

Study Abroad Blogs: Developing Intercultural Competence in Teacher Education Students

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Abstract

Developing intercultural competence is a necessary skill in order to successfully navigate our increasingly global society. This manuscript reports the findings of a study that examined how technology-mediated activities provide evidence of advancement towards intercultural competency and how digital tools played a role in this advancement among world language teacher education students studying abroad. Data from student blogs, participatory observations, and language learner autobiography assignments were analyzed using a modified matrix based upon Byram's (2000) guidelines for self-assessment of an intercultural experience. The results point to evidence of intercultural competence among the digital artifacts examined, and we find that digital tools play an important role in the advancement towards intercultural competence through affordances not available with print-based methods.

INTRODUCTION

As the ubiquitous influence of the Internet and mobile communication technologies permeates all aspects of life, we find ourselves in an ever-shrinking world. Connections among people from all parts of the world previously impossible are suddenly commonplace. However, meaningfully connecting with people from different cultures requires facility with *intercultural competence* - appropriate interactions and behaviors derived from a combination of attitudes, knowledge, and skills related to the target culture. This is not only true of digitally mediated interactions but of everyday face-to-face interactions.

Given the diversity of students in public schools, facility with intercultural competence is a crucial skill that should be cultivated in teacher preparation programs. Among second language teachers, intercultural competence is vital, and yet it has fallen between the cracks in most teacher preparation programs (c.f., Jayachandran, 2009; Luke & Britten, 2007; Sutton, 2011). Incorporating intercultural education into teacher preparation curricula as a means of improving intercultural competence is difficult because of its chameleon-like nature. The colors of intercultural competence change to reflect the situated nature of the domain and therefore cannot be attributed to one specific content area. Universities have slowly begun to address this issue in various ways including requiring study abroad or intercultural field experiences.

The purpose of this manuscript is to show how modern digital tools support the development of intercultural competence among teacher education students. Although this is not the first study to focus on blogging as a way to improve intercultural competence, it is one of few dedicated to discerning how the use of blogs and technology-mediated activities can support and facilitate the development of intercultural competence. This study followed seven third-year female students in a World Language Education program at a large, public northeastern

university as they studied abroad during the spring semester of 2010. While abroad, the students participated in a course (at their home institution), which required them to complete several technology-mediated activities; students wrote blog entries, participated in inquiry activities, and completed observations all related to their abroad experiences. To facilitate these activities, the university provided each student with a notebook computer; in addition, all students had varying degrees of Internet access while overseas.

Examining how digital tools can support, facilitate, and enhance the development of intercultural competence in World Language teacher certification candidates is the study's principal thrust. Demonstrating how activities mediated by these digital tools provide evidence of progression toward intercultural competence was a secondary consideration. The following research questions helped to guide analysis of data:

1. *How can technology-mediated activities support advancement towards intercultural competence?*
2. *In a technology rich setting, what roles can digital tools play in the development of intercultural competence?*

To answer these questions, we first turn to literature concerned with intercultural competence. From a definition of intercultural competence, we move to consider this competence in teacher preparation, how digital tools support its development, and we consider how to assess intercultural competence. Following a description of the study, evidence of intercultural competence extracted from blogs and other digital artifacts are presented in conjunction with discussion of the findings. The manuscript concludes with suggestions for further study.

DEFINITION OF TERMS

In this manuscript, the term *digital tools* refers specifically to the notebook computers provided to the students and the blogging platform through which they recorded their experiences. *Ethnorelative* refers to a perspective that acknowledges and respects beliefs, values, and norms inherent in other cultures; an ethnorelative perspective encompasses evaluation and judgment of cultural mores through consideration of the context in which they are embedded. *Expert speaker* refers to someone who speaks a target language as her first language though the person may or may not be native to the target culture. *Intercultural competence, in this study*, is a personal quality of which evidence is reflected in each of five categories: 1) interest in knowing other people's way of life and introducing one's own culture to others, 2) ability to change perspective, 3) ability to cope with living in a different culture, 4) knowledge about one's own and others' culture for the purpose of intercultural communication, and 5) knowledge of the intercultural communication process.

REVIEW OF RELATED LITERATURE

Defining Intercultural Competence

Difficulty in identifying the underlying components of intercultural competence has produced little agreement among researchers and scholars about its definition (Deardorff, 2004). Generally, intercultural competence is considered a socio-cultural, transformative learning process leading to successful and appropriate interactions and behaviors in intercultural scenarios

and exchanges (Deardorff, 2011). These appropriate interactions and behaviors are derived from a combination of attitudes towards, knowledge about, and skills related to the target culture and are embedded in cultural practices (Hoadley, 2012). Although attitudes, knowledge, and skills are the most basic components of intercultural competence, we think it useful to reflect upon several perspectives that reveal commonalities among the characteristics most desirable for an interculturally competent individual.

The most widely referenced conceptual understanding of intercultural competence in individuals is a five objective model attributed to Byram (1997):

1. a curious and open attitude
2. general knowledge of social groups and norms of another culture
3. skills for interpreting interactions, events, and artifacts from another culture and relating them to interactions, events, and artifacts in one's own culture
4. skills for developing and improving one's knowledge of a culture through discovery and using these skills and knowledge while interacting and communicating with individuals from this culture
5. the ability to critically evaluate both one's own and another culture

Though intercultural competence may be innate, it is often achieved through a transformative process (Deardorff, 2011; Karnyshev & Kostin, 2010; Marx & Moss, 2011; Taylor, 1994) that moves individuals across a continuum from an ethnocentric view of the world to an ethnorelative view facilitates realization of these objectives (Marx & Moss, 2011).

Throughout the transformative process, individuals change perspective from believing their own culture omniscient and unwavering to perceiving their own culture as a viable

alternative among myriad possibilities. Constructing this new perspective within the context of prior knowledge and existing beliefs is a major obstacle towards achieving this perspective.

(diSessa, 2006) According to diSessa (2006) overcoming deeply ingrained ideas to effect conceptual change can be an intensely personal and difficult process. Becoming interculturally competent does not hinge on a simple measure of knowledge acquisition; rather, individuals must demonstrate a deep internal change in perspective through behaviors and attitudes. Taylor described the process as being "... anchored within the individual ... [and] manifested in definitive affective, behavioral, and cognitive abilities" (1994, p.157). In essence, the process of intercultural competence involves changes in attitude, knowledge, and skills *within* the individual, yet demonstrated explicitly.

