Combining Online Education with International Service Learning to Increase Cultural Competence

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Combining Online Education with International Service Learning to Increase Cultural Competence

PURPOSE: Although international service learning has the capacity to promote a variety of important professional behaviors, merely visiting another country does not automatically result in these benefits.

METHODS: This article describes an evidenced-based course which used pre-trip preparation in combination with a nine day service learning trip to Ecuador to develop cultural competence among 6 occupational and 6 physical therapy students. Pre-trip preparation included online and in-person components to increase self-awareness, awareness of other cultures, knowledge about Ecuadorian culture and skill-building. On-site activities included exploration of the physical and social context in addition to providing occupational and physical therapy treatment in a variety of settings. The authors collected qualitative information by reviewing responses to prompts on an online forum. A pre-test/post-test format using the Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals-Student Version (IAPCC-SV) was used to gather quantitative information. RESULTS: A paired-samples t-test was used to compare the group's pre-test and post-test scores on the IAPCC-SV. There was a statistically significant difference in the scores between the pre-test (M=57.72, SD= 6.66) and post-test (M=67.54, SD= 3.55) with the change in mean score of 9.81 resulting in \( t = -4.91 \), \( df = 10 \) and \( p \leq .001 \). DISCUSSION: The results showed a change in students from the level of culturally aware to culturally competent based on the scale provided in IAPCC-SV. The experience resulted in an increased desire to continue intercultural practice. Health care professionals have a responsibility to be culturally competent. This article will assist health care professionals to reflect on the advantages of joining an international service learning trip to expand their self-awareness and awareness of other cultures. Professors may reflect on how pre-trip preparation may enhance existing service learning experiences.

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Combining Online Education with International Service Learning to Increase Cultural Competence

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ABSTRACT

PURPOSE: Although international service learning has the capacity to promote a variety of important professional behaviors, merely visiting another country does not automatically result in these benefits. This article describes an evidenced-based course which used pre-trip preparation in combination with a nine-day service learning trip to Ecuador to develop cultural competence among 6 occupational and 6 physical therapy students. METHODS: Pre-trip preparation included online and in-person components to increase self-awareness, awareness of other cultures, knowledge about Ecuadorian culture, and skill-building. On-site activities included exploration of the physical and social context and providing occupational and physical therapy treatment in a variety of settings. The authors collected qualitative information by reviewing responses to prompts on an online forum. A pre-test/post-test format using the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Student Version (IAPCC-SV) was used to gather quantitative information. RESULTS: A paired-samples t-test was used to compare the group's pre-test and post-test scores on the IAPCC-SV. There was a statistically significant difference in the scores between the pre-test (M=57.72, SD± 6.66) and post-test (M=67.54, SD± 3.55) with the change in mean score of 9.81 resulting in t=-4.91, df = 10 and p =0.001. DISCUSSION: The results showed a change in students from the level of culturally aware to culturally competent based on the scale provided in IAPCC-SV. The experience resulted in an increased desire to continue intercultural practice. Health care professionals have a responsibility to be culturally competent. This article will assist health care professionals in reflecting on the advantages of joining an international service-learning trip to expand their self-awareness and cognizance of other cultures and on the use of pre-trip preparation to enhance existing service learning experiences.

INTRODUCTION

The United States (US) is becoming increasingly multicultural. In 2015, there were 43.2 million foreign-born individuals in the US, which constitutes 13.5% of the US population.¹ Health care professionals must provide culturally competent care to their clients.²,³ Cultural competency has been defined as "the attitude, knowledge, and skills necessary for providing quality care to diverse populations."⁴ Cultural competency development is an ongoing process that involves self-awareness, awareness of differences between cultures, knowledge about other cultures, and the skill of adapting treatment to meet the needs of clients from different cultures.⁵⁻⁸ International service learning is one method used to increase cultural competency among students.⁷⁻¹² However, merely being immersed in a foreign culture does not automatically result in realization of all of the potential educational and cultural benefits.⁴ An evidenced-based intervention was designed and implemented for a group of occupational and physical therapy students as a method to improve cultural competency.

