

Building intercultural competence through virtual team collaboration across global classrooms.

SWARTZ, S., BARBOSA, B., CRAWFORD, I.

2020

© 2020 by the Association for Business Communication

Building Intercultural Competence Through Virtual Team Collaboration Across Global Classrooms

Stephanie Swartz

Mainz University of Applied Sciences, Germany

Belem Barbosa

University of Aveiro, Portugal

Izzy Crawford

Robert Gordon University, Scotland

Corresponding Author:

STEPHANIE SWARTZ, HOCHSCHULE MAINZ, LUCY-HILLEBRAND-STR. 2, 55128 MAINZ, GERMANY; SWARTZ@HS-MAINZ.DE

Abstract

By means of a cross-cultural virtual teams project involving classrooms in Scotland, Germany, and Portugal, students were exposed to the challenges of collaborating internationally with the intention of increasing their intercultural competency. Intercultural sensitivity and intercultural communication competency were measured using responses to surveys before and after the 6-week project. Students reported, among other aspects, a heightened awareness of the difficulties of intercultural communication. Despite a general appreciation of the project and its outcomes, negative results such as an increased dislike of intercultural interaction emerged. Contradictory results warrant further investigation with data from future collaborations.

Keywords

virtual teams, intercultural competence, business communication

Teaching at business schools in today's global world presents instructors with several challenges. Through easy accessibility to information throughout the world, instructors of all disciplines must continually keep up with new developments as well as impart critical thinking skills together with fundamental knowledge to their students. Furthermore, technical savviness, knowledge of foreign languages, and intercultural competence are prerequisites for graduates today. These skills are no longer exclusively for global careers but also for positions in small and medium-sized companies.

In order to meet these expectations, instructors have looked for avenues outside conventional classroom instruction, or teaching *outside the textbook*. Developments in technology have furthered this aim by providing learning management systems, collaborative platforms, and the use of apps and social media to facilitate learning by flipping the classroom. Not satisfied with staying local, instructors have reached beyond their national borders to create globally networked learning environments (GNLEs) in order to provide students with experiential learning experiences through cross-cultural collaboration projects (Starke-Meyerring & Wilson, 2008). GNLEs expose all participating students to intercultural exchange, in particular those who do not have the opportunity to spend a semester abroad, with the aim of developing their intercultural competence (Zhu, Gareis, Bazonni & Rolland, 2005). Starke-Meyerring (2007) noted the difficulty of making students aware of their own cultural limitations regarding knowledge in conventional classroom instruction and stressed the benefits of experiential learning. Through engaging students in collaborative projects involving global classrooms, or GNLEs, instructors aim to impart cross-cultural competencies, which are skills necessary not only for their professional but also for their personal development, such as by reducing ethnocentrism and encouraging civil engagement (Starke-Meyerring, 2010a, 2010b).

This article describes such a collaborative project and discusses its effectivity in increasing intercultural sensitivity and intercultural communication competence based on findings from pre- and post-project surveys. Furthermore, discrepancies between expectations and results are analyzed and suggestions made for further projects in order to raise students' awareness of cultural differences and increase their abilities to interact successfully in global environments.

Literature Review

Instructors set out to enhance students' intercultural competence, among other skills, by means of an experiential GLNE. To ascertain this objective, it is necessary to reach a common understanding of what exactly intercultural competence is. *Intercultural competence* can be defined as possessing the necessary attitudes and reflective behavioral skills and using these to behave effectively and appropriately in intercultural situations (Deardorff, n.d.). According to J. M. Bennett (2009), intercultural competence is "a set of cognitive, affective and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts" (p. 95). The term intercultural competence is often used interchangeably in academic discourse with the terms *intercultural literacies* (Starke-Meyerring, 2005), *intercultural sensitivity* (M. J. Bennett, 1986), and *cultural intelligence* (Earley, Ang, & Tan, 2006). According to Arasaratnam and Doerfel (2005), intercultural sensitivity and intercultural communication competence are indicators for the larger concept of intercultural competence. In both cases, cognitive, affective, and behavioral components play a role in determining possession and development of intercultural competence. Cognitive complexity describes the ability to relate and to construct messages so that the other can understand, affectivity deals with the emotional connection one has to another culture, and behavioral dimensions concern one's ability to adapt to and interact with other cultures (Arasaratnam & Doerfel, 2005).

This research focused on the concept of intercultural sensitivity and intercultural communication competence. Intercultural sensitivity encompasses “the know-how, problem resolution strategies, flexibility and empathy someone uses to understand, critically assess and produce symbols to interact positively with people from other cultures” (Bégin-Caouette, 2013, p. 56). According to Chen and Starosta (1998), intercultural sensitivity makes up the affective aspect of intercultural communication competence and deals with one’s “active desire to motivate themselves to understand, appreciate and accept differences among cultures” (p. 231). Thus, intercultural sensitivity is the ability to recognize differences in behaviors, perceptions, and feelings during the process of intercultural communication (Chen & Starosta, 1998). In order to accurately measure intercultural sensitivity, they argued, a scale that focused on the affective aspect, the Intercultural Sensitivity Scale, needed to be developed.

Intercultural communication competence, on the other hand, encompasses all three aspects of cognitive, affective, and behavioral abilities during intercultural communication. The ability to communicate effectively and appropriately (communication competence) should include the same skill across culturally diverse environments. Arasaratnam (2009) developed an instrument for indicating intercultural communication competence, the Intercultural Communication Competence (ICC) scale, which is not limited to a specific interaction but is consistently evident. Competent intercultural communicators were found to possess five qualities: empathy, intercultural experience/training, motivation, global attitude, and ability to listen well in conversation.

Changes in students’ affective abilities (empathy, motivation, willingness to listen, etc.) as well as in their ability to utilize behavioral understanding in order to communicate effectively and appropriately are the focus of this investigation. These changes concern specifically sensitivity toward verbal, nonverbal, and paraverbal cues; increased appreciation of cultural differences and

awareness of difficulties dealing with other cultures; a reduction in ethnocentrism and fear; and an increase in confidence when dealing with other cultures. While there are certainly more facets to intercultural competence, these aspects reflect some of the key components found in intercultural frameworks such as that of M. J. Bennett (1993) and Deardorff (2006). The Intercultural Knowledge and Competence VALUE Rubric offers a uniform approach to developing intercultural competence in classrooms based on those intercultural frameworks (Association of American Colleges and Universities, 2014). Included among the learning outcomes mentioned in the rubric are verbal and nonverbal communication skills, empathy, as well as understanding and openness towards other cultural values and behaviors.

In a nutshell, intercultural competence means neither being aware of *all* cultural differences across the globe nor taking on the mannerisms and behavioral patterns of the counterpart (universalism). It also does not mean ignoring differences (denial of difference) and expecting others to behave according to the same cultural norms and standards (M. J. Bennett, 1986). Intercultural competence—including intercultural sensitivity and intercultural communication competence—involves an understanding that differences do exist, that there are potential pitfalls involved in interacting across cultures, and that awareness of these factors can facilitate successful collaboration.