Throughout this process, individuals are "encouraged to reflect upon the cultural similarities and differences, and further develop the ability to tolerate differences that allow them to handle situations" (Lee, 2011, p.90). Individuals who successfully engage in self-reflection as a way to integrate new experiences into their neural networks exhibit a reflective cognitive orientation (Taylor, 1994); in this way, "participants not only attempt to make sense of their experience but at times are cognizant of the very learning process taking place and the subsequent change in behavior" (p.165). Some learners who make sense of new experiences and reconcile them with prior knowledge become invigorated to further explore situations that they have never before encountered. Individuals are motivated to learn more when these learning experiences support development of personal identity (Greeno, 2006). This driving motivation coupled with an open and curious attitude leads to a natural desire to accumulate knowledge and facts about the new culture that extend beyond the initial experience (Williams, 2009).

As noted above, knowledge alone is insufficient to demonstrate intercultural competence. Knowledge must be accompanied by overt behaviors and attitudes employed appropriately and effectively during intercultural interactions and experiences. Individuals must be active negotiators and instigators of intercultural interaction, experience, and understanding and not be simply passive vessels of knowledge. Intercultural competency is an iterative, ongoing process. It represents the evolution of an individual's intercultural identity that was once inextricably tied to one culture but has become culturally flexible through a dossier of intercultural experiences, interactions, and communications—what was once ethnocentric becomes ethnorelative. Individuals with a culturally flexible identity demonstrate greater self-confidence, changes in conceptions, perceptions, and values, and the ability to recognize and understand the perspectives of other cultures (Taylor, 1994).

Intercultural Competence in Teacher Preparation Programs

With the persistent change in the cultural makeup of American society, the number of intercultural interactions and contacts in which individuals may participate during their lifetimes is growing exponentially. While teacher demographics have changed little, the current make up of students reflects an ongoing shift in classrooms' cultural makeup (see Table 1).

Teachers who have no intercultural training or experience cannot be expected to exhibit intercultural competence or teach in a culturally responsive manner. As Marx and Moss (2011) note, "Teacher educators must challenge pre-service teachers' ethnocentric worldviews and prepare them to teach culturally diverse student populations" (p.36). Being prepared to teach culturally diverse students improves educators' abilities to meet students' learning needs. As such, university teacher education programs must become more proactive in adding intercultural

perspectives to their coursework to prepare future teachers for the reality of culturally, ethnically, and linguistically diverse learners.

In order for intercultural perspectives to be incorporated throughout various teacher preparation courses, instructors must find several ways “... to bring in diverse perspectives on issues, helping students begin to see from multiple cultural perspectives, using students’ diverse backgrounds within a course, and requiring students to have either a local cultural immersion or an education abroad experience” (Deardorff, 2004, p.69). By participating in courses infused with these elements, teacher education students benefit from exposure to knowledge, skills, and attitudes that support intercultural learning and centralize the role that culture plays in learning. Teachers must also acknowledge that “learning in academic disciplines includes more than mastery of a body of conceptual knowledge. Crucially, it also involves critical engagement with epistemological assumptions, points of view, values, and dispositions” (as cited in Nasir et al., 2006, p.496). Culture heavily influences and shapes epistemological assumptions, points of view, values, and dispositions. Teachers who are interculturally incompetent have difficulty understanding the role that culture plays in the learning process and thus are unable to leverage this vital role (Marx & Moss, 2011; Nasir et al., 2006).

A growing body of research suggests that teacher preparation programs should include some type of cultural immersion experience that may occur through study abroad, service learning projects, internships, community based projects, or home-stay living situations (Cushner & Mahon, 2009; Deardorff, 2011; as cited in Marx & Moss, 2011; Marx & Moss, 2011). These experiences may or may not occur overseas; the only condition is that individuals are immersed in cultures that are not their own. In Taylor and Henao's “Subculture Adaptation Project,” (2006) Colombian university students set out to become competent in various subcultures within

Colombian society as part of a university course; as the researchers noted, “students were able to combine theory with experiential learning as they studied their own adaptation process”.

Participants in this study exhibited a greater degree of intercultural competence between their native cultures and “adopted” cultures despite the fact that they did not engage in international experiences. An essential part of intercultural competence is experience in other cultural contexts where the individual is an “outsider” (Marx & Moss, 2011; Taylor, 1994). These experiences afford teacher education students unique opportunities to undergo perspective and conceptual transformation that facilitates their transition from ethnocentric to ethnorelative. They also help to engender cultural awareness and empathy for diversity, which enhance efficacy in culturally responsive pedagogy. Through productive cultural interactions, experiences, and negotiations, both teachers and students are more likely to achieve shared goals (Lee, 2006).

Table 1

Race	K-12 Students	Elementary and Secondary Teachers	Post- Secondary Teachers
African-American	16.6%	17.2%	7.3%
American Indian/Alaska Native	1.9%	---	---
Asian	4.9%	3.7%	10.1%
Caucasian	53.7%	64%	78%
Hispanic	22.0%	14.9%	4.8%

Sources: Center for Public Education (2013); U.S. Bureau of Labor Statistics (2011)

Digital Tools: Supporting the Development of Intercultural Competence

The development of intercultural competence is an extremely personal, transformative and reflective process that involves the construction of new knowledge, experiences, and meanings within oneself. In this way, an individual plays the most important role in the interpretation of events that leads to the deconstruction and reconstruction of conceptualizations,

which represents the amalgamation of many prior experiences (Brookfield, 2000; Oner & Adadan, 2011). In order to interpret events, individuals must reflect critically upon their own ideologies, which embody values, morals, thoughts, beliefs, and prior knowledge representative of a lifetime's worth of experiences. Though projection of self-vindicated ideologies is often subconscious, they are exhibited in all types of actions and interactions such as body language, mannerisms, habits, cultural norms, and most commonly, spoken language. As Brookfield noted, "To challenge ideology we need to be aware of how it lives within us, as well as how we see it working against us" (2000, p.38). This is where reflection enters the process of intercultural competence; in order for conceptions to change, individuals must be aware of their existence and how these conceptions affect not only themselves but others as well. Individuals experience enlightenment from societal and interpersonal contradictions through reflection and subsequently reconcile these contradictions through transformation.

Reflection can manifest as a self-initiated process or as response to a social prompt; reflection can reside exclusively within an individual or it can be externalized through various means. Reflection within teacher certification candidates is a pedagogical tool; its focus is personal transformation by changing individual competencies, perceptions, and conceptualizations (Putnam & Borko, 2000), which can then be utilized in subsequent teaching practices. Digital tools such as computers and communication technologies (i.e. blogs, wikis, discussion boards) support reflection as a pedagogical tool by increasing authenticity, access to feedback, and the ability to create sustained conversations.

