sure the patient’s okay and helping that person. Instead of trying to throw your input or beliefs into it. And that’s such a controversial topic to do. ‘Cause it’s important, I think, too. Just make sure you know your own beliefs and try to not get ‘em mixed with what our patient believes, but to try and understand what your patient is saying, though.

However, not all students agreed with Victoria. Some did not believe that a nurse must do only what the patient wants in order to be interculturally competent. Some
believed there must be an opportunity for the nurse to have a moral objection in some situations and still remain interculturally competent.

In the case she [Victoria] was talking about like when it comes to like, say performing an abortion or something, and you’re a nurse who is consciously against that. I don’t think you, just because the patient necessarily wants it, you have to do it yourself. I think you also have to stand for what you believe in, just as much as the patient does. I mean, if it involves another life or another being, in general. I don’t think like you’re morally obligated to follow, like, you’re obligated in your job to follow what you need to do. However, I think if it’s morally, if, if it’s against your own morals, I don’t think you’re obligated in that case to do anything. Like, as a nurse, I would not perform an abortion… You need to know competent you can be as well in providing health care. Like, interculturally, you need to understand what they believe in and what they practice. But, at the same time, you need to understand your beliefs, and your lines, and what you’re willing to cross, said Brianna.

*Culture and religion deeply connected with healing.* Students connected the value of the web-conferencing experience with the *Human and Religion* course, particularly when they discussed what they learned about the connection between culture and healing. Jennifer explained,

As we learned [in class], like culture and religion is deeply connected with healing. And if you’re able to understand people’s culture and maybe like know that they need to pray to Mecca like five times a day. I’ve heard of like nurses turning the bed towards Mecca. They’re gonna be more apt to feel better. And if
they feel better mentally, they’ll feel better physically, hopefully. But, um, I think understanding all that just will make you practice better as a whole.

**Synthesis of Quantitative and Qualitative Findings**

The data gleaned from the focus group interviews triangulated the results from the IAPCC-SV survey. After the experience of the web-conferences, students indicated that they became more culturally aware and more culturally competent, just as measured by the IAPCC-SV. In the focus group interviews, students were able to define critical components of intercultural competence in nursing, at least in a group setting.

A preference for this experiential learning pedagogy compared to reading about other cultures in textbooks was often expressed. Students kept pointing to the power of being able to interact, to see and hear the other students and faculty from Ireland. They recognized the impact of the platinum standard, study abroad, but felt that it was not within their reach due to monetary limitations and other reasons. Then students expressed the notion that another tool, web-conferencing, was attainable and convenient. It also provided some motivation for them to come to class prepared as they felt pressure to represent the U.S. well to their Irish counterparts. They voiced enthusiasm for this pedagogy by requesting more web-conferencing experiences as they progress throughout their nursing program, and more diverse cultures with which to interact.

Students appeared ready to apply their new awareness about culture to their future nursing practice. They recognized that they would likely encounter inner conflict as they deal with differences between their cultural beliefs and practices as well as those of their patients. They gained an understanding that these differences would need to be resolved internally before being able to practice as an effective nurse.
Interestingly, the TSET scores were not statistically significant. This could be a result of the web-conferencing having little impact on the affective subscale of transcultural self-efficacy. However, a better explanation could be that the web-conferencing experience caused them to approach intercultural nursing with greater respect and studiousness than they had previously. During the focus group interviews, it was clear that the students felt greater enthusiasm to learn about different cultures. They developed a keen awareness of the importance of providing culturally congruent care as well as the internal struggle that may result when faced with providing patient care that is not in alignment with their cultural beliefs and practices. This may have served to actually slow the rise of transcultural self-efficacy because they began to have an understanding of the type and level of nursing care that is required, and the work that it will take to achieve.
Chapter 5: Discussion

The purpose of this study was to determine the effect of web-conferencing on the cultural competence and transcultural self-efficacy of American undergraduate nursing students. The chapter begins with a review of the need for this research. Then the quantitative results are discussed followed by the qualitative findings, addressed within the framework of the foundational theories. The interplay of the quantitative and qualitative findings is presented, followed by a discussion of the key variables. Lastly, the implications for future practice research are presented.

The intersection of culture in the US nursing profession compared to the US population and the desire to teach culturally appropriate health care was the impetus for this study. (See Table 5.1, Cultural Comparison: Nursing and US Population.) Chapter one of this dissertation discussed the poor patient care outcomes, including death, that can result from a lack of culturally appropriate care. The true story was presented of a small refugee child from Laos, Lia Lee, who died from an intractable seizure disorder poorly managed by the US healthcare system attributed in large part to cultural dissonance between the child’s family and the team of healthcare professionals in California. While the book that chronicled Lia Lee’s sobering story, The Spirit Catches You and You Fall Down, was published in 1997 (Fadiman), its message is increasingly relevant. US healthcare workers continually strive to improve their ability to understand
and provide care that is culturally congruent to achieve optimum patient care outcomes due to growing diversity in the US.

Table 5.1

*Cultural Comparison: Nursing and US Population*

<table>
<thead>
<tr>
<th>Group</th>
<th>% Majority Culture</th>
<th>% Minority Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses</td>
<td>84.9</td>
<td>15.1</td>
</tr>
<tr>
<td>US population</td>
<td>72.4</td>
<td>27.6</td>
</tr>
</tbody>
</table>

This mixed methods study to determine the effect of web-conferencing on the cultural competence and transcultural self-efficacy of American undergraduate nursing students included an experimental pre-post quantitative design, and a qualitative design consisting of four focus group interviews. It demonstrates that web-conferencing coupled with an opportunity for reflection can be an effective concrete learning experience that can improve cultural competence.

**Major Findings**

There were a total of eight research questions asked in this study, two quantitative research questions and six qualitative research questions. The quantitative research findings will be addressed in order. While it is tempting to also explain the major findings of each qualitative research question in order, clustering them by similar notions, this strategy would not be the best way to present the findings. Instead, the themes presented in Table 4.7 (Chapter 4, Focus Group Data Categories/Themes) have been
related to four primary theories that connect the themes to the literature. Table 5.2, Focus Group Data Categories/Themes and Theory, presents the connections that will be addressed in the discussion of qualitative research findings.