SETTING

During the summer of 2015, six Master of Occupational Therapy (OT) and six Doctor of Physical Therapy (PT) students and corresponding instructors participated in a Global Health Perspectives course which culminated in traveling to Ecuador to complete a nine-day service learning trip in cooperation with a US-based nonprofit organization which provides health care
services to underserved populations in Ecuador. Ecuador is a small country of approximately 172,000 square miles and has a population of approximately 16,080,000. This is about the size of Colorado with three times the population. In addition to the official language of Spanish, there are 24 indigenous languages spoken in various parts of Ecuador. There are 415,500 people registered with the National Counsel for Equality for the Disabled in Ecuador. In the province of Imbabura, where the students went to complete their service project, 9,758 people are listed as having a disability, which includes the categories of auditory, visual, physical, intellectual, language, and/or psychological disabilities. Current statistics on the distribution of health care professionals in Ecuador are not published; however, they appear to be concentrated in the urban centers such as Quito and Guayaquil. The Global Health Perspectives course was designed to provide needed services to the people of Ibarra while providing the students an opportunity to increase their cultural and clinical competence.

The Ecuador trip was part of a two-credit Global Health Perspectives course. The course spanned 15 weeks, including the pre-trip preparation performed primarily online with three in-person meetings facilitated by the course instructors, nine days in Ecuador, and a post-trip evaluation that included students' personal reflections. The learning outcomes of the course were to develop cultural competence among the students while building their clinical skills. The pre-trip components of the course sought to prepare the students for their international experience. Learning activities were designed to allow students active engagement utilizing video and audio technology that facilitated students in practicing Spanish language skills. Students watched films that depicted the culture. Improved student preparation for international fieldwork may lead to better outcomes related to clinical reasoning, flexibility, and cultural competence.

BACKGROUND
Students choose to complete an international experience for various reasons. From an academic perspective, achieving cultural competence is one of the frequently stated benefits. Although there is recognition that cultural competence is important and is included as part of the standards of practice for occupational and physical therapists, the standards allow for variability in implementation to meet the unique needs of each program. A review of the literature revealed a process for developing cultural competence through online coursework in which topics are generally presented through readings, assignments, journaling, discussion, and case studies. For pre-trip preparation, journaling and debriefing are the strategies that were reported in the literature to improve cultural competence when used in combination with international service learning. Online education also has been shown to be effective in increasing cultural competence.

The components of the course were informed by the Campinha-Bacote model of cultural competence. The Campinha-Bacote model includes five constructs (cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire). However, only the first four constructs of the Campinha-Bacote model were used by Hunter. The motivation may vary, but to some extent, the students demonstrated a desire to increase their cultural competence by enrolling in the Global Health Perspectives course and therefore, the course content did not need to specifically address the construct of "desire". Cultural awareness was further broken down into self-awareness including the impact of the students’ own culture on their perceptions and a general awareness of other cultures. This course provided online education modules for students to complete prior to their international service work, in addition to journaling and debriefing while in Ecuador. Outcomes related to cultural competence were measured using the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals - Student Version (IAPCC-SV). The IAPCC-SV is a self-report assessment based on the Campinha-Bacote model of cultural competence.

DEMOGRAPHICS
The 12 students who enrolled in the course were females between the ages of 23 and 32, with the average age of 24.9 years. The majority of the students were Caucasian of European descent (9/12, 75%). Two students were Asian (Japanese and Indian descent), and one Hispanic. Two students had parents who were immigrants. Although all students were lifelong residents of the US, most reported a wide range of international travel experiences. Several students had traveled multiple times and to multiple countries, including Latin American countries. Two students reported spending three months living in another country during a study-abroad experience. Only one participant reported having never traveled out of the US. No students had visited Ecuador previously.

METHODOLOGY
IRB approval was received prior to the initiation of the course. The course included several in-person sessions and 13 weeks of online assignments prior to travel. During the first pre-trip session, students completed the pre-test, which was collected by the instructors during an initial meeting on campus. Students watched a short video introduction to the organization that coordinates
service-learning programs in Ecuador. Students entered their demographic information and personal goals into the online course forum.

Following the Campinha-Bacote model, online activities to increase cultural awareness and knowledge were designed. In addition to online activities to increase self-awareness, the students read My American Glasses to understand that behavior they might consider normal could appear strange to someone who was not raised in the US. In-person activities were used in conjunction with on-line activities to build skills prior to the trip. Cultural encounters primarily happened during the trip to Ecuador. Following each learning activity, students posted reflective responses in the online course forum.

To increase cultural awareness, during weeks 2 and 3 of the course, the students viewed a video clip of formal and informal greetings. To build their knowledge of Spanish vocabulary, the students practiced Spanish greetings by recording greetings in the online forum and posting online resources for learning Spanish. At the end of week 3, the students dined at a Peruvian restaurant to experience unfamiliar food (there was no Ecuadorian restaurant nearby) and posted their reflections about the experience on the forum. This activity was included to build community among the students who did not know one another and to introduce the cultural aspect of food.