In this study, instructors used blogs as the communication medium to support critical reflection among the teacher certification candidates (Godwin-Jones, 2011). These blogs were not protected or hidden by the university blogging system that was used. Sharing the blogs with

an audience beyond the course instructors and other students increased their legitimacy; in this sense, the blogs were “real publications with a real audience” (as cited in Oner & Adadan, p.479); they were freely available with the potential to affect others through consumption by the general public. When students know that their work will not be kept private, they are more likely to invest greater time, effort, and energy into producing a quality product that truly represents their thoughts, ideas, and feelings. In this way, blogging makes public an individual’s experiences, interactions, and private thoughts, which would otherwise be viewed only by instructors or other course individuals. By making the transformation process public, students are encouraged to further hone and refine their reflective skills, which eventually will translate into classroom pedagogy.

Using public, educationally-grounded blogs affords an author the convenient advantage of immediate feedback that would not otherwise be feasible. As soon as a blog entry is published, it is available for reading, reviewing, commenting, critiquing, and providing feedback to the author. The immediacy of digital artifacts yields timely feedback for students and can result in improved learning. Prompt feedback is more apt to help learners commit new information to long-term memory and to create greater connections within memory leading to easier retrieval and increased likelihood of transfer (Schunk, 2012). Blogs may also improve the diversity of feedback since they are available to such a wide audience, which incites contributions from different perspectives and cultures (as cited in Lee, 2011). Feedback on paper-based materials is much less timely, efficient, or effective and is limited to a narrow audience. Lack of feedback or lapse in time between publication and feedback may inhibit the amount of information that is connected within and retained by an individual. When the distribution range is limited, it is less probable that an author will receive diverse or plentiful feedback. It is through timely

commentary and feedback that represents a diversity of perspectives that individuals are further able to reflect upon their experiences in a way that promotes the development of intercultural competence.

Furthermore, blogging may help to sustain conversations and communications surrounding the blog content. Through engagement in reflective conversation and communication, individuals gain the ability to view themselves more objectively while simultaneously integrating new perspectives and experiences with prior knowledge. Integrating new perspectives and experiences supports development of attitudes, knowledge, and skills, which incite progression toward intercultural competence (Byram, 1997; Lee, 2011). The amount of interaction capability and conversation afforded by the use of digital tools surpasses that which can be achieved through paper-based means (Oner & Adadan, 2011). Digital tools give users the ability to comment in real-time and although conversations may not occur synchronously, the rapid nature of this asynchronous communication facilitates the sustenance of conversations. When individuals have to wait several days or weeks for a response, conversations are more likely to flag.

Conversations stimulated by blog entries often help authors to expand and further refine their ideas thus leading to greater self-reflection and internalization of new experiences due to the personal stake an individual has in the learning experience (Schunk, 2012). As evidenced by Elola and Oskoz (2008), “blog interactions appear to encourage study abroad students to explore and closely examine different aspects of the target culture and to verbalize their impressions about their surroundings; this very likely leads to greater absorption of new cultural practices” (p.472). Individuals who have a vested personal interest in the content exhibit greater ownership of learning and in turn are more likely to retain the associated knowledge (Schunk, 2012).

Similarly, those examining these digital artifacts can more easily gain a well-rounded, deeply contextualized view of the transformative learning process through analysis of the blog entries and subsequent conversations.

Digital tools such as computers and communication technologies support and enhance the development of intercultural competence among teacher certification candidates as a result of their unique ability to improve the authenticity of the learners' experiences, to incite timely and appropriate feedback, and to sustain conversations through comments. These opportunities are neither feasible nor practical with traditional, print-based media. Furthermore, digital tools allow individuals to share expertise and learn informally from one another (Kukulska-Hulme, 2010).

Intercultural Competence Assessment Tools

Assessment can take many forms and employ numerous techniques (Fantini, 2009). Superficial assessment of knowledge and skill acquisition is easy. It is however, difficult to evaluate an individual's understanding of information and how it factors into intercultural interactions and communication (Byram, 2000). In this way, multiple measures are needed to effectively evaluate all aspects of intercultural competence (Fantini, 2009). One method or instrument cannot capture the complexities of this phenomenon. The flexible, context-specific nature of intercultural competence requires an assortment of theories, definitions, and frameworks as bases for assessment instruments.

Researchers and scholars have created numerous instruments to assess intercultural competence (c.f., Fantini, 2009); some are commercially available, others are free. Hammer and Bennet developed one of the most widely cited and utilized indirect assessment instruments - the Intercultural Development Inventory or IDI (as cited in Sinicrope et al., 2007). Developed

within the framework of Bennett's Developmental Model of Intercultural Sensitivity (DMIS), the IDI is considered “a valid, reliable, cross-cultural tool for assessing intercultural competence at the individual, group and organizational level” (Intercultural Development Inventory, 2012, p.1). While studies [e.g., with physician trainees, college students studying abroad, and high school students at international schools (Sinicrope et al., 2007)] have demonstrated statistical reliability and validity (Intercultural Development Inventory, 2012), IDI is only available for purchase. Though appropriate for use with teacher certification candidates, cost may limit its implementation.

While the IDI assesses an individual's competency, the Cross-Cultural Adaptability Inventory (CCAI) assesses an individual's potential to be cross-culturally effective (Fantini, 2009). According to its creators, the CCAI is an “assessment instrument, [that] can help individuals or groups identify their current strengths and weaknesses within four critical skill areas important for effective cross-cultural communication and interaction”, and it has been utilized with medical students, students studying abroad, people who work in multicultural environments, and travelers returning from lengthy stays abroad (Kelley & Meyers, 2012). Utilizing this instrument before study abroad would serve to identify intercultural competence areas teacher certification candidates should focus on while abroad. Upon returning from abroad, the instrument might help to determine gains in these areas., The reliability, however, of the CCAI is questionable (c.f., Sinicrope et al., 2007); the most current research supporting the reliability of the assessment is from 2004 (Kelley & Meyers, 2012). Additionally, the instrument is not free, but broken hyperlinks make it impossible to determine actual cost.

In contrast to indirect assessment tools, direct assessment tools utilize multiple approaches by combining various types of measures in order for the assessor to achieve a more

comprehensive view on the development of intercultural competence within the assessed. The theoretical work of Byram, Köhlmann, Müller-Jacquier, and Budin led to the development of the Intercultural Competence Assessment project (INCA), which is funded by the UK educational training organization *Leonardo da Vinci* (INCA project, n.d.). Three types of assessments: questionnaires, scenarios, and role plays comprise INCA. Each assessment is designed to evaluate one or more of INCA's six competencies. Questionnaires, scenarios, and one role play are freely available from INCA project's website. Guidelines for establishing an intercultural portfolio (the "Passport to Intercultural Competence") allow individuals to "select materials to document and illustrate achievements or experiences" (Byram, 2000, p.4).

Assessing Intercultural Competence in Teacher Certification Candidates

Defining intercultural competence that is relevant to and situated within the specific context is the first step in assessing it in teacher education students. Next, contextually specific outcomes and indicators that include measurable objectives are called for (Deardorff, 2011). Deciding which qualities, characteristics, and facts are the most important, and measurable, within a given context are perhaps most difficult (Byram, 2000). Developing measurable objectives that reflect deep understanding and conceptual change is also a challenge. In addition, the outcomes and indicators must reflect what the individuals should learn and how they should change (Sinicrope et al., 2007).