Quantitative Research Questions

Research question one. Do students’ cultural competence scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences? The Inventory for Assessing the Process of Cultural Competence among Health Care Professional – Student Version, IAPCC-SV (Campinha-Bacote, 2002, 2007) provided quantitative answers to the research question. The results of the ANOVA statistical procedure performed by SPSS demonstrated a nine percent increase in post web-conferencing cultural competence scores for students in the treatment group compared to their pre web-conferencing scores. In contrast, the control group, who received the same content by the same American instructor through lecture format, made no gains in post-lecture scores compared to their pre-lecture scores.

Campinha-Bacote’s model of cultural competence is composed of five constructs that nurses must develop to become culturally competent, including: (1) cultural awareness, (2) cultural knowledge, (3) cultural skill, (4) cultural encounters, and (5) cultural desire (Campinha-Bacote, 2002, 2007). The interplay between the constructs is represented by a circle of spirals, one for each construct, with the cultural encounters spiral positioned in the center and the other four construct spirals circling around it. Without cultural encounters, the remaining four constructs do not have the opportunity to develop (Transcultural C.A.R.E. Associates, 2010). Applying this theory to the data suggests that the web-conferencing educational sessions provided cultural encounters,
albeit virtual. These virtual encounters provided opportunity for students to develop cultural awareness, cultural knowledge, cultural skill and cultural desire.

Traditional lecture format did not provide the same opportunity for cultural encounters, even though the same content was presented. Students had no opportunity to ask questions or interact with the cultural informants, so the other constructs of Campinha-Bacote’s cultural competence model were not supported or energized.

**Research question two.** Do students' transcultural self-efficacy scores increase after participating in web-conferences compared to a control group that does not participate in web-conferences? This was measured with the affective subscale of the Transcultural Self-Efficacy Tool, TSET. The results of the ANOVA statistical procedure performed by SPSS demonstrated no increase in post transcultural self-efficacy scores for either group of students, treatment or control. Some explanations are discussed below.

Jeffreys’ TSET combines affective, cognitive and behavioral subscales. The affective subscale was utilized for this research examining students’ awareness, acceptance, appreciation, recognition and advocacy related to their beliefs about people of different cultures. Students’ self-efficacy related to their beliefs about different cultures did not increase after the experience, as captured by the quantitative tool. Tying Jeffreys’ Transcultural Self Efficacy (TSE) Pathway (Jeffrey’s 2010) to the results from quantitative research question two provides plausible explanation for no change in scores.

Jeffreys’ TSE pathway, categorizes student feelings as inefficacious, efficacious or supremely efficacious related to providing care to people of different cultures. Both inefficacious, believing that you cannot do something you likely have the skill to do, or overly efficacious, believing that you can do more than you actually possess the skill to
do, can result in providing culturally incompetent care. For each item in the TSET, students can select 1-10, where 1 represents *not confident* and 10 represents *totally confident*. The average pre-test score for all students in the study was 8.33. This suggests that students rated themselves close to totally confident in their beliefs about culture. This is high for freshman nursing students who have not been in the clinical setting interacting with patients from different cultures. The average post-test score was 8.65 for all students. This lack of a statistically significant rise in post scores may indicate that the experience of students from Private Catholic College in Ohio with the students from University in Dublin, Ireland was sobering, with the American students coming away from the experience realizing that there is much to learn about people from different cultures in order to provide culturally congruent care. They might have come to appreciate that their initial self-assessment was overly high.

Another possible explanation is that two web-conferences were not enough of an experience to cause a significant change in students’ self-confidence about their cultural beliefs. The results could indicate that when students in the treatment group took the post-TSET, after web-conferencing but prior to the debriefing of the focus group interviews, they did not experience an increase in confidence related to their beliefs about culture, by comparison with qualitative research question results.

Alternately, the affective subscale of the TSET may have failed to capture changes in student self-efficacy related to their beliefs regarding culture, particularly when measured before the focus group interviews. Research methodology was constructed this way to measure the impact of the web-conferencing in purest form, preventing the focus group experience from impacting the TSET results. However, the
focus group interviews also served as an important debriefing experience for students, the results of which were not captured on the TSET. The importance of debriefing will be addressed in greater detail later in this chapter.

**Qualitative Findings**

Although qualitative questions were asked in a sequential manner, or one question at a time, there was quite a bit of overlap in student answers to different questions. The findings from the four focus group interviews are more effectively discussed within the context of four primary theories addressing cultural competence development, cultural competence among healthcare providers, experiential learning, and transcultural self-efficacy below.

4. Kolb’s Experiential Learning Cycle (Kolb & Kolb, 2005)

Table 5.2, Focus Group Data Categories/Themes and Theory, shows the congruence between findings and these four theories. The discussion of the results will be grouped according to the theories that underpinned this research. In the qualitative data, there were several themes and categories that supported more than one of the theories, as noted in the third column. Further, there is interesting interplay between the theories due to the similarities of their constructs. (See Figure 5.1, Research Theory Interplay with
Qualitative Data Themes.) Thus, the four following sections present a discussion of the sequence noted previously.

Table 5.2

*Focus Group Data Categories/Themes and Theory*

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<thead>
<tr>
<th>Category</th>
<th>Theme</th>
<th>Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Awareness</td>
<td>Stereotyping</td>
<td>Bennett</td>
</tr>
<tr>
<td></td>
<td>Verifying Assumptions/</td>
<td>Bennett, Campinha-Bacote</td>
</tr>
<tr>
<td></td>
<td>Open-minded</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eye-opening</td>
<td>Bennett, Campinha-Bacote</td>
</tr>
<tr>
<td>Development of Cultural</td>
<td>Inner Conflict</td>
<td>Campinha-Bacote, Bennett</td>
</tr>
<tr>
<td>Competence in Nursing</td>
<td>More Effective Nurse</td>
<td>Campinha-Bacote</td>
</tr>
<tr>
<td></td>
<td>Culture and Religion</td>
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<td>Connected with Healing</td>
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<td>Impact of Pedagogy</td>
<td>Continuous Learning</td>
<td>Jeffreys, Kolb</td>
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<td>Kolb</td>
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<td></td>
<td>Concrete Experiences/</td>
<td>Kolb, Campinha-Bacote</td>
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<td></td>
<td>Cultural Encounters</td>
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</tbody>
</table>
Figure 5.1

*Research Theory Interplay with Qualitative Data Themes*
**Bennett and developing intercultural sensitivity.** Bennett’s *Developmental Model of Intercultural Sensitivity (DMIS)* (Hammer, Bennett & Wiseman, 2003) explains how people move from ethnocentricity to ethnorelativism in the ongoing process of becoming more culturally competent. (See *Figure 2.1*, Bennett’s DMIS Model.)