Weeks 4, 5, and 9 were dedicated to guiding the students in building their cultural skills related to treatment planning prior to the trip. In order to improve their language skills, the students continued to share useful websites to use to learn or review Spanish. In order to build cultural skills to apply during treatment sessions, the students read a different case study each of the weeks when they met in-person, watched a video clip of a treatment session that took place at the non-profit outpatient center, and worked together to create a treatment plan which considered cultural components of care. The specific content for the treatment planning units were developed and led by the course instructors. In addition to collaborating in OT/PT student pairs to design meaningful intervention for the presented case, the students were asked to discuss the most important qualities to develop as a student therapist in order to be culturally effective. The discussion was facilitated by the course instructors and examples of culturally appropriate language were role modeled.

During week 6, the students engaged in a choice of activities to increase their knowledge of South American and Ecuadorian history. Nine students met in-person to watch the movie “The Motorcycle Diaries”. The students who were not able to join the group to watch the movie read an excerpt from the Ecuadorian Constitution which was posted online. Students posted answers to questions that asked them to reflect on the significance of the political context.

During weeks 7 and 8, the learning activities were designed to help the students gain knowledge about providing health care services and delivering OT and PT in a different country emphasizing health care and disability in Ecuador. Week 10 was dedicated to trip logistics, including packing lists, air travel schedules, and coordinating rides to the airport. During weeks 11-13, the students began making specific plans for working with clients and designed an in-service that would be delivered in Ecuador to a group of local service providers.

During week 14, the students traveled as a group to Ecuador accompanied by the course instructors. An onsite orientation was provided. A leader from the non-profit organization that facilitated the trip built upon the prior online discussions by presenting the strengths and needs of specific clients the students would encounter at the treatment sites and guiding the treatment planning process. On the students' last night in Ecuador, a discussion was facilitated to help the students reflect on their experiences during the course. During the week following the group's return to the US, the students completed course evaluations and answered reflective questions online.

OUTCOMES
The authors collected qualitative information by reviewing responses to prompts on the online forum. During the first week, the students were asked to write their goals and expectations for the experience. The 6 OT and 6 PT students (12/12, 100%) each stated a goal that included learning about the other profession (inter-disciplinary). Eighty-three percent (10/12) of the group stated that they wanted to learn about Ecuadorian culture. Sixty-six percent (8/12) listed some type of professional development goal, including “enhance my problem solving skills and adapt quickly to the situations that arise in the clinical settings,” “understand how cultural beliefs and practices influence how treatment needs to be carried out,” and “test out my skills at immediate thinking when it comes to intervention planning.” The final goal mentioned by more than 50% of the students was to learn and/or improve Spanish language skills.

The students demonstrated evidence of passing through the steps from self-awareness to cultural encounters in their forum posts. The reading from My American Glasses succeeded in increasing the students' awareness of how one's own culture
impacts one’s view of behavior and how often they are unaware of what is happening outside the US. During the forum discussions related to the book, students agreed with the statement made in the reading that individuals from the US lack knowledge regarding world issues and several of them “admitted to being guilty” of not educating themselves about world events. Students demonstrated self-awareness by posting comments such as the following: “I imagine that someone from any other country would find an equal amount of things to be weird and interesting in the US,” and “reading his impression of these topics I couldn’t help but laugh and think to myself that it is a little odd.”

Following the Peruvian restaurant dinner, the students wrote about their reactions to the experience. The students reported feelings which ranged from, “I was a little nervous about dinner as I can be a picky eater at times” and “I am not usually very adventurous with my food choices but I am excited to try a few new things while in Ecuador!” to “I’m definitely excited to try the food in Ecuador!”

During the sessions focusing on skill-building, students listed qualities that they believed are necessary for culturally competent patient care. Ten students mentioned effective communication in their list of important qualities for culturally competent patient care. This quote reflects a typical response: “It is important to strive to communicate effectively both verbally and nonverbally in order to establish patient rapport and improve towards the patient goals, family goals, and therapy goals.” Nine students wrote a variation of the following statement: “Being open minded and non-judgmental: this is a key aspect for us to not be ethnocentric in our interaction with others.” Eight students wrote that flexibility and adaptability were important in order “to change our clinical practice to fit that of the patient. We need to acknowledge a patient’s culture and be willing to change our ideas and treatments to meet the needs of the patient.” Seven students thought that having knowledge about a culture would allow them to better understand and adapt treatments accordingly. Other qualities mentioned by at least two students included, empathy, self-awareness, resourcelfulness, patience, collaboration, passion, and compassion. The students wrote about a need to learn about Ecuadorian culture including the family dynamic and customs, which “can help us understand why our clients are doing things certain ways in which they are not willing to change.”