Adherence to standards for effective assessments (i.e., that they be *sound*, *sensitive*, and *systematic* (as cited in Carver, 2006) are important design considerations for intercultural competence assessments. The definition of intercultural competency along with the measurable objectives is the main consideration in the development of an appropriate assessment instrument.

These factors help researchers to “focus their assessment designs by objectively determining which data to collect under what conditions as well as which data *not* to collect” (as cited in Carver, 2006, p.209). In other words, the definition of intercultural competency and the appropriate measurable objectives provide a base from which to create a *sound* instrument that produces useful data and withstands scrutiny regarding internal, external, and empirical validity.

Assessment of intercultural competence should utilize a variety of techniques and strategies chosen based on their alignment with the measurable objectives and be integrated *systematically* throughout the transformational learning process both formally and informally. Intercultural competence assessment must “be multidimensional as well as multiperspective, ongoing, integrated, aligned, and intentional” (Fantini, 2009, p.465). Through purposeful selection of a variety of assessments that target specific objectives, the assessments will produce results that are clearly aligned with the framework components (Carver, 2006). These assessments may include, but are not limited to, closed and open ended questions, objective tests, interactive activities for individuals and groups, field experiences, interviews, discussions, role plays, simulations, oral and written activities, learning contracts, peer evaluation, critical self-evaluation, and portfolios (Byram, 2000; Deardorff, 2011; Fantini, 2009; INCA project, n.d.). Furthermore, providing varied assessments that are *sensitive* to individual differences such as culture and gender improves internal validity (Carver, 2006).

Because objectives and their subsequent assessments often embody more than one of the main components of intercultural competence (attitudes, knowledge, skills), this model lends itself well to making a holistic determination of the competency achieved by the participating individuals (Byram, 1997). Since intercultural competence is viewed as essentially one competence composed of various components, holistic assessment based upon a battery of varied

assessments is most appropriate and helps to ensure stronger, more accurate measurement (Deardorff, 2011). Teacher certification candidates should be provided with many opportunities to experience both formal and informal intercultural learning as well as to demonstrate their increasing competence through both direct and indirect measures.

METHODOLOGY

Study Context

This study involved students in an approved study abroad program through the World Language Education program at a large, northeastern public university. Attempting to maximize educational gains from a study abroad experience, three instructors designed a course entitled “Language Learning through Study Abroad” offered through the department of Curriculum and Instruction as a complement to the student’s international experience. Connecting pedagogical, cultural, and linguistic knowledge with practical applications, the course consisted of two main components: blogging and inquiry activities. Utilizing a university-administered blogging platform, students posted entries and uploaded inquiry activities documents through this platform. The university provided all students with a notebook computer to facilitate these tasks. While not ubiquitous for all participants, consistent Internet access varied among students.

Instructors introduced students to their notebook computers and the university blog system in the fall of 2009. Throughout courses during that semester, instructors incorporated activities that oriented the students to the computers and blogging. It was during this semester that the students also completed the “Language Learner Autobiography”, which we will use as a

launching point to consider intercultural competence progress. The course of study has elements of intercultural competence education woven throughout though no explicit structure sets forth the defining features of intercultural competence. Students were not required to complete a self-assessment of intercultural competence as part of this course of study.

Participants

In the spring of 2010, seven female students who were enrolled in the World Language Education program during the 2009 – 2010 academic year agreed to participate. In addition to their study abroad experience, all of these third-year students simultaneously enrolled in a Language Learning through Study Abroad course. Of the seven, 2 majored in French, 1 in German and 4 in Spanish, spending approximately ten weeks in one of six locations: Cumbaya, Ecuador; Montpellier or Paris, France; Marburg, Germany; and Alicante or Salamanca, Spain. All participants studied their target language for at least three years in high school and had taken at least seven college-level language courses. At least three World Language Education courses were also completed which included a field experience in the fall of 2009; only one participant had significant interaction with speakers of the target language prior to study abroad. While abroad, two of the participants lived in dormitory settings and five lived in home stay settings.

Tasks

Students were required to establish a personal blog through the university's blogging platform to record course assignments; students initially created their blogs in Fall 2009. When blogging during the study abroad experience, all students used a common tagging system to organize entries; the course blog - established and maintained by the instructors – also connected

students to each other. Blogging assignments included writing ten weekly entries on varied topics chosen from a list of fifteen possibilities including family, food, routine, school, and others. In addition, students commented weekly on another student's blog posting as well as responded to at least one comment posted on her own blog. Instructors felt that the blog space was best left to inter-student communication and as such did not offer consistent comments or feedback on posting; however, instructors did communicate with students via *Skype* halfway through the semester for approximately 20 minutes to check in with them.

The courses' inquiry activities were designed to incorporate and immerse students into local communities while connecting them with members of the target culture. Inquiry activities consisted of two, 2-page papers, which were reflections upon a participatory observation such as a cultural holiday or family birthday and an interview with a member of the target culture that dealt with global issues or outside perspectives on the United States; these papers were then uploaded to the students' blogs. Prior to study abroad, each participant wrote a "Language Learner Autobiography", which described her prior experience with language learning from earliest contact up to and including college-level experiences with the target language.

Procedure

In the semester prior to studying abroad, participants completed a methods course (focused on secondary students) which required the creation of a personal blog through the university's blogging system. One of the blog-based assignments of the methods course was the development of a "Language Learner Autobiography", which allowed students to reflect upon their experiences as a language learner. Instructors and other students in the class commented on this assignment. A synthesis of the Language Learner Autobiography, reflection on others'

comments, and self-reflection laid the foundation for introducing intercultural competence.

For the study abroad blog-based course, requirements were communicated through e-mail, course blog, and syllabus. Communication with students happened as individual questions arose, to remind students about assignments, or to make changes to the schedule or course expectations.

Data Collection and Analysis

Blog entries, inquiry activity papers, observation reports, and the Language Learner Autobiography documents were used to track the development of intercultural competence among the students. Byram's (2000) framework served as the organizational structure for data. Content analysis of these artifacts was conducted using a framework (see Appendix B) of five different facets of intercultural competence demonstrated through eight specific dimensions; this framework was derived through a reconfiguration of Byram's framework (2000). Ninety-seven blog entries, fourteen inquiry activity papers, seven observation reports, and seven language learner autobiographies were reviewed and analyzed; vignettes and experiences from these documents were extracted as evidence to support development of and progression towards intercultural competence. Researchers organized evidence with a matrix as shown in Appendix A.