Movement was evident in student answers to the research questions as they expressed new awareness, understanding, and an ethnorelative orientation of acceptance whereby they were “able to experience others as different from themselves, but equally human” (Hammer, Bennett & Wiseman, 2003, p. 5). Qualitative data obtained in this research question was similar to/ triangulated the quantitative data obtained from the IAPCC-SV scores demonstrating a nine percent improvement in cultural competence scores from pre to post-test for the web-conferencing group.

In every focus group students expressed how eye-opening the experience was for them. When asked what they felt they learned about cultural differences and similarities by working with their distant colleagues, students stated that the experience was helpful in understanding the similarities that exist both between and within cultures. The following comment reflects Bennett’s stage of acceptance, whereby the individual understands differences and equal humanity at the same time. Jennifer said,

I think that it was very nice…to realize they are real people, and they are really just like us, even though we had no idea. Because I remember when we first saw ‘em, we were like chatting, like, ‘They look like us, except they don’t look like bums.’ ‘Cause we go to school like bums, but they were like, it was nice to relate to. Because if you’re alike in that culture, you can be alike in many others.
Students were asked how their views regarding culture and nursing changed from participation in the web-conferencing. Gabrielle said, “It helped me see that if we just listen to those people from different cultures we can remove the stereotypes. If we would just take the time to understand those people life would be less stressful for both parties.” The realization that there are stereotypes held about those from other cultures, and the desire to understand those differences, is powerful. It indicates that the student values the relativity of cultural beliefs, providing another illustration of Bennett’s acceptance stage.

Students were able to recognize that it is equally, if not more important, to understand differences within cultures than between cultures. Samantha stated,

In general, [my views regarding culture and nursing have changed] quite a bit. But specifically, I never thought I would ever work with a diverse group of nurses in the future hospital I work at, but when all of them stated they wanted to work here, that opened my eyes. Also, it taught me to regard every person as an individual and not defined by their culture, alone. Culture plays an important role in shaping our lives, but every individual has their own set of beliefs and goals.

When asked how they believed they will be able to use knowledge gained from the web-conferencing experience in their future nursing practice, Elizabeth’s comments demonstrate a shift from minimization, the stage in which one’s personal cultural worldview are seen as universal, toward acceptance. She shared,

Throughout the web conferencing experience, I learned that there are misconceptions about Americans. With this it became more obvious that often, as humans, we think we know more than we actually do. It is important to be
extremely open-minded to various cultures, because our knowledge may not be correct. I now have a greater appreciation for cultures worldwide.

Other theorists address similar development patterns. Cifuentes & Murphy (2000), state that students become more tolerant and respectful as they interact cross-culturally via web-conferencing, demonstrating multicultural awareness. Supporting students as they construct their own knowledge in this experience enables them to transition from parochial to global in their views (Cifuentes, et. al., 2000; Whittle, Morgan & Maltby, 2000). Broadening perspectives and expanding vision can be an outcome of these types of virtual experiences. Emily expressed her broadened vision as a result of the web-conferencing experience,

Web conferencing with students and faculty of [University in Dublin, Ireland] was very intriguing and thought provoking. It was fascinating to interact face-to-face with students across the world in understanding their thoughts and perspectives on their own country as well as ours. This activity opened my eyes greatly in becoming more open to build relationships with people from different walks of life. I learned that these people experience joy, pain, and suffering the same ways I do. I believe I gained a broader perspective on people of all cultures simply through listening to the views of others.

The understanding that increased opportunity for intercultural interaction is the key to unlocking cultural awareness is central to the theory of Campinha-Bacote in her Process of Cultural Competence in the Delivery of Healthcare Services (Campinha-Bacote, 2010).
Campinha-Bacote and cultural competence. It was important to understand how students defined intercultural competence after the experience of web-conferencing together with their international peers. Consequently, students from Private Catholic College in Ohio were asked to create a definition together at the end of the focus group interviews. Campinha-Bacote has identified the five requisite constructs that make up cultural competence: (1) cultural encounters, (2) cultural awareness, (3) cultural knowledge, (4) cultural skills, and (5) cultural desire. In the following discussion student definitions of intercultural competence are compared with related definitions used by several researchers, beginning with Campinha-Bacote.

- **Cultural Competence [in general]:** is “the ongoing process in which the healthcare professional continually strives to achieve the ability and availability to work effectively within the cultural context of the patient (individual, family, community)” (Campinha-Bacote, 2007. p. 15).

- **Cultural Competence [for nurses]:** is “a necessary set of skills for nurses to attain in order to render effective patient-centered care” (Campinha-Bacote, 2011, para 1).

- **Intercultural Sensitivity:** occurs when one’s own cultural context is not used to understand behavior, but instead is understood through the cultural context of the other (O’Dowd, 2003). It is “the ability to experience and discriminate relevant cultural differences” (Hammer, Bennett & Wiseman, 2003, p. 422).

- **Intercultural Competence:** is defined by Davis & Cho (2005) as the ability to exercise openness and malleability when interacting with other cultures through the transformation of knowledge, attitudes and behaviors.
Students felt that part of intercultural competence in nursing is taking the opportunity to learn about culture instead of acting based on assumptions. This would be described as seeking to improve cultural knowledge by Campinha-Bacote, and intercultural sensitivity. Courtney explained,

Getting to, taking the opportunity to learn about the culture, to have a patient from another country. And, you know, educating yourself about it before you go in there saying, well, you won’t want this, you won’t want this. So, you know, giving them options of the treat[ment], like, all the options that they have instead of just assuming that they wouldn’t want something.