The question as to what extent GNLEs actually develop intercultural competence is a fairly recent subject of research. Bégin-Caouette (2013) examined the assumption that GNLEs develop students' cultural sensitivity and enhance their learning experience by analyzing several examples of such global classroom experiences—referred to as *eduscapes*—many of which can also be found in Starke-Meyerring and Wilson's (2008) book *Designing Globally Networked Learning Environments*. According to Bégin-Caouette (2013), an increase in intercultural sensitivity was found among students engaging in global collaborations—however, more so in

some GNLEs than others. The differences appeared to be contingent upon the level of cooperation between the instructors and degree of mutuality, such as access to technology (Bégin-Caouette, 2013).

The Project

Instructors in three countries (Scotland, Germany, and Portugal) designed a cross-cultural virtual teams project that took place over 6 weeks and involved students in business programs and disciplines ranging from organizational communication and multicultural teamwork to digital marketing, public relations, and fashion management.

Origins of the Project

The groundwork for faculty collaboration began in 2017 when an instructor from Scotland responded to a German university professor's general enquiry for colleagues from international partner universities interested in virtual team projects. After the latter's presentation of virtual team projects at an international conference on education and new learning technologies in Barcelona, a third colleague from Portugal met with the instructor from Germany and discussed future collaboration. After several Skype meetings, continuous emails, and instant messages (IM), the three instructors put together a concept for a collaborative project involving all three universities.

Challenges of the Project

The challenges the instructors faced were multifaceted: Each university had different semester schedules and varying requirements for each course. They found a 6-week slot that fit, with a few slight adjustments (the Scots began and ended the project a week earlier). Whereas the German and Portuguese students had a built-in project integrated into their course syllabus, the British students experienced it as an add-on. This impacted the latter students' willingness to engage in the project, as did differences in the demands on and evaluation of students (while the

Scottish students engaged voluntarily, students from Germany received 50% of their final grade related to the project). In addition, the students differed in age, gender, ethnic as well as academic and professional backgrounds, and English-language abilities (ranging from native speakers to intermediate command). Furthermore, the courses involved various disciplines within undergraduate and graduate business programs and were taught either online, seated or hybrid.

Learning Objectives

The instructors shared a mutual understanding of the objectives of this GNLE. With this project, they aimed to improve students' collaborative writing and speaking skills, intercultural competencies, teamwork skills, use of digital channels in cross-border communication, and skills in communicating with individuals whose native language is different from the other team members. The project also focused on familiarizing students with common business communication practices as well as honing their project management skills. Furthermore, students were exposed to the constraints of digital communication channels and expected to develop and adhere to best practices when collaborating virtually. Moreover, by engaging in a cross-cultural virtual collaboration, students facilitated work with counterparts from different cultural backgrounds, communication styles and expectations. Similar to the learning outcomes of previous GNLEs (Starke-Meyerring & Andrews, 2006), developing students' intercultural sensitivity and intercultural communication competence was an essential objective in the outcome of this project.

Project Development

Participants. The students involved in this intercultural collaborative project differed from one another in more than their national culture. The Scottish teams involved both seated and online students of corporate communication and public affairs and fashion management. They represented a range of cultural, ethnic, academic, and professional backgrounds. In fact, the

majority of Scottish students declared their nationality as other than Scottish. The Scottish students were undertaking—both online and seated—a postgraduate module in public relations theory and practice as part of a wider Master of Science course of study. The German teams were made up of seated undergraduate students of business administration (sophomores) and applied computer sciences (freshmen). The language abilities of the computer science students varied considerably, and the majority were foreign students primarily from Northern Africa or raised in families of non-German ethnic origins. The students from the Portuguese university were undergraduate, primarily seated students of marketing and were ethnically homogeneous, although a few of them were mobility students from other European countries. They were third-year students (final year). The topic of their course was digital marketing, which was particularly focused on creating strategies and producing content to interact with target audiences on the Internet.

In addition to the diversity in disciplines and study programs mentioned above, the students were composed of almost twice as many females and their ages were primarily between 21 and 26 with a few under 21 and over the age of 26. Approximately one third described themselves as foreign students; in other words, they did not grow up in the country in which they were studying. More than half of the students considered their English good. Approximately one third placed their English language skills at very good and native speaker proficiency. Slightly more than 10% described their English language competence as bad or basic.

Thus, the teams of participating students were heterogeneous in terms of national cultural, gender, ethnicity, age, educational level, professional experience as well as areas of study and length of time at their university. There are conflicting opinions concerning the effectivity of heterogeneous groups, yet most authors agree that they are more effective, share more knowledge, and improve mutual learning (Gorgônio, Vale, Silva, & Silva, 2017). Essig (2012)

underlined the notion that heterogeneous groups are more successful and can provide fertile ground for new ideas. While diversity certainly reflects the global eduspaces we face today, this heterogeneity can influence the trends seen when measuring intercultural sensitivity and should, therefore, be taken into account.

Assignment. The assignment involved investigating potential difficulties that companies experienced on the foreign market, such as Hugo Boss in the United Kingdom or Walkers Shortbread in Germany. These difficulties could encompass brand recognition, human resource policies, or competitors. Students were expected to analyze these difficulties with the help of modalities such as a PESTLE (political, economic, social, technological, legal, and environmental) analysis or a SWOT (strengths, weaknesses, opportunities, and threats) analysis and agree on possible solutions. Their analyses, as well as suggestions for changes, were presented to the class; the other students functioned as a board of directors and ideally subjected the presenters to critical questioning. In the case of the Portuguese and German teams, the assignment was adapted to better fit the syllabus and learning objectives of the Portuguese class. In this case, the teams developed ideas and marketing strategies to encourage a rise in tourism to Portugal and to make Germany more attractive, in order to attract Portuguese professionals to fill needed positions in Germany. These assignments culminated in videos which were created by the Portuguese digital marketing students and supported by the German team members.

Team interaction. The virtual team project took place over 6 weeks and involved three phases. In the first phase, students formed local teams of approximately two or three members. In some courses, students were put together randomly, while in others students were able to choose their own partners. The local teams created a team identity with a logo, slogan, and short video clip introducing themselves. Instructors randomly assigned their local teams to those of their international partners. It should be mentioned that the teams were comprised of members from

only two universities; they were not entirely mixed with a member from each. The teams then exchanged their team IDs as well as information about themselves with their counterparts; they did so by using self-profiles in which they volunteered personal information concerning where they grew up, their families, hobbies, and professions. Also in this stage students held their first icebreaker Skype meeting with their counterparts in other countries. They agreed to a collaborative platform such as Google Drive, Slack, or a Facebook group, where they uploaded their information and shared files, divided up tasks amongst themselves, and agreed to benchmarks along the project timeline. In the second phase, the teams focused on the assignment, exchanged information, created presentations, and wrote debriefings on the results. Presenting the results and giving feedback on the collaboration made up the third phase of the project.