Appendix B demonstrates a reconfiguration of the definitions utilized in the matrix shown in Appendix A. Since attitudes, skills, and knowledge are widely accepted as the most basic components of intercultural competency, we found it useful to regroup the definitions to reflect these three dimensions and to more logically analyze the data. By analyzing the data in a framework of three dimensions rather than eight definitions, intercultural competence manifests

as a synergy of these three distinct dimensions as opposed to somewhat disconnected instances or experiences that evidence the more detailed definitions. The first three definitions indicate evidence of open attitudes necessary for progression towards intercultural competence; these qualities imply something that participants *feel* rather than *do* or *know*. To express interest in someone else's life experiences demonstrates a shift away from an egocentric (ethnocentric) perspective toward an egorelative (ethnorelative) perspective that welcomes the experiences of others as enrichment in one's own life. In addition, open attitudes manifest through entertaining different points of view and also taking an "outsider" stance on one's own culture. These three definitions provide evidence that supports development of open attitudes.

The second grouping of definitions relates to knowledge – what participants *know* rather than what they feel or what they can do. The knowledge acquired and desired by participants regarding the country, state, and people of the target culture can take many forms beyond simple facts; knowledge reveals itself in places that may seem unlikely such as navigating the local bus system or preparing a meal using previously unfamiliar ingredients or tools. Much of this knowledge is acquired nonformally through everyday interactions and experiences; these indicators place emphasis on knowledge acquired in a self-directed manner that demonstrates relevance and importance to the learner.

The final group of definitions relates to skills - those that provide evidence to support participants' abilities to *do* something rather than feel or know something. The first definition implies a very personal skill that has been cultivated throughout life and which has presumably been invoked at least once prior to this experience. Individuals understand from personal experience how to employ appropriate coping skills to deal with varying situations. The other two definitions distinguish skills that have been learned through experience within the target

culture and perhaps through classroom instruction and experience as well. Beyond human instinct, there are various skills involved in negotiating conversation and mediating misunderstanding between different cultures.

RESULTS AND DISCUSSION

To answer the first research question, evidence provided by student blog entries was examined and aggregated using a framework originally designed as self-assessment of an intercultural experience (see Appendix A, Byram, 2000). Since participants did not complete a formal self-assessment, we determined all categorizations. The framework was subsequently reconfigured to demonstrate more clearly the areas that represent the three basic components of intercultural competence: attitude, knowledge, and skills (see Appendix B) and to further demonstrate the areas of greatest gains among the participants. Though not all participants' are represented through subsequent examples, the samples reflect varying degrees of attitudes, knowledge, and skills.

Attitudes

The attitudes with which intercultural competence is concerned are those that express not only positivity towards people who are viewed as different but also openness towards them; interculturally competent attitudes are those that move beyond stereotypes and prejudices. According to Byram (1997), "They need to be attitudes of curiosity and openness, of readiness to suspend disbelief and judgement with respect to others' meanings, beliefs and behaviours. There also needs to be a willingness to suspend belief in one's own meanings and behaviours, and to

analyse them from the viewpoint of the others with whom one is engaging” (p.34). The demonstration of these types of attitudes reveals a person’s ability to view the world from an ethnorelative rather than ethnocentric perspective.

All participants expressed interest, curiosity, and openness towards the new cultures, people, and environments encountered throughout their study abroad experiences. Some, like Sarah, were surprised by and curious about their living environments. Sarah was accustomed to ubiquitous television but was shocked to learn otherwise. “I was completely surprised to find out that my host mother did not have a television. TVs in the United States are not hard to come by-- it's pretty normal to have more than one TV in a household, and in my house here, there are none. My host mother instead listens to the radio” (Hudson, 2010, Arrival). Though it was unsettling at first, Sarah soon embraced the idea of a household without television and became more interested in what she could learn through the available media – the radio.

In some instances, participants sought to dispel popular myths commonly held as truths by outsiders. Natalie wrote about the fact that not all Spaniards speak Spanish as their first language or use it in everyday conversation. She noted, “I am fascinated by the differences found within the language. For example, when I traveled to Barcelona, my Spanish was not recognized there since they speak Catalán. Locals were actually more willing to speak English with me than Spanish” (Jefferson, 2010, Arrival). A common belief among those who have never studied Spanish is that there is one “type” of Spanish that may have minimal local variations; however, Natalie experienced the reality of just one of many dialectical variations of Spanish – Catalán. Language forms a critical part of cultural identity, and Natalie demonstrates realization that being a Spaniard doesn’t necessarily mean speaking Spanish.

A controversial topic that pervades societies worldwide—racism—was the focus of the most profound evidence to demonstrate how curious and open attitudes facilitate progression towards intercultural competency. While studying in Ecuador, Kasey developed a relationship with an Afro-Ecuadorian man. Upon bringing him to her university for a tour, they were nearly denied entrance simply because of his physical appearance. The depth of emotion is evident in her writing: “But, there exists something that bothers me much, much more. That is racism. For a long time, I only used to hear about racism or see racist graffiti, but I had never experienced or seen it firsthand. But, recently, I experienced it [detailed description of university incident]...many people here are racist against African Americans”(Cooper, Week 9, as translated from the original Spanish). Through this experience, Kasey’s open attitude helped her to examine the incident as a microcosm of a much greater societal problem; though this singular event was the fulcrum, it initiated a transformational process within the individual that helped to reframe personal views and subsequently alter the way in which her experiences serve to construct her notion of culture and racism.

Perhaps one of the most difficult ways to adjust attitudes is the ability to recognize that other cultures are not “better” or “worse” than one’s own – they are simply different. Lindsay’s perspective shift supports how a curious and open attitude proves transformative as it provides an appropriate contextual basis from which to view another culture’s beliefs towards important issues – in this instance, education. Lindsay (2010) noted:

To me, an American, it is almost insulting that people here are complaining about paying 250 Euros a semester when I pay thousands each semester. For a while, I couldn't understand why this tuition was such a big deal. It's only 250 Euros. And then I realized:

they are protesting this small amount now, so that in ten years, they aren't paying what Americans are... the students here are afraid of paying what American students pay.

By evaluating the increased cost of education from a German standpoint, Lindsay demonstrates a shift from an ethnocentric perspective to an ethnorelative perspective.

The aforementioned evidence supports positivity towards other cultures as well as attitudes of interest, curiosity, and openness. Furthermore, the transformative process of intercultural competency is manifest in the perspective shift among participants from ethnocentric to ethnorelative. Through blogging about their experiences, participants engaged in more profound personal reflection and revelation. Blog conversations surrounding the entries also stimulated further self-analysis as evidenced by subsequent commentary.