Nicole believed that increased knowledge about culture leads to becoming a more effective nurse. Her answer reflected cultural knowledge, cultural awareness and cultural skill, as well as intercultural sensitivity. She stated,

I think to be more, um, to be a more effective nurse, I guess. Um, when you understand someone and understand where they come from, to an extent they feel more comfortable with you. And they’re more likely to tell you the honest truth and how they really do feel and how much this really does hurt. Or, something like that and so you get, um, like the more open relationship with that patient. And then that, in turn, will make you a more effective nurse because you will be able to better treat them because they’re being honest with you. And they’re not just trying to run out of the hospital because you, that you don’t understand what they’re going through.

In working together to define intercultural competence in nursing, students discussed inevitable inner conflict that will occur when they grapple with differences
between their beliefs and those of their patients. The following answer is reflective of intercultural sensitivity, intercultural competence, cultural competence [in general], and cultural competence [in nursing] by Campinha-Bacote.

I think it means just being aware of an individual’s beliefs and being sensitive to the way that they wanna do things, and how they want to practice, and how they wanna heal, and get better, or how they wanna die, either way. You can still have your own beliefs and that you can still be competent. It’s a matter of awareness and accepting the fact that you can’t force your beliefs on someone else, said Brianna.

Campinha-Bacote’s theory hinges on the critical component of cultural encounters. Without the chance to interact with people from other cultures, nurses cannot improve their cultural competence. These student comments reveal the impact of the opportunity for intercultural exchange through the technology of web-conferencing with international faculty and students. Babenko-Mould, Andrusyszyn & Goldenberg (2004) state that “computer conferencing is an effective teaching method, which contributes to the development of a community of learners” that can “awaken self, discover and share voice, and collectively construct knowledge” (p. 154). This research adds to the body of evidence supporting their conclusions. Moreover, students appeared to appraise the task of cultural encounters with students from University in Dublin, Ireland appropriately as a challenge, exhibiting behaviors that would lead to a desirable outcome, according to Jeffreys Transcultural Self-Efficacy Pathway [TSE] (2010).

**Jeffreys, motivation and efficacy.** In spite of the quantitative results illustrating no pre post-test difference from the affective sub-scale of Jeffreys’ TSET, some student
comments in the focus group interviews exhibited increased motivation to perform. They prepared for and attended class more than they did while in the face-to-face lecture format due to the web-conferencing and interaction with their transatlantic colleagues. Gabrielle said,

I feel more motivated. Like, I don’t wanna let the other country down. Like, like the whole country of Dublin, Ireland would be let down if I don’t do the reading before class or something. Like, like, you know what I mean? You just feel like, because what I do plays a big role in how they see America, because this is all that they’re seeing of America. This might be the only experience they have with Americans. And then, you know, I don’t wanna not do the reading and then, them be like, they don’t know what they’re talking about. Then tell all their friends, ‘Americans don’t know what they’re talking about. They don’t do the reading before class.’

This may be explained using Jeffreys’ TSE Pathway (Jeffreys, 2010). Students who assess the transcultural task and are appropriately efficacious use more energy and effort in preparation. They exercise persistence and increased motivation. Thus, the experience of web-conferencing may have precipitated appropriate levels of transcultural self-efficacy that was not captured using the affective sub-scale of Jeffrey’s TSET. It was clear that students preferred experiential learning strategies when the content was about culture compared to face-to-face lecture, and they also felt that the web-conferencing augmented learning in classroom lectures. Kolb describes this interacting with the environment as a necessary component in his experiential learning theory.
Kolb and experiential learning. To set the stage for this discussion, it is useful to briefly recap the discussion of David Kolb’s experiential learning theory. David Kolb developed an experiential learning theory, an adult process with six propositions (Kolb & Kolb, 2005): (1) Learning is a process which; (2) tests and examines old knowledge to make new. (3) Learning entails conflict moving from old to new knowledge; (4) is holistic; (5) requires the experience of interacting with the environment; and (6) makes new knowledge.

The web-conferencing experience can be framed using Kolb’s propositions, as follows. It was a process for the students whereby they built upon prior knowledge gained in the classroom. The opportunity to interact with the students from University in Dublin, Ireland gave them a chance to test their beliefs and feel slight discomfort as they built cognitive scaffolds from old knowledge to new. Students became aware that all Irish students do not feel the same way or view people from the US the same way. The interaction allowed them to become aware of diversity between and within culture. They were able to create new knowledge together through the shared experience. Describing the experience in this manner shows the close alignment with the four stages of Kolb’s cyclical experiential learning cycle: (1) concrete experience, (2) reflective observation, (3) abstract hypothesis, and (4) active testing. The foundation for all other stages in the experiential learning cycle is the concrete experience (Kolb & Kolb, 2005).

During the focus group interviews, students were asked what value there might be in working with a cohort from another culture as part of their nursing education. Nicole expressed the impact of concrete experience on learning,
It’s always so much more interesting to hear from someone else and not to just read it on paper, because you don’t get that interactive experience and you’re not really interested in learning more about a person. When you’re face to face with them you’re really interested in like what they believe and what they have grown up with and the things that they’ve learned throughout their life. And it’s kind of interesting to compare like your life to theirs. When on paper, you don’t really think about that things, those kind of things as much. You more or less just read what’s on the paper and nothing further.

The essential thread in the development of cultural competence, tangible experience, may be defined differently by each theorist, but is the same. Campinha-Bacote describes it as a cultural encounter. Kolb labels it as a concrete experience. Their terms may be different but the message is the same: Tangible experiences are central and pivotal in the development of cultural competence. (See Table 5.2, Focus Group Data Categories/Themes and Theory, and Figure 5.1, Research Theory Interplay with Qualitative Data Themes.)

**Interplay Between Quantitative and Qualitative Findings**

It is not surprising that some of the quantitative findings were different than the qualitative findings. While the quantitative instruments were developed to measure specific constructs, they may not been able to effectively capture/ measure student beliefs from the student exchanges, through the technology of web-conferencing, immediately after the experience. Developing intercultural sensitivity requires a higher level of learning and integration that may not measurable immediately post-experience, thus was likely not captured well by the post-survey. Qualitative focus group interviews were
designed to probe more deeply into student perceptions and beliefs about the experience of interacting through web-conferencing with diverse faculty and peers. Triangulation occurred through the examination of quantitative survey data, focus group interview video and audio tapes, and focus group interview transcriptions

**Key Variables**

Upon examination of the data, it became apparent that two variables made significant impact on study outcomes, reflection/debriefing and prior experience abroad. These variables are discussed in turn.