Use of technology. The initial communication between teams occurred through email. Having once established contact, students arranged Skype meetings (three meetings were expected during the course of the project) and agreed on the collaborative tools they intended to use. While instructors recommended the use of Slack and Google Drive for file sharing and collaborative writing, students were relatively free to choose from all available platforms, social media, as well as IM apps such as WhatsApp or Messenger. The universities utilized different learning management systems (i.e., Germany with OLAT, Portugal with Moodle), so it was not possible for instructors to arrange a collaborative space common to all.

While discussing the communication channels to be used, students discovered differences among team members in technological savviness or comfort when using social media that needed to be overcome. Some foreign students were unfamiliar with WhatsApp, an instant-messaging app which allows for text and voice messages as well as audio and video communication and which is widely used in Germany for example. Some of the technically challenged students were unfamiliar with collaborative platforms and in need of assistance from their digital native

counterparts. Nevertheless, students later reported that they were able to overcome these hurdles through a combination of different media and by resorting to email when all else failed. They also mentioned that familiarizing themselves with platforms such as Slack or Skype was high on their list of positive outcomes of this project.

Workload and focus. As mentioned above, the project was either built into the course or added on, depending on the requirements and schedules of the different university courses. Whereas the German students were given time during their seated courses to work with their partners on their projects, the online students at the Scottish university were expected to work outside their regular coursework and without seeing their local partners. This contextual difference in classroom environment influenced the responsiveness of students to the project as well as their feelings towards their team members. This fact also impacted the role of the instructor in terms of mentoring students and their progress. In classes which met in person once a week, students voiced concerns or pointed to glitches so that solutions could be found quickly, reducing frustration levels, whereas in other classroom contexts, a considerable amount of time passed before instructors became aware of difficulties and could offer assistance. This case occurred fairly early in the project when students had different understandings concerning the project objective, despite the fact that each team received the same project description. The first valuable weeks of the project were perceived as wasted while they sought answers from their instructors and reported back to their members.

Student evaluations. Student performance during the course of the project was not monitored closely. Students were expected to fulfill certain benchmarks at the beginning of the project, such as establishing contact and exchanging information about each other as well as designating roles and tasks, in order to ensure a relatively smooth flow. For most of the project, the teams worked independently, unless they requested guidance. The final papers, presentations,

and/or videos were the focus of evaluations. Among those students who were required to hand in an assignment, all of them were satisfactory and, in some cases, exceptional.

As previously mentioned, existing discrepancies in the marking criteria of the project between the four participating courses led to differences in perceived project significance between the teams, which in turn impacted student performance. Students who were required to present their findings in a short paper and a presentation were surprised to discover that their teammates were involved *just for fun* and became frustrated when they found themselves researching and writing on their own.

Methods

Research Objectives

Using pre- and post-project surveys, the instructors set out to measure changes in intercultural sensitivity and intercultural communication competence among students involved in a global learning project. While it would be utopian to believe that a 6-week project could make enormous changes in the development of intercultural sensitivity and intercultural communication competence in our students, comparing the results of the first survey and those compiled after the project yielded noticeable trends (see Table 1). An analysis of these trends is discussed later.

Research Instruments

In order to determine whether students increased their intercultural sensitivity through this project, instructors had their students complete an online intercultural sensitivity survey based on the Intercultural Sensitivity Scale created by Chen and Starosta (2000), which comprised 24 items divided into five factors: interaction engagement, respect of cultural differences, interaction confidence, interaction enjoyment, and interaction attentiveness (see Table 2). Students were

asked to respond to each item on a 5-point Likert scale of 5 = *strongly agree*, 4 = *agree*, 3 = *uncertain*, 2 = *disagree*, and 1 = *strongly disagree*.

In addition to intercultural sensitivity, the instructors further sought to determine if there was an increase in the intercultural communication competence of the students taking part in this GNLE. For this reason, items taken from the ICC scale were utilized in the survey (Arasaratnam, 2009) (see Table 3). Students were asked to respond along a 5-point scale to statements concerning the cognitive, affective, and behavioral dimensions of intercultural communication.

Pre- and post-project responses were analyzed according to five tendencies of intercultural sensitivity: increased awareness of verbal, nonverbal, and paraverbal communication; increased appreciation of cultural differences; reduction of ethnocentric tendencies and stereotypes; reduction of fears and increase in confidence in dealing with other cultures; and increased awareness of difficulties in dealing with other cultures. These aspects are all indicative of “the ability to discriminate and experience relevant cultural differences,” as intercultural sensitivity is defined according to Hammer et al. (2003, p. 422).

Students were asked to complete this survey before the project began. At the end of the project, students were again asked to complete the survey, but this time qualitative questions created by the instructors were included. These questions asked about their personal feelings towards the project, what they found most difficult, their satisfaction with the project, and what they would do differently next time. In addition, they were asked to rate the activity and evaluate both their own and their team members, both at home and abroad, concerning commitment and active participation. These answers were compared between native team members and also between international counterparts to see whether tendencies arose concerning positive or negative attitudes towards the project.

Results

Regarding the five factors in Chen and Starosta's (2000) Intercultural Sensitivity Scale (interaction engagement, respect of cultural differences, interaction confidence, interaction enjoyment, and interaction attentiveness), the data revealed few statistically significant differences in the results between the surveys before and after the project. When comparing changes in the mean between before and after the project (M_{Before} , M_{After}), slight differences can be seen in the numbers after the decimal (see Tables 2 and 3). Nevertheless, slight numerical differences in the mean of individual items indicate changes in understanding, attitude, and behavioral awareness amongst the students after the project. These changes are categorized under: awareness of verbal, nonverbal, and paraverbal communication; appreciation of cultural differences; ethnocentric tendencies and stereotypes; fears as well as confidence in dealing with other cultures; and awareness of difficulties in dealing with other cultures. Developments found in these areas are supported as well as contradicted by answers to the qualitative questions at the end of the second survey. While ascertaining positive developments in intercultural sensitivity after students took part in the GNLE would fulfill the objectives of the project, the need for further data over the course of repeated projects, in order to verify any significance this study might have, must be stressed. At this point, it should also be mentioned that the surveys lacked the possibility of excluding responses to solely the first or second survey. Any further studies must include items which allow for matching pre- and post-project responses and excluding single responses while preserving anonymity.

Results of Survey

Increased awareness of verbal, nonverbal, and paraverbal communication. In response to the survey, students reported increased sensitivity towards subtle meanings conveyed by their counterparts during intercultural interaction. In response to the statement "I am sensitive to my culturally-distinct counterpart's subtle meanings during our interactions," there was a

marked increase to the affirmative ($M_{\text{Before}} = 3.25$, $M_{\text{After}} = 3.50$). Thus, in the area of interaction attentiveness, we found a statistically significant difference between the data samples.