Knowledge

Because intercultural competence requires an individual to see from another's perspective or point of view, knowledge of a target culture is essential. The types of cultural knowledge that individuals must acquire fall into two categories: apparent and conceptual. Apparent knowledge is a more superficial, explicit knowledge of culture and social groups within one's own country as well as a target country. On the other hand, conceptual knowledge represents a deeper, tacit understanding of processes of cultural interaction on both micro and macro levels (Byram, 1997). Apparent knowledge may be acquired through formal education or simple socialization through family, peer, and societal interactions; in this way, it may be fraught with stereotypes and misconceptions. Apparent knowledge is acquired through the cultural lens of a learner who can accept the information as true and unbiased.

Varying world histories, country relationships, and perspectives on global events can shape the way in which cultural information is presented. It is up to an individual to challenge this ethnocentric lens and begin processing the cultural information through an ethnorelative lens. As an individual becomes more able to assess and relate apparent knowledge about a target culture, transformative learning can occur. Deardorff extends the explanation of conceptual knowledge as a “deep cultural knowledge [that] entails a more holistic, contextual understanding ... including the historical, political, and social contexts ... knowledge needs to go beyond the conventional surface-level” (2011, p.68). Though knowledge of one’s own culture and of a target culture is essential to successful negotiation of intercultural interactions, it is only a fraction of the larger picture. Participants exhibited varying degrees of apparent and conceptual knowledge, expressing a range of knowledge from simple details of daily life to more profound internalizations of meaning derived from their intercultural experiences.

Sarah had the unique opportunity to experience a nation in the midst of change – an election in France – which immersed her in a drastically different political climate than the one she was accustomed to in the United States. She observed, “... elections in France are pretty different than those in the States. There are two tours, or rounds, of elections...The votes are then counted, and there is a new person in charge. The votes are always manual; the French don't really believe in electronic voting and it's safety” (Hudson, 2010, Week 7). Though her observations are largely superficial, her participation in the French political culture during this time helped her to acquire apparent knowledge related to the French electoral system. Another recollection by Kellie demonstrates apparent knowledge of Paris acquired by means of a daily routine. Kellie (2010) wrote:

Since Paris is a big city, it has lots of suburbs and people working in the city who live in those suburbs. I actually live in one of the suburbs of Paris, even though I can see the peripheral boulevard from the end of my street. The zones encompass the various levels of the suburbs. My [transportation] pass covers zones 1 and 2: unlimited rides for about 60 Euro a month.

By utilizing the subway system in Paris, Kellie developed knowledge regarding the spatial layout of the city and how to navigate it.

Both Natalie and Kasey made especially concerted efforts to learn more about their target cultures by actively seeking out friendships with local, expert speakers. Natalie remarked, “I have also made some really great friends who live in Salamanca. This is extremely helpful for me, because I am able to learn the language and culture through them. I meet with them once or twice a week, and during that time we only speak Spanish. We also speak Spanish when we talk on the Internet” (Jefferson, 2010, Arrival). Kasey expressed similar experiences: “I’ve also been trying to meet more people that only speak Spanish...then English isn’t an option” (Cooper, 2010, Week 2 Reaction). Both women took the initiative to further their knowledge base through interactions with speakers who were native to the target culture. This type of knowledge blurs the lines between apparent and conceptual knowledge. Although these experiences represent greater depth of personalization than apparent knowledge, they do not necessarily represent conceptual change—they do however demonstrate movement towards intercultural competency.

Some participants including Kasey display conceptual change derived from their intercultural experiences. Kasey’s experiences demonstrate an even more profound conceptual change as she examined her own culture in the context of another. “Why did the people in the United States decide that they are ‘Americans’? Why did everyone accept this? People from the

United States have asked me, ‘when do you come back to America?’ I always respond with, ‘I’m in America right now,’ because, in reality, I am in America...South America. There are two Americas, but it seems that everyone only recognizes part of one. Even though North America consists of more than the United States. *Estadounidenses* are not the only people who say ‘America’ and they are referring to the United States. People from all over the world say that, but I don’t understand why it is accepted” (Cooper, 2010, Week 6, translated from the original Spanish). Clearly, Kasey’s views of the term “America” are incongruent with those of the majority of people. Through her experience in South America, Kasey reconceptualized the term ‘American’, which reflects intercultural competency growth.

Skills

The ability to leverage knowledge to successfully negotiate a target culture and cultural interactions is manifest in critical thinking skills that demonstrate the ability to *do* something with the knowledge. These skills deal with interpersonal interactions, interpretation of events, and navigation of intercultural communication with members of a target culture. This study is not concerned with whether the demonstrated skills are the most effective but rather with identifying the presence and utilization of such skills as evidence of progression towards intercultural competence. From basic intrapersonal, emotional coping mechanisms to advanced handling of complex situations with expert speakers participants demonstrated a range of these skills.

Many of the participants expressed feelings of homesickness and discomfort and blogged about their feelings, emotions, and how they dealt with them. Jasmine demonstrated how conjuring and focusing on a positive attitude helped her deal with homesickness and progress

from a status of discomfort to comfort. She remarked, “It's always easier to want to be somewhere comfortable, but what we are doing here is so awesome and we are going to have so many stories to look back on” (Moyer, 2010, Reaction to Julie). Jasmine's comments demonstrate her ability to move beyond what is “easy” or “comfortable” in order to make the most of the enrichment opportunities she experienced. Kasey experienced a similar progression from some unease with the spoken language to one of comfort and acceptance of her abilities. “It's taken me a while to get comfortable speaking in Spanish here, especially since so many of the students know English. I feel dumb making a mistake in Spanish when they can speak English perfectly” (Cooper, 2010, Week 4). Despite her wavering self-confidence in her ability to speak Spanish with expert speakers, Kasey recognized the journey by which she was able to attain a feeling of comfort for speaking Spanish with expert speakers.

Another common way of improving skills within a target culture emerged through deliberate interactions with expert speakers. Natalie actively pursued contact with unfamiliar expert speakers to hone her conversational skills. “I will randomly start talking to locals in order to gain language experience, and I have actually made friends by doing this. I think this is extremely necessary in any situation” (Jefferson, 2010, Response to Jess's Arrival). Natalie's active pursuit of knowledge is emblematic of her curious and open attitude as well as her skills of engaging intercultural communications. While Natalie looked outside of her immediate contacts in the target culture to improve her intercultural skills, Kellie pursued similar goals with her host family. “Over the past two months, I have been having a lot of conversations with my host family, and these conversations have given me some interesting insight into the French perception of Americans and America” (White, 2010, The French Point of View). Through these

conversations, Kellie exhibited skills that helped her to negotiate the communications with her host family that led to conceptual change regarding how her French family perceives her culture.