**Importance/role of reflection and debriefing.** To recap from chapter two, debriefing is a requirement in most simulation experiences in order to allow students to work together to connect theory with practice in small group discussion. Often, video of the experience, or critical portions of it, are shared to spark memory, stimulate group awareness, analysis and discussion. Students discuss, debate and put together the pieces of the simulation in a way that is meaningful to them. Medley and Horne (2005) state that debriefing should be carefully planned and led by experienced educators to prevent students from feeling intimidated and belittled as they sometimes struggle with constructing knowledge. Reflection, underscoring critical points, and correcting misconceptions should occur in post-simulation conferences/debriefing sessions (Rauen, 2004; Medley & Horne, 2005).

Kolb & Kolb (2005) believe that learners can form testable concepts through the process of reflection. Learning about learning, or meta-cognition, occurs when learners use reflective experiences to become better learners. Self-assessment of the learning process is a key component of experiential learning meta-cognition (Kolb & Kolb, 2009).
On two open-ended survey questions, before focus group interviews, students were asked if their views regarding culture and nursing had not changed after the web-conferencing experiences, why not? Of the 18 students in the treatment/ web-conferencing group, only five stated that some of their views regarding culture and nursing had not changed. These five explained that they had already been exposed to this content, that they were aware of the need for nurses to be mindful of cultural differences, and that the web-conferences did not directly mention a connection to nursing.

Interestingly, all five of the comments were made by students who later participated in the focus groups. Before the focus groups, they wrote on the open-ended survey question that their views regarding culture and nursing had not changed as a result of the web-conferencing. Later, those same students described how their views had changed within the context of the focus group setting. It is remarkable that the open-ended question on the quantitative survey obtained two weeks after the final web-conference did not capture the same data that was obtained during the focus groups. There are a couple of possible explanations for this. In a group setting, students could have responded more positively because of Group Think or because of the Hawthorne effect. However, similar data was gleaned from all four focus group interviews. A more compelling explanation is that focus groups may have acted as a catalyst to stimulate thoughts, enabling mutual construction of knowledge. Students were able to process their ideas within a safe peer group of others who had also participated in the web-conferences, similar to a debriefing session after simulation.

Students in the focus groups voiced shock when they heard how Americans could be perceived by people from other countries. Some stated that this was the first time they
had ever felt bias directed towards themselves. They decided that these perceptions of Americans were false. A realization developed that they, too, may form misperceptions. They decided that careful checking between the nurse and a culturally diverse patient could prevent misperceptions. Such a reflective experience required time and appropriate levels of support. Students received this support from one another during the focus groups and from the researcher after the focus group interviews were completed.

Reflection is the most plausible explanation for the change in student response from individually written answers after the web-conferences to the focus group interviews. These results are suggestive of an evolution of thinking that is attainable through the shared experience of reflection within a group.

**Prior experience abroad.** Prior experience vacationing abroad appears to have the greatest positive impact on student learning from the web-conferencing experience. Thirteen students who participated in the focus group interviews were asked about their experiences, if any, outside of the U.S. Three types of experience were found: (1) no experience outside of the U.S., (2) vacation experience abroad, and (3) significant experience abroad.

Those students who made the greatest gains in IAPCC-SV scores, 6 points, were students who had vacationed abroad. The group with vacation experience abroad had opportunity for some type in-person cultural exchange which may have caused greater cultural desire, cultural awareness, curiosity and openness leading up to the web-conferencing experiences.

Students with no experience outside of the U.S. made a 3.5 point gain in IAPCC-SV scores. This may have been the first opportunity to begin cultural exchanges,
sparking cultural awareness and cultural desire. However, the web-conferencing experience may not have been a strong enough stimulant to make big movement on those constructs of cultural competence for the group of students with no physical experience outside of the U.S.

The group with the smallest gain, 1 point, was the significant experience abroad group. It may be that the experience of interacting with students and faculty from University in Dublin, Ireland via web-conferencing was less impactful by comparison for students who already had significant experience abroad. Study abroad affords the opportunity to get to know people of another culture in their own environment, living there and experiencing it with all of the senses.

**Limitations**

First, this mixed methods study involved only 33 participants. Therefore, the generalizability of quantitative findings would be a stretch. Second, these students were enrolled in a Private Catholic College. Students in a different academic setting, such as a large public institution with a significant international student population, might respond differently. Therefore, results of the IAPCC-SV may not be the same as they were in this study with this particular group of students. Third, the post-survey data was conducted the same semester of the web-conferencing. Therefore, the results do not address the question of longevity of the impact.

Fourth, five of the students in the treatment/web-conferencing group elected not to participate in the focus groups, became ill, or had a last minute scheduling conflict. There could be differences among this group of five students compared to the thirteen who did participate in focus groups and that qualitative data was not captured. Fifth, the
design of the focus group questions focused on the treatment, and a parallel set of questions were neither designed nor posed to members of the control group. As a result, it is unknown how the control group participants might have responded to a similar set of questions. Finally, information about experience abroad was collected only from focus group participants, not from students in treatment group who did not participate in focus groups or the control group. It is unknown whether differences, in prior experiences outside of the U.S. between the groups of students, may have been a confounding variable for the quantitative results.

**Implications/ Recommendations for Practice**

Web-conferencing served to ignite a flame of desire and curiosity to interact with people from other countries and cultures. Arranging this type of intercultural experience at the beginning of the American students’ nursing education, during their freshman year, may serve as a foundational element to frame all others and to build a desire to develop intercultural competence in nursing. It was both surprising and hopeful that freshmen nursing students, in only the second semester of their nursing program, could create such strong definitions of intercultural competence in nursing. Students appreciated the opportunity for experiential learning, to see and hear the others, to interact with students and faculty from around the globe. Participants in several focus groups requested more web-conferencing experiences. Some asked for greater diversity in student groups, such as Muslim students. Future experiences should attempt to broaden the diversity of the cultural exchanges through web-conferencing.
Certainly, web-conferencing is more attainable for students in terms of money and time compared to study abroad. Efforts should be made to utilize this tool to augment other cultural exchange efforts in the higher education setting.