Also found under interaction attentiveness was a slight increase regarding the statement “I am very observant when interacting with people from different cultures” ($M_{\text{Before}} = 3.76$, $M_{\text{After}} = 3.80$). Students reported a greater understanding for the need to watch their counterpart’s behavior more closely to determine their meaning. This aspect is underlined by an increase in awareness of negative signals during an interaction, as can be seen with greater affirmation of the statement “I can tell when I have upset my culturally-distinct counterpart during our interaction” ($M_{\text{Before}} = 3.08$, $M_{\text{After}} = 3.28$). Furthermore, students displayed a marked increase in agreement with the statement “I often show my culturally-distinct counterpart my understanding through verbal or nonverbal cues” ($M_{\text{Before}} = 3.42$, $M_{\text{After}} = 3.55$). On the other hand, students reported making fewer affirmative responses during communicating, which can be reflected in results for “I often give positive responses to my culturally different counterpart during our interaction” ($M_{\text{Before}} = 3.76$, $M_{\text{After}} = 3.73$). Overall, students reported an increased awareness of the signals the counterpart may be sending as well as a rising sensitivity towards the signals one is sending and what effect these may have on the positive and negative feelings of the counterpart. In this respect, there was a slight increase in affirmation of the statement “When I interact with someone from a different culture, I usually try to adapt some of his/her ways” ($M_{\text{Before}} = 3.31$, $M_{\text{After}} = 3.2$).

Increased appreciation of cultural differences. Across from a marginal increase in the values in interaction attentiveness was a negative trend in the area of interaction engagement. Responding to the statement “I have a feeling of enjoyment towards differences between my culturally-distinct counterpart and me,” students reported a negative, though slight, tendency ($M_{\text{Before}} = 3.65$, $M_{\text{After}} = 3.62$). The same sentiment was expressed concerning the statement “I

enjoy interacting with people from different cultures” ($M_{\text{Before}} = 4.35$, $M_{\text{After}} = 4.22$). The statement “I respect the way people from different cultures behave” remained the same ($M_{\text{Before}} = 4.30$, $M_{\text{After}} = 4.30$). On the contrary, there were negative results in the area of respect for cultural differences, which should not be overlooked. An example of this may be reflected in the significant change regarding the statements “I avoid those situations where I will have to deal with culturally-distinct persons” as well as “I usually look for opportunities to interact with people from other cultures” ($M_{\text{Before}} = 1.82$, $M_{\text{After}} = 2.07$, $M_{\text{Before}} = 3.69$, $M_{\text{After}} = 3.58$, respectively). In addition, students reported slightly more antipathy towards interacting with people of another culture (“I don’t like to be with people from different cultures”; $M_{\text{Before}} = 1.42$, $M_{\text{After}} = 1.45$). According to the values related to ICC statements, students reported feeling more comfortable with people from their own culture and preferring friends from their own cultures. Responses before and after the survey support this general sentiment ($M_{\text{Before}} = 2.97$, $M_{\text{After}} = 3.13$, and $M_{\text{Before}} = 3.61$, $M_{\text{After}} = 3.70$, respectively). On the other hand, students differentiated between feeling more comfortable and feeling closer to people from their own culture. The statement “I usually feel closer to people who are from my own culture because I can relate to them better” was met with a dip in positive responses ($M_{\text{Before}} = 3.45$, $M_{\text{After}} = 3.23$). Students reported attaching less importance to the feelings of others concerning people from other cultures as reflected in responses to “I feel more comfortable with people who are open to people from other cultures than people who are not” ($M_{\text{Before}} = 4.23$, $M_{\text{After}} = 4.12$).

Reduction of ethnocentric tendencies and stereotypes. As previously mentioned, responses from students after the project indicated both an increase in awareness of cultural differences and a mixed appreciation of those differences. While respect for their counterparts remained the same, students registered less openness to diversity and foreign ways of thinking and behaving as well as a decrease in valuing opinions different from their own. This is reflected

in a slight increase concerning the statement “I think my culture is better than other cultures” ($M_{\text{Before}} = 1.54$, $M_{\text{After}} = 1.60$). Concerning the statement “I would not accept the opinions of people from different cultures,” there was a considerable upward tendency in affirmative responses ($M_{\text{Before}} = 1.32$, $M_{\text{After}} = 1.60$). It should be pointed out that these responses are still at the extreme end of possible answers (between *disagree* and *strongly disagree*). In this context, there is a further deviation concerning the item respect for cultural differences. Whereas students remained consistent in their respect for differences in the way people from different cultures behave, there was a marked dip in response to the statement “I respect the values of people from different cultures” ($M_{\text{Before}} = 4.63$, $M_{\text{After}} = 4.47$).

Alternatively, students’ responses to the statement “I tend to wait before forming an impression of culturally distinct counterparts” showed a considerable increase ($M_{\text{Before}} = 3.45$, $M_{\text{After}} = 3.80$). This coincides with an upward trend concerning ICC, where students affirmed less difficulty differentiating between similarities in cultures such as Asians, Europeans, Africans, and so on ($M_{\text{Before}} = 2.39$, $M_{\text{After}} = 2.32$). Despite the positive change previously noted, students reported reverting to categories for reference: “I find it easier to categorize people based on their cultural identity than their personality” ($M_{\text{Before}} = 2.21$, $M_{\text{After}} = 2.36$) At the same time, students reported finding commonalities amongst themselves. This can be seen in the noticeably affirmative responses to the statement “I often notice similarities in personality between people who belong to completely different cultures” ($M_{\text{Before}} = 3.41$, $M_{\text{After}} = 3.68$). On the contrary, there was a marginal decrease in students’ responses to the statement “I feel that people from other cultures have many valuable things to teach me” ($M_{\text{Before}} = 4.15$, $M_{\text{After}} = 4.12$).

Reduction of fears and increase in confidence in dealing with other cultures. As described above, students reported an increase in wanting to avoid interactions with other cultures as well as a rise in their antipathy towards dealing with other cultures after they took part

in the project. While a slightly positive development in the area of interaction confidence was reported concerning the statements “I always know what to say when interacting with people from different cultures” ($M_{\text{Before}} = 3.00$, $M_{\text{After}} = 3.15$) and “I often get discouraged when I am with people from different cultures” ($M_{\text{Before}} = 1.80$, $M_{\text{After}} = 1.78$), there were nevertheless significant downward trends in the area of confidence and interaction enjoyment. Students responded that they found it more difficult to talk in front of culturally different people, and they felt discouraged or useless when engaging with people of different cultures. Note, however slight, the increase in responses to the statements “I find it very hard to talk in front of people from different cultures” ($M_{\text{Before}} = 2.41$, $M_{\text{After}} = 2.43$) and “I often feel useless when interacting with people from different cultures” ($M_{\text{Before}} = 1.70$, $M_{\text{After}} = 1.75$). This trend was reflected in the negative responses regarding the statement “I feel confident when interacting with people from different countries” ($M_{\text{Before}} = 3.83$, $M_{\text{After}} = 3.63$). Moreover, there was a downward change in students’ perspectives on their own confidence in interacting or being sociable with people from different cultures ($M_{\text{Before}} = 3.94$, $M_{\text{After}} = 3.87$, and $M_{\text{Before}} = 3.69$, $M_{\text{After}} = 3.61$, respectively).