Others gained skills that afforded them the ability to view their experiences from an objective point of view. Lindsay experienced a reconciliation of distinct perceptions – those with which she entered her study abroad experience and those with which she exited. “I have learned a lot about myself and about others. I learned to experience and look at things with new eyes. I have learned to accept others a lot more; not everyone works the way I do, not everyone follows the same schedule as I do, and sometimes I just need to go with the flow of things. (Union, 2010, Week 10). Her reflection of the overall study abroad experience expressed successful skill acquisition that allowed her to navigate a new culture as well as examine her preexisting beliefs while reconciling them with new information.

The preceding examples demonstrate skill acquisition among participants in the areas of interpersonal interactions, interpretation of events, and navigation of intercultural communication with members of target cultures. These critical thinking skills not only affect intercultural interactions but also encourage learners to “take a step back and evaluate their own beliefs in order to be able to critically evaluate another individual’s beliefs and behaviors” (Elola & Oskoz, 2008, p.456). This type of critical self-evaluation serves to perpetuate conceptual change in participants as part of this transformational learning process.

CONCLUSION

This study was undertaken to examine how technology-mediated activities provide evidence of advancement toward intercultural competency among teacher certification

candidates in a study abroad context; the study also sought to observe the role of digital tools in the development of intercultural competence. Technology-mediated activities were found to provide evidence of intercultural competence. Through blog reflections, participatory observations, and language learning autobiographies, students demonstrated gains in intercultural competence. Findings also indicate that digital tools had a positive impact on the development of intercultural competency among participants. Digital tools increased self-reflection on the learners' experiences, improved access to feedback and comments, and incited sustained conversations surrounding these experiences. Blogs provided the students with an outlet for expression that led to subsequent reflection, learning, and development of essential attributes of intercultural competence.

Though all participants entered this experience with some apparent knowledge and possibly some conceptual knowledge of a target culture, the study abroad experience is designed to help situate this knowledge within its appropriate context. By situating knowledge about a target culture within the target culture, participants are immersed in the “physical and social contexts in which an activity takes places...[forming] an integral part of the learning that takes place within it” (Putnam & Borko, 2000, p.4). The individuals transform from receptors of knowledge to participants that actively construct meaning through interactions with people, materials, and systems (Putnam & Borko, 2000). These experiences and activities are authentic to the participants and increase the likelihood that knowledge acquired will be retained and transferred to similar situations.

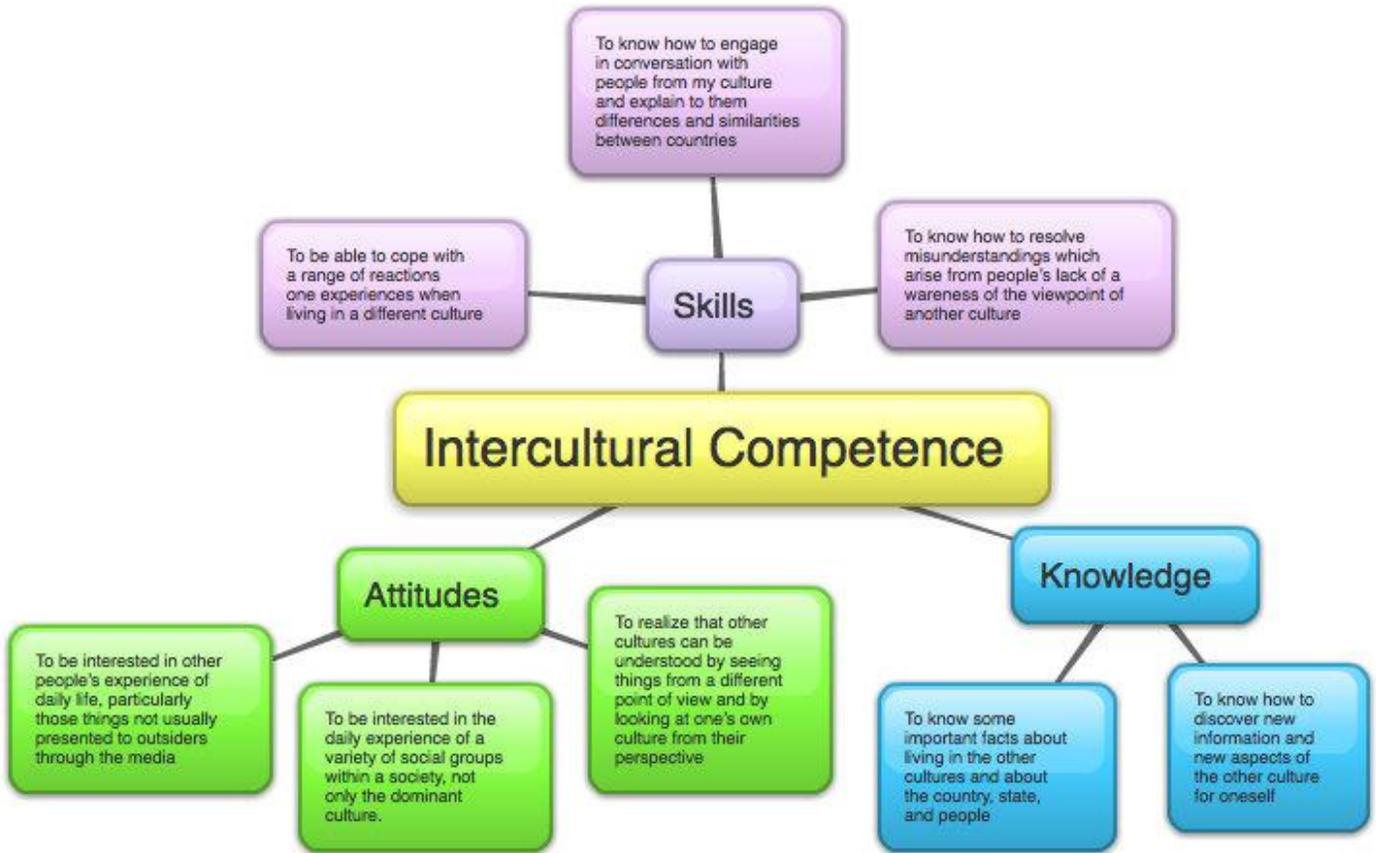
As noted by Elola and Oskoz (2008), greater research on the impact of blogging as a means of developing intercultural competence is needed. Research should include larger numbers of students from various locations (not just the United States). Research might also

explore similarities and differences of intercultural competence development among students who engage in domestic intercultural experiences as well as foreign. Furthermore, distinctions might be made among students who participate in intercultural experiences for varying lengths of time to identify various levels and stages of intercultural competence.