In order to increase the positive but modest nine percent gain on the IAPCC-SV, web-conferencing should begin early and throughout the higher educational process to spark desire to learn more about other cultures. According to Campinha-Bacote (Transcultural C.A.R.E. Associates, 2010), cultural encounters are central to the development of the four other constructs. Thus, cultural desire, cultural awareness, cultural knowledge and cultural skill can improve only after opportunity for cultural encounters. Consistently offering opportunity for such cultural encounters is fundamental for development.

Web-conferencing is clearly dependent upon technology for interaction, even though the requirements are few. Technical support is essential so that educators can focus on the content, interactivity, and student support. During the first web-conference with the group in University in Dublin, Ireland, technical support was not readily available in Ireland. Thus, the technology team from Private Catholic College in Ohio needed to provide the support over the distance in order to make the web-conference possible. Likewise, it is necessary to establish an alternate plan in case of technology glitches, lapses and failures. Simply holding a practice session for fifteen minutes before each web-conference is quite helpful.

Web-conferencing with diverse cultural groups requires advanced knowledge about pedagogy related to connecting students across cultures, not unlike study abroad. In a discussion of study abroad, both Liaw (2006) and O’Dowd (2003) warn that greater
faculty presence may be necessary to prevent an underscoring of previously held stereotypes or a “fossilizing of stereotypes” (Liaw, p. 50). Merryfield (2002) states that global educators should employ the following key teaching methods: “confront stereotypes…resist simplification of other cultures and global issues; foster the habit of examining multiple perspectives; teach about power, discrimination, and injustice; and provide cross-cultural experiential learning” (p.18). Therefore, students and faculty need adequate support to meet this challenge. In addition to pre-experience discussion with students, a debriefing session is a critical part of necessary support.

Blending cultural competence teaching strategies would help to meet the needs of students with different learning styles. Finding culturally diverse groups near campus for service-learning opportunities would provide students the chance to learn from different cultures. Working with culturally diverse groups of students and their faculty in the U.S. as web-conferencing partners is another idea.

It is important for geographically separated faculty to work together to avoid imposing teaching strategies and/or content on the other. Faculty should educate themselves in order to effectively lead a student group through web-conferencing with culturally diverse students to prevent cementing of stereotypes.

Institutional infrastructure and faculty development are necessary to support intercultural exchanges. Engaging college/university administrators to support faculty development to participate in this pedagogy is necessary to prevent it from becoming a faculty burden. Providing opportunities for faculty development around cultural competence, collaborating with international peers, technology of web-conferencing, and how to lead debriefing sessions is important.
The ARC Theoretical Model

The ARC Model for Nursing Education toward Cultural Competency was developed in 2010 while preparing the research proposal. (See Chapter 1 for Figure 1.1, ARC Model for Nursing Education toward Cultural Competency, 2010.) Literature from multiple disciplines informed this model of various teaching strategies to develop cultural competence. Knowledge, skills and attitude changes resulted leading to cross-cultural experiential learning, self-efficacy and Appreciation of the Role of Culture [ARC] in healthcare. This model was used to underpin this mixed methods research.

After completion of the research, it became apparent that several elements of the theoretical frameworks could be woven together to form something greater than each of them alone for the purpose of nursing education. Through the lens of this synergy, the actions of the students can be explained in greater detail. The result is Figure 5.2, A Synthetic Model of the Theory and Dynamics Leading to ARC in Nursing Education, 2012.

In both the pre and post-research versions of the ARC model, multiple disciplines inform the various concrete experiences/ teaching strategies. However, there are five important changes. First, the phrase Cross Cultural Experiential Learning was vague and needed to be unpacked. In this research it became apparent that there was much going on in this stage that was not captured by the original ARC Model. A systems approach was used in the post-research version of the ARC model depicting the interrelationships between the parts. There is a main or central experiential learning cycle, informed by Kolb, Campinha-Bacote, Jeffreys and Bennett including: (1) cultural encounters; (2) debriefing; (3) abstract hypothesis testing while building knowledge, skills and attitudes;
and (4) active experimentation in the clinical setting. There could be differences in outcome based on differences in clinical settings.

The second important revision to the ARC model addresses how the various components relate to one another. In the original version the ARC Model was static and unidirectional. However, building an appreciation of the role of culture is cyclical and dynamic with feedback loops that may feed and strengthen the process.

The third important distinction between the two ARC models is the power of reflection. There are two powerful feedback loops that flow from the critical component of reflective observation/debriefing. When students have the chance to think about the experience, they are able to scaffold to prior experiences and build new knowledge together.

The fourth change in the ARC model is the addition of a feedback loop that flows from debriefing and leads to cultural awareness and transcultural self-efficacy. As students have the opportunity to reflect and debrief, they gain cultural awareness from the interaction(s) and build confidence or transcultural self-efficacy from reflective observation.

The fifth change to the ARC model is the addition of a second feedback loop flowing from debriefing to cultural desire. Cultural desire leads to seeking more cultural encounters and back to reflective observation. Students build cultural desire from more and more cultural encounters when they have the opportunity to reflect on them.

Both feedback loops could be described as reinforcing loops (Senge, 2006), because as students worked through each of them those experiences influenced their willingness to work through the central loop again. Since the experiences were positive,
students wanted to do this again, requesting more opportunities to web-conference with culturally diverse groups of students and faculty. It is surmised that the opposite would also be true; negative experiences would lead to reticence to repeat the central loop.

Web-conferencing is used as a cross-cultural experiential learning vehicle for active experimentation during cultural encounters. Students are given opportunity to develop the knowledge, skill, and attitudes necessary for transcultural self-efficacy. Pivotal debriefing/reflection occurs next, followed by abstract conceptualization and cultural awareness/acceptance, leading to ARC in health care. The ARC Model for Nursing Education toward Cultural Competency may be used to assist nursing faculty to plan concrete experiences with multi-cultural peers. Future research should be completed to further test and refine this model.
Figure 5.2: A Synthetic Model of Theories and Dynamics Leading to ARC in Nursing Education, 2012
Recommendations for Future Research

While the data from this study demonstrates an impact from international web-conference experience, more research is needed. Five areas for further exploration are proposed here.

This research took place on the campus of a Private Catholic College in Ohio. It would be interesting to determine the outcome in a larger, public university with a more diverse international student population.