Increased awareness of difficulties in dealing with other cultures. While comparing the students’ answers before and after the project, it becomes increasingly clear that there was no statistically relevant growth in intercultural competencies among students through engaging in a cross-cultural collaborative project. While students reported an increase in various aspects of their own cultural sensitivity, they also reported that they enjoyed the interaction with people from different cultures less and would even avoid such interactions more. At the same time students reported a very marginal decrease in respecting the behavior of people of other cultures, and they signaled a decrease in respecting the values of those people after the project. Students also noted a decrease in informing themselves more when interacting with other cultures (“I try to obtain as much information as I can when interacting with people from different cultures” (M_{Before}

= 4.08, $M_{\text{After}} = 3.87$). Furthermore, upward responses to frustration could be seen: “I get upset easily when interacting with people from different cultures” ($M_{\text{Before}} = 1.59$, $M_{\text{After}} = 1.77$). This coincides with a negative trend in values such as “I am open-minded to people from different cultures” ($M_{\text{Before}} = 4.48$, $M_{\text{After}} = 4.38$).

Results of Qualitative Investigation

In their open responses, students mentioned the worst or most difficult aspects of the project as follows: the different time zones, coordinating appointments to meet with different time zones and schedules, language barriers, coordinating tasks through social media, technological issues, differing expectations and deadlines as well as difficulties agreeing on what to do, varying degrees of engagement and reliability between teams, working remotely instead of face-to-face, and lack of communication and/or organization in and between the teams.

Concerning what the students would do differently, many of them criticized their own, their team's, and/or their counterparts' lack of effort in managing time, assigning roles, and delegating tasks. They stated they would have planned better, engaged members more, set up more frequent meetings, and prioritized the project higher. A few students expressed the disappointment that they did not value the experience as highly as they should have, stating that in future collaborations they would learn more about the other cultures and enjoy the opportunity to work with foreign students more.

Almost all students mentioned the interaction with different cultures as the primary positive aspect of the project. They considered it a new experience and opportunity to work and exchange perceptions on the topic with people from another country and another culture. One student described the interaction as “a bonding we created with each other,” while another appreciated the friendly and inviting atmosphere interacting with the foreign counterparts. Another student valued “working in a multicultural team in a real scenario, finding solutions and

solving problems.” One student went as far as to appreciate being “forced” to work with different people. Some students held the experiential learning aspect as the most valuable part of the project. Students also appreciated the learning exercise, despite the fact that “things did not go as smoothly as I would have liked.” Meeting new people, discussing cultural differences, engaging with another culture, acquiring different perspectives, and hearing other points of view were all ascribed to this “unique opportunity.” Lastly, meaningful changes in one’s approach to other cultures were attributed to the project. As one student admitted, “That I had to talk with people from other cultures and backgrounds help[ed] me to overcome the fear of communication.”

Discussion

One of the primary elements in increasing intercultural communication competency is promoting among students the understanding that different channels of communication—so-called verbal, nonverbal, and paraverbal communication—differ from culture to culture. Students are to understand that they send out subtle messages over which they have little control and are equally receiving messages from their counterpart(s) which may be misinterpreted (Mehrabian, 1972). As mentioned in the results, students reported an increase in their observational skills and attentiveness to subtle meanings. This is particularly interesting considering the fact that most of the interactions took place via digital communication channels such as text messaging or email. These two channels are notoriously difficult for understanding indirect communication; signals such as body language, facial expressions, and paraverbal signals such as tone can help the message when words fail.

At the same time, students engaged in at least two Skype meetings. Depending on the quality of the audio/visual reception, however, students could also not always rely on facial expressions and sound to aid understanding. On the other hand, since nonverbal communication creates the greatest minefields in intercultural communication (Mehrabian, 1972), students might

have experienced fewer misunderstandings by relying on written messages. Incorrect or, for nonnative speakers, more difficult wording or colloquialisms could be looked up and translation engines utilized to aid understanding. Furthermore, the students involved in the project were, for the most part, digital natives. This means that they were familiar with conversing through social media and text messages and were able to facilitate understanding and develop rapport through the use of digital language involving emojis, memes, and so on.

Lastly, students registered an increase in making affirmative responses verbally and nonverbally when communicating. Affirmative responses such as “Yes, I see,” smiling, or thumbs up are essential elements of communication for many cultures, and, although merely speculation, an increase in their importance among students could be the result of picking up and mimicking those signals, especially in today’s Facebook communication culture.

As we have seen, positive developments in the areas of interaction attentiveness after the intercultural collaborative project went hand in hand with statistically marginal but, nevertheless, negative developments in interaction engagement and in respect for cultural differences after interacting with people of other cultures. This inconsistency might be partially explained by students’ frustration with their team members during the project, a sentiment which was voiced many times in the qualitative part of the survey. It would be important to further investigate these results with comparisons to future projects and survey data.

The learning outcomes of teaching intercultural competencies include reducing the impact of ethnocentrism and the tendency to place different cultures in certain categories and stereotypes. This is achieved in most cases through classroom instruction examining culture from a more theoretical standpoint. References to the groundwork laid by social scientists such as Lewis (2006), Hall and Hall (1990), and Hofstede (1991) are helpful in order to recognize patterns in behavior of cultures. By familiarizing students with cultural theory, instructors impart

insight into the important differences in communication styles of regions and that one's own values and behavioral traits are not exclusive. This is intended to reduce the tendency to ignore differences or hold onto notions of exclusivity, superiority, and ethnocentrism. Furthermore, students learn to avoid reacting to counterparts along the lines of stereotypes and preconceived notions, which are often transmitted through the portrayals of cultures in mass media. Students are encouraged to prepare for interactions with other cultures by referring to cultural frameworks and models in order to reduce the chances of misunderstandings and a communication breakdown.

While many of the negative responses in the areas of interaction engagement and respect for cultural differences would appear to defeat the goals of increasing intercultural competence and reducing ethnocentrism, there are results which give support to the belief that intercultural collaborative projects such as this one can impact students positively and more effectively than classroom instruction. As previously mentioned, students tended to wait longer before forming an impression about another culture after the collaboration. Furthermore, they reported finding more commonalities amongst the different cultures. Nevertheless, the negative results certainly run counter to the objectives of an intercultural collaborative project and need to be investigated further.

It should be mentioned, however, that the difficulties of the project itself, the differences in terms of evaluation for the project, and the disparities in motivation and language skills among team members all could have had an influence on the positive or negative perception of the culturally distinct counterparts, and thus on the values reported in the surveys.