During the onsite portion of the course, two students mentioned that they were glad that they had learned about proper greetings in advance because they could see how important it was when they entered a facility. The focus on formal culturally appropriate communication was overtly modeled in the online portion via the video students watched and reinforced during the on-site orientation. In the post-trip forum, students stated that they learned about Ecuadorian culture and had a chance to apply their clinical skills in an unfamiliar context. The students’ comments reflected a general agreement that the experience met or exceeded their expectations.

A paired-samples t-test was used to compare students’ pre- and post-test scores on the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals- Student Version. There was a statistically significant difference in the scores for IAPCC-SV pre-test (57.72 ± 6.66) and IAPCC-SV post-test (67.54 ± 3.55) with the change in mean score of 9.81 resulting in t= -4.91, df = 10 and p= 0.001. See Figure 1.
The pre-test results mean of 57.72 had a standard deviation of 6.66 which is relatively large for this small group, indicating a wide variation in the students’ cultural competency at the beginning of this course. The students who were less culturally competent at the beginning of the course had larger gains than those who were more culturally competent prior to the intervention. The IAPCC-SV describes four levels of cultural competency based on the scores. See Table 1.

Using this scale, the group was culturally aware at the time of the pre-test but reached the culturally competent level after the course. However, five students scored 60 points or more on the pre-test, placing them in the ‘culturally competent’ range before the intervention. These findings are consistent with reports that participating in international service learning leads to increased cultural competence.

The 20 questions in the IAPCC-SV were examined in the groups that were defined by Campinha-Bacote to reflect the five specific constructs of the model. A combined variable t-test demonstrated that the increases in the areas of desire, knowledge, and skill were highly statistically significant at \( p = 0.001 \) See Figure 2.

The areas of knowledge and skills demonstrated gains of 35.13% and 30.03%, respectively. The area of awareness did not show change, possibly due to the fact that there were only three questions on the IAPCC-SV which were identified as measuring awareness. On average, the students either agreed or strongly agreed with those three statements at the pretest, which did not allow for large gains to be made. In the area of encounters, it could be that several of the questions are not sensitive to the population being measured. For example one question assumes the participant is already working in a health care role. Another question asks if the participant seeks out education, consultation, and/or training experiences. In both of these questions, the students may have opted to check agree on both the pretest and posttest since they may not feel they are not in a position to complete these tasks. Since this was a forced choice inventory, checking agree may have seemed the most appropriate to.
describe their situation but it would not have changed from the pre to posttest. Although not specifically addressed in the intervention, the largest change was in the area of ‘desire’. The group had an increase of 88.58% on the construct of ‘desire,’ suggesting that having a successful international experience contributes to the desire to be culturally competent. Practitioners recognize that transcultural communication requires life-long learning, reflection, and practice.\textsuperscript{23} The students in this course reported an increase in their desire to work with people from diverse cultures which, if it continues, could serve as the basis for continuing to increase cultural competency.

LIMITATIONS
Although this project will add to the body of knowledge regarding increasing cultural competency, it has some limitations that diminish the ability to generalize the findings. There was a small number of participants. Only one university and one non-profit organization were involved in the project. The IAPCC-SV, although widely supported in the literature, is a self-report tool; therefore, it is subject to over- or under-reporting. A nine-day experience is too short to allow full exploration of the culture. In addition, some students were completing fieldwork during the online portion of the course and were exposed to patients from other cultures that may have created learning outside the scope of this project. There was not a breakdown to demonstrate changes in quantitative scores for cultural awareness between the preparation and immersion parts of experience so it was not clear if the online portion of the project alone could elicit the change.

SUMMARY
The outcomes described in this article confirm that online preparation combined with international service learning contribute to increased cultural competency for OT and PT students. The students who completed this course demonstrated increased cultural competence that may help them work with therapists and clients from other cultures located either in the US or in other countries. Further examination is required to determine which specific components of this intervention were the most beneficial.

For this course, an online training program was complemented with a visit to Ecuador; however, it could be adapted to increase general cultural awareness for students or professionals who will be working with clients from other cultures in the US or abroad.

REFERENCES


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