The quantitative surveys were administered two weeks after the completion of the second web-conference. Focus group interviews followed for two weeks. All data were obtained during the same semester in which web-conferences were held. Whether or not the results will be long lasting is unknown. Conducting focus groups toward the end of the educational program would be one way to determine the length of the effect of the web-conferencing.

Ultimately, the goal is to change nursing practice and develop culturally competent nurses. This study collected data from classroom situations. Yet nursing students spend a great deal of “educational time” in clinical settings. Collecting data related to clinical demonstrations of cultural competence by students, comparing treatment and control groups, would provide valuable information about students’ ability to transfer knowledge from the web-conferencing experiences to practice.

Instruments created by nurse theorists in the U.S. were not used with the student cohort from University in Dublin, Ireland as they had not been tested in Ireland. Testing
the IAPCC-SV and TSET with Irish student groups would allow quantitative data to be examined from both groups of students and to validate the instruments. Knowledgeable faculty members with an understanding of cultural competence are critical to advancing this work. Conducting similar research with faculty members would aid in determining their cultural competence development and necessary faculty development in order to lead future web-conferences.

Conclusion

From a higher education lens, cultural differences create opportunity coupled with responsibility to discover viable, affordable pedagogies to improve cultural competence of nursing students that will ultimately improve the appropriateness and quality of nursing care delivered to the entire U.S. population, improving patient care outcomes. This is particularly critical as just 1.4 percent of US students in higher education in 2010-2011 studied abroad (Institute of International Education, 2011). Video and/or web-conferencing is a tool used by disciplines across the globe to bridge distance and assist in multicultural communication through the addition of live voice and video. It is one method by which educators can engage more students interculturally without the typical constraints of geography and resources, both human and financial. Technology is being utilized to assist with mutual scaffolding for the social construction of knowledge. Content is learned together in addition to learning about culture from and with international peers and respective faculty.

This research was conducted to discover if the novel teaching/learning strategy of web-conferencing between geographically separated and diverse groups of students and
their respective faculty could be used to improve cultural competence. Web-conferencing appears to be a viable tool in the cultural competence educational tool box. In contrast to the 1.4 percent of students in higher education in the U.S. who study abroad (Institute of International Education, 2011), web-conferencing allows the masses to participate as it is not limited by cost, time away from home, time away from study, time away from work. It is free to students and faculty and can occur in the context of many courses. Faculty time, organization, and a willingness to do things differently/present content differently are necessary. A faculty champion is needed to teach others and lead this initiative towards new cultural competence pedagogies if the goal is to teach nursing students how to provide culturally appropriate care.
References


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Appendix
Appendix A: GPower3 output

F tests – ANOVA: Repeated measures, within factors
Analysis: A priori: Compute required sample size

Input: Effect size f 0.25
       α err prob 0.05
       **Power (1−β err prob)** 0.8
       Number of groups 2
       Number of measurements 2
       Corr among rep measures 0.5
       Nonsphericity correction ε 1

Output: Noncentrality parameter λ 8.5000000
       Critical F 4.1490974
       Numerator df 1.0000000
       Denominator df 32.0000000
       **Total sample size** 34
       Actual power 0.8070367

F tests – ANOVA: Repeated measures, within factors
Analysis: A priori: Compute required sample size

Input: Effect size f 0.25
       α err prob 0.05
       **Power (1−β err prob)** 0.7
       Number of groups 2
       Number of measurements 2
       Corr among rep measures 0.5
       Nonsphericity correction ε 1

Output: Noncentrality parameter λ 7.0000000
       Critical F 4.2252013
       Numerator df 1.0000000
       Denominator df 26.0000000
       **Total sample size** 28
       Actual power 0.7214198
Appendix B: IRB Approval

March 20, 2012

Protocol Number: 201200019
Protocol Title: BUILDING THE ARC IN NURSING EDUCATION: CROSS-CULTURAL EXPERIENTIAL LEARNING ENABLED BY THE TECHNOLOGY OF VIDEO OR WEB-CONFERENCE, Ada Demb, Tara Spalla, Educational Policy and Leadership

Type of Review: Initial Review—Expedited
Date of Review: March 10, 2012
IRB Staff Contact: Michael Donovan
Phone: 614-292-6950
Email: donovan.6@osu.edu

Dear Dr. Demb,

The Behavioral and Social Sciences IRB **REQUIRES MODIFICATIONS** to the above referenced research.

1. Question #24c—Change “Tara L. Spalla” to participant, as the participant is the one who will be providing consent.

2. Appendix B—Also mark the box for category 6, since recording is taking place.

3. Oral Introduction and Invitation Letter—Revise as follows:
   - As the data being collected is not anonymous (e.g., videotaping is taking place), change “You can be assured that participant comments will be anonymous...” to instead read “You can be assured that participant comments will be kept confidential by the researchers...”
   - Change “In addition, survey responses and focus group feedback will be kept confidential” to include “by the researchers” at the end of the sentence.
   - After the 2nd sentence of the paragraph beginning “You can be assured that...”, insert the following sentence: “However, while we ask focus group participants to respect the confidentiality of focus group discussions, we cannot guarantee they will do so.”
   - Before the sentence starting “For questions about your rights as a participant...”, insert the following sentence: “For questions, concerns or complaints, or if you feel you have been harmed as a result of participating in this study, you may contact <insert PI and/or Co-Investigator name and contact information>.”
   - Add the below language regarding confidentiality and required disclosures:
     “Efforts will be made to keep your study-related information confidential. However, there may be circumstances where this information must be released. For example, personal information regarding your participation in this study may be disclosed if required by state law. Also, your records may be reviewed by the following groups (as applicable to the research):
     - Office for Human Research Protections or other federal, state, or international regulatory agencies;
     - The Ohio State University Institutional Review Board or Office of Responsible Research Practices;
     - The sponsor, if any, or agency (including the Food and Drug Administration for FDA-regulated research) supporting the study.”

Modifications should be submitted to the Office of Responsible Research Practices as follows:
   - Provide a cover letter with a detailed, point-by-point response to each of the requested modifications.
   - Revise all applicable documents and submit the following:
     - One copy of each applicable revised document with changes underlined
     - One copy of each applicable revised document with changes incorporated (clean)
   - Submit a copy of this letter with the Principal Investigator’s original signature and date in the spaces provided.