A further element of developing intercultural competence is reducing the fear of venturing into the realm of multicultural environments. An increased understanding of cultural differences and their predictability may lend a sense of control when dealing with other cultures and reduce

anxiety as to how to behave and what to expect. Whereas advanced preparation for an intercultural interaction with the help of cultural frameworks is certainly conducive to a reduction of fears and an increase in confidence in dealing with other cultures, theoretical knowledge cannot replace actual interaction with other cultures. As Herrington (2008) underlined, theoretical knowledge cannot replace the impact of learning through experience. Experiential learning through a collaborative project across cultures exposes students to differences in a real-life situation. Having stumbled over intercultural blocks (which are inevitable) and having emerged unharmed, students can appreciate the ambiguity inherent to multicultural interactions. In fact, students may begin to enjoy the interactions with counterparts of different cultures and recognize the strengths that other members of the team bring to the project, thus raising the value of both the interaction and the behavior of the other culture in their eyes. When students recognize their ability to succeed in interacting with their counterparts, they may thereby increase their confidence while reducing their fears.

When comparing the results before and after the project, students appear to have gained an understanding of cultural differences through their interactions and experienced a rise in sensitivity concerning their own communication styles as well as the differences in styles among their counterparts. While they tended to want to avoid interactions with other cultures, they felt more confident in their communication prowess. The increase in cultural awareness may result in less fear and a greater sense of control over the interaction.

A rise in students' confidence levels after interacting with people of different cultures contributes further toward the goal of increasing intercultural competence in students. The objective is that, by increasing their appreciation for the cultural behavior of their counterparts while correspondingly raising their own confidence levels when interacting with people of another culture, students will relativize their view of their own culture and move from a primarily

ethnocentric notion of their own culture as the primary measure of behavior towards an increased tolerance for ambiguity in intercultural relations.

Seemingly negative tendencies in some of the results after the collaborative project may indicate a rise in consciousness concerning the difficulties of real interaction with other cultures. What appears simple in theory to students before the project becomes more daunting when put to the test in a real-life situation. As a result, students realize that engaging with people of different cultures is a greater challenge to their confidence and level of knowledge than they anticipated. Faced with the realities of intercultural interaction, a mirror is held up to students' estimations of themselves and, upon self-reflection, students have to admit that while accepting the theories of intercultural competence is one thing, putting them into practice is another.

Further reasons for negative trends proceeding the project may be found in the results concerning what students disliked most about the project (time zones, diverging deadlines, and expectations) as well as what they would do differently (invest more time) and their suggestions for future collaborations. What the students enjoyed most about the collaborative project (being "forced" to work with other cultures) may have congruently led to experiences reflected in downward values in the post-project survey. The overall response to the project and suggestions for improvement for future collaborative projects are dealt with in the next section.

Conclusion

In summary, instructors of three universities carried out a 6-week GNLE in which teams of students from Scotland, Germany, and Portugal collaborated on topics ranging from analyzing issues companies face in the respective foreign markets to creating a marketing/PR strategy to draw members of one country to another. The aim of the project was primarily to develop intercultural competence in the students. Secondary objectives were to expose students to virtual teamwork and develop their project-management skills and communicative competence. In order

to measure changes in their intercultural sensitivity and ICC, students were asked to complete a survey before and after the project. The values of the survey were taken from the ISS, originally developed by Chen and Starosta (2000), as well as the ICC instrument developed by Arasaratnam (2009). The final survey included qualitative questions that asked about the positive and negative aspects of the project as well as what students would do differently or change about the project.

As we have seen, there were marginal changes in interaction engagement, respect of cultural differences, interaction confidence, enjoyment, and attentiveness, apart from a noted increase in sensitivity to subtle meanings conveyed by culturally distinct counterparts. A closer look at individual items reveals slight tendencies towards increased awareness of the differences in one's own and counterparts' nonverbal communication styles and willingness to observe before passing judgment on counterparts' behaviors. At the same time, an increased recognition of the differences in cultural behavior was noted as well as a heightened awareness of the difficulties that interactions between cultures can bring. Finally, there were slight increases in reported difficulties engaging with other cultures and, congruently, a lessening of enjoyment in the actual interaction.

This project helps further define intercultural competence as involving an understanding that cultural differences do exist, that there are potential pitfalls involved in interacting across cultures, and that awareness of these factors can better facilitate successful collaboration. The findings confirm that virtual team collaboration, however short and small in scope, develops intercultural competence skills in students.

Overall Response to the Project

Responses from students after the project reveal an overall appreciation of the project. Their remarks confirm a greater appreciation for intercultural interaction, multicultural teamwork, cultural exchange, and differences. Negative experiences appear to have resulted

primarily from organizational difficulties resulting partially from students' own lack of commitment as well as differences in deadlines and expectations on the part of the instructors.

The overall consensus was that the project was a valuable experience which students regarded as instructive despite the hurdles they faced regarding time differences, technical issues, and scheduling difficulties.

Recommendations

Instructors found the collaboration amongst themselves to be an enriching experience. While the project was time-consuming and sometimes difficult to embed into an already-demanding curriculum, they considered the project a valuable contribution in experiential learning and will continue to incorporate the project in their courses. Future collaborative projects will ensure that all students have equal conditions within the project. This means aligning the project content, syncing the timeline and assignment deadlines better, and adjusting the assessment criteria so that demands on students are similar. In order to facilitate group interaction, tasks should be divided across locations, creating a closer dependence on each other for project success. Inclusiveness should be promoted with the help of digital means. To this end, instructors will encourage the use of a single platform, Slack, to collaborate and Zoom to record teleconferencing sessions in future projects. Starke-Meyerring and Andrews (2006) suggested the use of blogs for sharing information and ensuring it is available to all members while encouraging all team members to participate. In addition, Starke-Meyerring and Andrews (2006) recommended instruction in the art of making suggestions, explaining, and negotiating, skills imperative to business communication practices that are often overlooked in business communication classes.

Closing the gaps in policies and procedures, known as the *gelling approach*, will also contribute to a more positive collaborative experience for instructors. According to Bégin-

Caouette (2013), instructors involved in GNLEs, whether as a loose collaboration or a jointly coordinated project, profit immensely in their professional development through the exchange of knowledge across institutions and disciplines and through mutually creating new approaches to learning. In their article entitled “Building a Shared Virtual Learning Culture,” Starke-Meyerring and Andrews (2006) pointed to the instructors as role models through the intensity of and interest in their own collaborations. Before launching a new project in the coming semester, the instructors tested the collaborative platforms together and will show screenshots and recordings to their students to set an example for how virtual teamwork can and should proceed.