APPENDIX A
(adapted from Byram, 2000)

Categories	Definitions	Examples
Interest in knowing other people's way of life and introducing one's own culture to others	To be interested in other people's experience of daily life, particularly those things not usually presented to outsiders through the media.	
	To be interested in the daily experience of a variety of social groups within a society, not only the dominant culture.	
Ability to change perspective	To realize that other cultures can be understood by seeing things from a different point of view and by looking at one's own culture from their perspective	
Ability to cope with living in a different culture	To be able to cope with a range of reactions one experiences when living in a different culture	
Knowledge about one's own and others' culture for the purpose of intercultural communication	To know some important facts about living in the other cultures and about the country, state and people.	
	To know how to engage in conversation with people from my culture and explain to them differences and similarities between countries	
Knowledge of the intercultural communication process	To know how to resolve misunderstandings which arise from people's lack of awareness of the viewpoint of another culture	
	To know how to discover new information and new aspects of the other culture for oneself	

APPENDIX B
(reconfiguration of definitions from Byram, 2000)



REFERENCES

- Bhawuk, D. P. S. & Brislin, R. W. (1992). The measurement of intercultural sensitivity using the concepts of individualism and collectivism. *International Journal of Intercultural Relations*, 16, 413-436.
- Brookfield, S.D. (2000). Concept of critically reflective practice. In A. Wilson & E. Hayes (Eds.), *Handbook of Adult and Continuing Education*. San Francisco, CA: Jossey-Bass.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Great Britain: WBC Book Manufacturers Ltd.
- Byram, M. (2000). Assessing intercultural competence in language teaching. *Sprogforum* 18, (6), 8-13. Retrieved on January 26, 2012, from <http://inet.dpb.dpu.dk/infodok/sprogforum/Espr18/byram.html>
- Carver, S. M. (2006). Assessing for deep understanding. In R. K Sawyer (Ed.), *The Cambridge Handbook of the Learning Sciences* (205 - 221). New York, NY: Cambridge University Press.
- Center for Public Education. (2013). Data first. Retrieved on February 3, 2013, from <http://www.data-first.org/data/what-is-the-racial-and-ethnic-make-up-of-our-schools/>

- Cushner, K. & Mahon, J. (2009). Developing the intercultural competence of educators and their students: Creating the blueprints. In D. K. Deardorff (Ed.), *The SAGE Handbook of Intercultural Competence* (304 – 318). Thousand Oaks, CA: SAGE Publications, Inc.
- Deardorff, D.K. (2004). In search of intercultural competence. *International Educator* 13 (2), 13-15.
- Deardorff, D.K. (2011). Assessing intercultural competence. *New Directions for Institutional Research* 2011, (149), 65-79.
- diSessa, A. A. (2006). A history of conceptual change research. In R. K Sawyer (Ed.), *The Cambridge Handbook of the Learning Sciences* (265 – 281). New York, NY: Cambridge University Press.
- Elola, I. & Oskoz, A. (2008). Blogging: Fostering intercultural competence development in foreign language and study abroad contexts. *Foreign Language Annals*, 41 (3), 454-477.
- Fantini, A.E. (2009). Assessing intercultural competence. In D. K. Deardorff (Ed.), *The SAGE Handbook of Intercultural Competence* (457 - 474). Thousand Oaks, CA: SAGE Publications, Inc.
- Godwin-Jones, R. (2011). Autonomous language learning. *Language, Learning & Technology*, 15(3), 4-11.

Greeno, J.G. (2006). Learning in activity. In R. K Sawyer (Ed.), *The Cambridge Handbook of the Learning Sciences* (79 - 96). New York, NY: Cambridge University Press.

Hoadley, C. (2012). What is a community of practice and how can we support it? In D. H. Jonassen & S. M. Land (Eds.), *Theoretical Foundations of Learning Environments* (p. 287-300). New York: Routledge.

INCA project. (n.d.) Intercultural competence assessment. Retrieved on April 9, 2012, from <http://incaproject.org/index.htm>

Intercultural Development Inventory. (2012). Developing intercultural competence. Retrieved on April 8, 2012, from <http://www.idiinventory.com>

Irving, J.A. (2010). Educating Global Leaders: Exploring Intercultural Competence in Leadership Education. *Journal of International Business and Cultural Studies*, 3(1), 1-14. Retrieved on January 26, 2012, from <http://www.aabri.com/manuscripts/09392.pdf>

Jayachandran, A. (2009). Technology integration practices of foreign language preservice teachers: A case study. (Doctoral dissertation). Retrieved from ProQuest. (3383142)

Karnyshev, A.D. & Kostin, A.K. (2010). Intercultural competence as a competitive advantage of secondary school graduates. *Russian Education and Society* 52 (11), 12-26.

Kelley, C. & Meyers, J. (2012). The Cross-Cultural Adaptability Inventory. Retrieved on April 8, 2012, from http://ccaiassess.com/Home_Page.html

Kukulska-Hulme, A. (2010). Learning cultures on the move: Where are we heading? *Educational Technology & Society*, 13(4), 4-14.

Lee, L. (2011). Blogging: Promoting learner autonomy and intercultural competence through study abroad. *Language Learning & Technology* 15 (3), 87-109.

Luke, C. L. & Britten, J. S. (2007). The expanding role of technology in foreign language teacher education programs. *CALICO Journal*, 24(2), 253-267.

Marx, H. & Moss, D.M. (2011). Please mind the culture gap: Intercultural development during a teacher education study abroad program. *Journal of Teacher Education* 62 (1), 35-47.

Oner, D. & Adadan, E. (2011). Use of web-based portfolios as tools for reflection in preservice teacher education. *Journal of Teacher Education* 62 (5), 477-492.

Putnam, R. T. & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher* 29 (1), 4-15.

Sinicrope, C., Norris, J., & Watanabe, Y. (2007). Understanding and assessing intercultural competence: A summary of theory, research, and practice (technical report for the foreign language program evaluation project). *Second Language Studies* 26 (1), 1-58.

Sutton, S. R. (2011). The preservice technology training experiences of novice teachers. *Journal of Digital Learning in Teacher Education*, 28(1), 39-46.

Taylor, E.W. (1994). Intercultural competency: A transformative learning process. *Adult Education Quarterly* 44 (3), 154-174.

Taylor, J.A. & Henao, V. M. (2006). Intercultural competence without international experience. Proceedings from 9th Annual ELT Conference. Bogotá, Colombia.

The National Council for Accreditation of Teacher Education. (2012). Unit standards in effect 2008. Retrieved on March 20, 2012 from <http://www.ncate.org/Standards/NCATEUnitStandards/UnitStandardsinEffect2008/tabid/476/Default.aspx>

United States Bureau of Labor Statistics. (2011). *Labor force statistics from the current population survey*. Washington, D.C.: U.S. Government Printing Office. Retrieved on March 21, 2012, from <http://bls.gov/cps/cpsaat11.htm>

Williams, T.R. (2009). The reflective model of intercultural competency: A multidimensional, qualitative approach to study abroad assessment. *Frontiers: The Interdisciplinary Journal of Study Abroad* 17, 289-306.