Continuing Review revisions should be returned within one week of the date of this letter or sooner, based on the protocol expiration date. Initial Review and Amendment revisions need to be returned within two weeks of receipt.
Appendix C: Recruitment Letter

ORAL INTRODUCTION AND INVITATION LETTER FOR RESEARCH PARTICIPATION
(This document be introduced verbally in class, provided as hard copy after introduction, and then sent via email.)

[Date]

Dear [student’s name]:

As you may have heard from your faculty member, Laura Patch, I would like to request your participation in a research project for my dissertation. I am a doctoral student in the School of Higher Education Policy and Leadership at The Ohio State University under the guidance of my advisor, Dr. Ada Demb. My research aims to understand whether the use of web-conferencing, which connects geographically separate groups of nursing students in different countries, will affect a student’s level of cultural competence as a result of this experience of learning together.

This introduction will provide important information about the study and what to expect if you decide to participate. The same information will be provided to you in a follow-up email, and your response to the email will serve in place of a consent form for research participation.

Your participation in this study would be extremely valuable in helping us discover more about the best teaching and learning strategies to prepare nursing students to practice in a multicultural society.

There are two parts to this research: two paper-and-pencil surveys, and the opportunity to discuss the experience after the conference in focus groups. First, those of you who agree to participate will be randomly assigned to either the group with web-conferencing or a group without web-conferencing. Both groups of participants will be asked to complete two brief surveys twice: the first time before the web-conferencing takes place, and the second time after the completion of the web-conferencing experiences. The web-conferencing session(s) will be video-taped so that I may study them afterwards. For the second part, students from the web-conference group will be invited to participate in one
of a several focus group interviews to discuss this experience. The focus group interviews will be audio-taped so that I may create transcripts to study.

The web-conference sessions will be integrated as discussion sessions with the on-going course material in Religion and Spirituality. The sessions will be in place of the regular coursework. Students who do not elect to participate in the research will still be randomly assigned to attend either the web-conference or the regular class covering the same content but will not have to complete surveys or participate in focus group interviews.

You can be assured that participant comments will be kept confidential by the researchers, as everyone in the study will be assigned a code number for the surveys, and alias names for the focus group. In addition, survey responses and focus group feedback will be kept confidential by the researchers. However, while we ask focus group participants to respect the confidentiality of focus group discussions, we cannot guarantee they will do so. While you may wish to share with your friends about your own participation, you should respect the privacy of other participants and avoid mentioning their names and/or comments. After collecting the surveys and conducting the focus groups, all data will be de-identified. Once data analysis is complete, video and audio tapes will be destroyed. Survey responses will only be reported collectively.

Efforts will be made to keep your study-related information confidential. However, there may be circumstances where this information must be released. For example, personal information regarding your participation in this study may be disclosed if required by state law. Also, your records may be reviewed by the following groups (as applicable to the research):

- Office for Human Research Protections or other federal, state, or international regulatory agencies;
- The Ohio State University Institutional Review Board or Office of Responsible Research Practices;
- The sponsor, if any, or agency (including the Food and Drug Administration for FDA regulated research) supporting the study.

I want to extend a personal invitation to you to participate in this web-conference experience. By doing so you will be contributing to higher education research, and ultimately to the quality of nursing education.

The first survey should take approximately 5-10 minutes to complete, and the second survey, approximately 20-30 minutes to complete. You will be asked to complete them once before the web-conferencing begins and a second time after completion of all web-conferencing. The focus group interview will last for no more than one hour. You may decline to participate in this study without penalty. If you choose to participate in the study, you may discontinue participation at any time without penalty or loss of benefits.
By replying to this email invitation letter, you do not give up any personal legal rights you may have as a participant in this study and there will be **no impact on your coursework or grades at Mount Carmel College of Nursing.**

An Institutional Review Board responsible for human subjects research at The Ohio State University reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

**As an incentive to participate,** students who elect to participate in this study will be entered into a **drawing for a chance to win one of four $50 gift cards to Amazon.com.** If you choose to enter this drawing, your contact information will be collected separately and will not be connected in any way to your survey or focus group responses. You are not required to finish the survey or focus group interview to enter the drawing.

For questions, concerns or complaints, or if you feel you have been harmed as a result of participating in this study, you may contact Ada Demb at demb.1@osu.edu or Tara Spalla at spalla.2@osu.edu. For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

**This letter will also be delivered to you via email. Please respond to that email from spalla.2@osu.edu with the subject line “Web-Conferencing Research in HUMN 425” by Monday, March 26 if you would like to participate in this study.**

Thank you for your consideration.

Sincerely,

Tara L. Spalla, MS, MA, RN  Ada Demb, Ed.D.  
Doctoral Candidate  Associate Professor, Emerita  
Educational Policy & Leadership  Educational Policy & Leadership  
College of Education & Human Ecology  College of Education & Human Ecology  
The Ohio State University  The Ohio State University
Appendix D: Focus Group Script

Hello! Thank you for being part of this focus group today. We will explore more deeply your thoughts, beliefs and feelings surrounding the web-conferencing experiences and cultural competence in nursing. Opinions expressed in this room should remain confidential so that all members of this focus group feel safe to share. After conducting the focus groups, all data will be de-identified. No participant names will be used at any time. Any comments quoted in my research will be associated only with an alias. Once data analysis is complete, video and audio tapes will be destroyed.

This focus group interview will last for no more than one hour. Participation in this study is completely voluntary. You may drop out at any time. This will have no impact on your coursework or grades at Mount Carmel College of Nursing.

We will watch a few short video clips of the web-conferences today to help refresh your memory of the experience. Show clips throughout the focus group.

1. What do you feel you have learned about cultural differences and similarities by working with your distant colleagues through the process of web-conferencing together?

2. How do you believe that you will be able to use knowledge gained from the web-conferencing experience in your future nursing practice?

3. What do you think the value might be from working with a cohort from another culture as part of your nursing education?

4. How do you define intercultural competence in nursing?

5. How have your views regarding culture and nursing changed from participation in the web-conferences?

6. If your views regarding culture and nursing have not changed, why not?
Thank you for your participation today. Your participation in this study will be extremely valuable in helping us discover more about the best teaching and learning strategies to prepare nursing students to practice in a multicultural society. Your contribution to higher education research, and ultimately to the quality of nursing education, is sincerely appreciated.