Through leading by example, the instructors hope to encourage best practices among their students when collaborating virtually. At the same time, the rapport shared by the instructors while organizing the project should impart to the students the enjoyment involved when bonding with counterparts across borders. Starke-Meyerring and Andrews (2006) emphasized the need to have fun despite the demands of collaborative projects. The willingness to embrace ambiguity and enjoy an intercultural learning experience despite uncertainty is a prerequisite for both instructors and students. As Herrington and Tretyakov (2005) explained regarding their global classroom project, chaos is a both an inevitable as well as a welcome aspect of COIL projects. The difficulties of collaborating virtually push students as well as instructors outside their comfort zones. Succeeding despite the chaos to reach their collaborative goals rewards instructors and students alike with a sense of accomplishment and the tools to confront future hurdles.

References

- Arasaratnam, L. A. (2009). The development of a new instrument of intercultural communication competence. *Journal of Intercultural Communication, 20*. Retrieved from <https://www.immi.se/intercultural/>
- Arasaratnam, L. A., & Doerfel, M. L. (2005). Intercultural communication competence: Identifying key components from multicultural perspectives. *International Journal of Intercultural Relations, 29*, 137-163. <https://doi.org/10.1016/j.ijintrel.2004.04.001>
- Association of American Colleges and Universities. (2014). *Global learning VALUE rubric*. Retrieved from <https://www.aacu.org/value/rubrics/global-learning>
- Bégin-Caouette, O. (2013). Globally networked learning environments as eduscapes for mutual understanding. *Critical Intersections in Education, 1*, 54-70.
- Bennett, J. M. (2009). Transformative training: Designing programs for culture learning. In M. A. Moodian (Ed.), *Contemporary leadership and intercultural competence: Exploring the cross-cultural dynamics within organizations* (pp. 95-110). Thousand Oaks, CA: Sage.
- Bennett, M. J. (1986). A developmental approach to training for intercultural sensitivity. *International Journal of Intercultural Relations, 10*, 179-196. [https://doi.org/10.1016/0147-1767\(86\)90005-2](https://doi.org/10.1016/0147-1767(86)90005-2)
- Bennett, M. J. (1993). Towards ethnorelativism: A developmental model of intercultural sensitivity. In R. M. Paige (Ed.), *Education for the intercultural experience* (pp. 21-71). Yarmouth, ME: Intercultural Press.
- Chen, G.-M., & Starosta, W. J. (1998). *Foundations of intercultural communication*. Boston, MA: Allyn & Bacon.

- Chen, G.-M., & Starosta, W. J. (2000). *The development and validation of the Intercultural Sensitivity Scale*. *Human Communication, 3*, 1-15. Retrieved from http://digitalcommons.uri.edu/cgi/viewcontent.cgi?article=1035&context=com_facpubs
- Deardorff, D. K. (n.d.). *Theory reflections: Intercultural competence framework/model*. Retrieved from http://www.nafsa.org/_/file/_/theory_connections_intercultural_competence.pdf
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education, 10*, 241-266. <https://doi.org/10.1177/1028315306287002>
- Earley, P. C., Ang, S., & Tan, J.-S. (2006). *CQ: Developing cultural intelligence at work*. Redwood City, CA: Stanford University Press.
- Essig, L. (2012). Frameworks for educating the artist of the future: Teaching habits of mind for arts entrepreneurship. *Artivate: A Journal of Entrepreneurship in the Arts, 1*, 65-77.
- Gorgônio, F. L., Vale, K. M. O., Silva, Y. K. N., & Silva, H. M. (2017, March). *Grouping students for cooperative and collaborative learning: Challenges and trends in virtual learning environments*. Paper presented at the IEEE World Engineering Education Conference, Santos, Brazil. Retrieved from <http://edunine.eu/edunine2017/proc/works/33.pdf>
- Hall, E. T. & Hall, M. R. (1990). *Understanding cultural differences: Germans, French and Americans*. Boston, MA: Intercultural Press.
- Hammer, M. R., Bennet, M. J. & Wiseman, J. (2003). Measuring intercultural sensitivity: The intercultural development inventory. *International Journal of Intercultural Relations, 27*, 421-443. [https://doi.org/10.1016/S0147-1767\(03\)00032-4](https://doi.org/10.1016/S0147-1767(03)00032-4)

Herrington, T., & Tretyakov, Y. (2005). The global classroom project: Troublemaking and troubleshooting. In K. C. Cook & K. Grant-Davie (Eds.), *Online education: Global questions, local answers* (pp. 267-283). Amityville, NY: Baywood Publishing

Herrington, T. (2008). The global classroom project: Multiple relationships in global partnering. In D. Starke-Meyerring & M. Wilson (Eds.), *Designing globally networked learning environments: Visionary partnerships, policies, and pedagogies* (pp. 37-51). Rotterdam, Netherlands: Sense.

Hofstede, G. (1991). *Cultures and organizations: Software of the mind: Intercultural cooperation and its importance for survival*. Maidenhead, UK: McGraw-Hill.

Lewis, R. D. (2006). *When cultures collide: Leading across cultures* (3rd ed.). Boston, MA: Brealey.

Mehrabian, A. (1972). *Nonverbal communication*. Chicago, IL: Aldine-Atherton.

Starke-Meyerring, D. (2005). Meeting the challenges of globalization: A framework for global literacies in professional communication programs. *Journal of Business and Technical Communication*, 19, 468-499. <https://doi.org/10.1177/1050651905278033>

Starke-Meyerring, D. (2007, October 19). *Designing globally networked learning environments: Visionary pedagogies, partnerships, and policies* [Pdf file]. Keynote speech at the 1st Conference of the SUNY Center for Collaborative Online International Learning, Purchase, NY. Retrieved from <http://webpages.mcgill.ca/staff/group1/dstark1/web/starke-meyerring/area1.htm>

Starke-Meyerring, D. (2010a). Globally networked learning environments in professional communication: Challenging normalized ways of learning, teaching, and knowing. *Journal of Business and Technical Communication*, 24, 259-266. <https://doi.org/10.1177/1050651910363266>

- Starke-Meyerring, D. (2010b). Globally networked learning environments: Reshaping the intersections of globalization and e-learning in higher education. *E-Learning and Digital Media*, 7, 127-132. <https://doi.org/10.2304/elea.2010.7.2.27>
- Starke-Meyerring, D., & Andrews, D. (2006). Building a shared virtual learning culture: An international classroom partnership. *Business Communication Quarterly*, 69, 25-49. <https://doi.org/10.1177/1080569905285543>
- Starke-Meyerring, D., & Wilson, M. (Eds.). (2008). *Designing globally networked learning environments: Visionary partnerships, policies, and pedagogies*. Rotterdam, Netherlands: Sense.
- Zhu, Y., Gareis, E., O’Keefe Bazzoni, J., & Rolland, D. (2005). A collaborative online project between New Zealand and New York. *Business Communication Quarterly*, 68, 81-96. <https://doi.org/10.1177/1080569904273715>

Authors’ Note

This manuscript is a collaborative effort resulting from a cross-cultural project involving the authors’ classrooms. The researchers at Mainz University and the University of Aveiro conducted the study with the full approval of their department heads and data security officers, and they applied ethical principles of confidentiality, anonymity, voluntary participation and providing full information, all in compliance with the EU General Data Protection Regulation. The study was also approved by the ethics board of Robert Gordon University. Student comments are reproduced by permission.

Author Biographies

STEPHANIE SWARTZ is a professor of English in the SCHOOL OF BUSINESS, MAINZ UNIVERSITY OF APPLIED SCIENCES, Germany. She specializes in business and organizational communication as well as intercultural communication. She also serves as a consultant for collaborative online international learning (COIL) at home and internationally.

BELEM BARBOSA is an adjunct professor of marketing in the HIGHER INSTITUTE OF ACCOUNTING AND ADMINISTRATION (ISCA-UA) at UNIVERSITY OF AVEIRO. BELEM BARBOSA's research interests lie primarily in the area of consumer behavior, including word-of-mouth communication, internet marketing and sustainability marketing. She is also interested in innovation and internationalization of higher education.

IZZY CRAWFORD is an academic strategic lead within the SCHOOL OF CREATIVE AND CULTURAL BUSINESS at ROBERT GORDON UNIVERSITY, Aberdeen, Scotland. She holds postgraduate qualifications in public relations, higher education learning and teaching, and research methods, and is currently studying for a PhD in the field of Collaborative Online International Learning (COIL).

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Table 1. Sample Characteristics.

	Survey 1 Before the Activity (N = 71)		Survey 2 After the Activity (N = 61)	
	Frequency	Percentage	Frequency	Percentage
Universities				
Aveiro	33	46.48	28	45.90
Mainz	22	30.98	28	45.90
Robert Gordon	16	22.54	5	8.20
Gender				
Male	24	33.80	24	39.34
Female	47	66.20	37	60.66
Age				
18-20	13	18.31	18	30.51
21-23	30	42.25	24	40.68
24-26	21	29.58	13	22.03
27-55	7	9.86	4	6.78
Nationality				
German	20	28.17	19	31.14
Portuguese	22	30.98	21	34.43
Other	29	40.85	21	34.43
Foreign Students				
Foreign	26	36.62	17	29.31
National	45	63.38	41	70.69
English language skills				
Bad	2	2.82	0	0.00
Basic	6	8.45	9	14.75
Good	38	53.52	27	44.26
Very good	16	22.53	23	37.71
Native	9	12.68	2	3.28

Notes: As the participation in the survey was voluntary, the number of responses after the activity is smaller than before the activity. As responses were not mandatory, for some variables the total frequency is less than the total of participants. Percentages are calculated over the total responses for each variable.

Table 2. Chen and Starosta's Intercultural Sensitivity Scale.

	Before the activity (<i>N</i> = 71)	After the activity (<i>N</i> = 60)
	<i>M</i>	<i>M</i>
ISS_F1_33[I often give positive responses to my culturally different counterpart during our interaction.]	3.76	3.73
ISS_F1_35[I am open-minded to people from different cultures.]	4.48	4.38
ISS_F1_39[I often show my culturally distinct counterpart my understanding through verbal or nonverbal cues.]	3.42	3.55
ISS_F1_41[I have a feeling of enjoyment towards differences between my culturally distinct counterpart and me.]	3.65	3.62
ISS_F1_42[I enjoy interacting with people from different cultures.]	4.35	4.22
ISS_F1_43*[I avoid those situations where I will have to deal with culturally distinct persons.]	1.82	2.07
ISS_F1_44[I tend to wait before forming an impression of culturally distinct counterparts.]	3.45	3.80
ISS_F2_6*[I don't like to be with people from different cultures.]	1.42	1.45
ISS_F2_14*[I think my culture is better than other cultures.]	1.54	1.60
ISS_F2_17[I can tell when I have upset my culturally distinct counterpart during our interaction.]	3.08	3.28
ISS_F2_18[I respect the values of people from different cultures.]	4.63	4.47
ISS_F2_19[I respect the way people from different cultures behave.]	4.30	4.30
ISS_F2_20*[I would not accept the opinions of people from different cultures.]	1.32	1.60
ISS_F3_1[I am pretty sure of myself in interacting with people from different cultures.]	3.94	3.87
ISS_F3_2*[I find it very hard to talk in front of people from different cultures.]	2.41	2.43
ISS_F3_3[I always know what to say when interacting with people from different cultures.]	3.00	3.15
ISS_F3_4[I can be as sociable as I want to be when interacting with people from different cultures.]	3.69	3.61
ISS_F3_34[I feel confident when interacting with people from different cultures.]	3.83	3.63
ISS_F4_8*[I get upset easily when interacting with people from different cultures.]	1.59	1.77
ISS_F4_10*[I often get discouraged when I am with people from different cultures.]	1.80	1.78
ISS_F4_12*[I often feel useless when interacting with people from different cultures.]	1.70	1.75
ISS_F5_26[I try to obtain as much information as I can when interacting with people from different cultures.]	4.08	3.87

ISS_F5_28[I am sensitive to my culturally distinct counterpart's subtle meanings during our interactions.]	3.25	3.50
ISS_F5_29[I am very observant when interacting with people from different cultures.]	3.76	3.80

Note. An asterisk (*) in the item number means that for that item intercultural communication competence increases if the mean score decreases.

Source. Scale developed by Chen and Starosta (2000), with free and open access.

Table 3. Arasaratnam's Intercultural Communication Competence.

	Before the activity (<i>N</i> = 71)	After the activity (<i>N</i> = 60)
	<i>M</i>	<i>M</i>
ICC_Cognitive_1*[I often find it difficult to differentiate between similar cultures (Ex: Asians, Europeans, Africans, etc.).]	2.39	2.32
ICC_Cognitive_5[I find it easier to categorize people based on their cultural identity than their personality.]	2.21	2.36
ICC_Cognitive_6[I often notice similarities in personality between people who belong to completely different cultures.]	3.41	3.68
ICC_Affective_2[I feel that people from other cultures have many valuable things to teach me.]	4.15	4.12
ICC_Affective_4*[I feel more comfortable with people from my own culture than with people from other cultures.]	2.97	3.13
ICC_Affective_7*[I usually feel closer to people who are from my own culture because I can relate to them better.]	3.45	3.23
ICC_Affective_10[I feel more comfortable with people who are open to people from other cultures than people who are not.]	4.23	4.12
ICC_Behavioral_3*[Most of my friends are from my own culture.]	3.61	3.70
ICC_Behavioral_8[When I interact with someone from a different culture, I usually try to adapt some of his/ her ways.]	3.31	3.32
ICC_Behavioral_9[I usually look for opportunities to interact with people from other cultures.]	3.69	3.58

Note. An asterisk (*) in the item number means that for that item intercultural communication competence increases if the mean score decreases.

Source. Scale developed by Arasaratnam (2009), with free and open access.