Effectiveness of Technology-Mediated Cross-Campus Teaching and Learning and Its Effects on Students' Intercultural Competence

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Abstract: The use of technologies in cross-campus teaching and learning is largely an unexplored domain, and even rarely examined are the effects of technology-mediated cross-campus teaching and learning on students' intercultural competence. Two field studies, including a survey in Study 1 and a quasi-experiment in Study 2, were conducted over two consecutive semesters to find answers to four research questions and to test one hypothesis. Findings show that students somewhat enjoyed their cross-campus teaching and learning classes. What is more, their interactions with students from another school helped them become interculturally competent when they were willing to interact with outsiders. Theoretical and practical implications of the findings are discussed.

Keywords: New technologies, cross-campus teaching and learning, contact hypothesis, intercultural competence

1. Introduction

The millennium generation has grown up with various types of new technologies and developed different ways of learning and thinking from previous generations (Veen & Vrakking, 2006). Meeting their different learning styles, educators in different areas have been making pedagogical changes, including adopting various types of new technologies in their classrooms. Specifically, in addition to installing computers with Internet access in classrooms and offering online courses across different subject areas, many have incorporated innovative technologies into the classroom, including videoconferencing systems (e.g., Aleksic-Maslac & Magzan, 2012; Kinnear, McWilliams & Caul, 2002; O'Dowd, 2013), Tablet PCs (e.g., Maclaren, 2014), mobile devices (e.g., Song, 2007), and online gaming (e.g., Pillay & James, 2013). As a result, there has been an increase in research on the impact of new technologies in educational settings.

A vast majority of these studies have mainly focused on three areas: (1) How the use of new technologies enhances students' knowledge or learning outcomes of specific courses such as math (e.g., Maclaren, 2014), nursing (e.g., Montenery et al., 2013), management of information system (e.g., Aleksic-Maslac & Magzan, 2012), agriculture (e.g., Pallavi & Naika, 2012), foreign language (e.g., Baumann & Shelley, 2006; Wang & Coleman, 2009), intercultural communication or intercultural competence (e.g., Anfimova, 2010; Clouet, 2013; Mc Calman, 2014; Pillay & James, 2013; Wang & Coleman, 2009), teacher education (e.g., Kinnear et al., 2002; McCalman, 2014; Mc Glashan& Wells, 2013), and general education courses for the first year college students (e.g., López-Pérez, Pérez-López, Rodríguez-Ariza & Argente-Linares, 2013); (2) how students and instructors experience and perceive these new technology-facilitated courses (e.g., García-Valcárcel, Basilotta & López, 2014; Johnson, 2013; Joyet al.,

2014; Montenery et al., 2013; Pallavi & Naika, 2012; Papo, 2001); and (3) what practical and institutional challenges there are in implementing those innovative programs (e.g., Kinnear et al., 2002; Mc Glashan & Wells, 2013; Montenery et al., 2013; Song, 2007). However, there is a lack of research about the impact of new technologies on students' psychological and social developments such as interpersonal relationship development skills, conflict management strategies, and communication techniques and mindfulness. Considering the fact that one of the major goals of higher education is to help students become well-rounded citizens (Hersh, 2009), it is important for researchers to study how new technologies or technology-equipped educational settings influence students' social and psychological developments.

Another significant change on college campus is the fast increasing number of students from diverse racial, ethnic, cultural, linguistic, socioeconomic, and religious backgrounds (Association of American Colleges & Universities, 2019; American Council on Education, 2019). It renders intercultural competence one of the essential social skills for them to develop in their programs of study when the opportunities for global employment keep growing in today's world market (Martin & Nakayama, 2011). Acknowledging this phenomenon, more and more higher education institutions are offering intercultural communication courses or developing intercultural training programs to promote students' awareness of diversity and to provide students with appropriate communication skills. Many of these courses or training programs are rooted in the assumption that intercultural competence is about understanding foreign cultures or developing effective communication skills to interact with people from foreign countries. As a result, past studies about intercultural competence have focused on three domains: (1) effectiveness of study-abroad programs (e.g., Covert, 2014; Houghton, 2014; Root & Ngamapornchai, 2013; Schuerholz-Lehr, 2007; Sizoo & Serrie, 2004), (2) relationship between intercultural competence and foreign language proficiency (e.g., Basbagi, 2012; Nieto & Booth, 2010; Peng, Rangsipaht & Thaipakdee, 2005), and (3) international students' experiences and perceptions of education in the U.S. (e.g., Wilton & Constantine, 2003). However, in the context of globalization, cultural differences between countries are becoming less visible while differences within a culture are increasing constantly, particularly in the U.S., which has been known as the country of immigrants (Martin & Nakayama, 2011). Thus, it is timely to examine college students' intercultural awareness and competence by focusing on diversity within a culture or country rather than on between countries.

Filling in previous studies the two gaps: (1) on the effectiveness of new technologies used in education and (2) on interpersonal communication skills in an increasingly diverse society we live in, the present two studies explore how the use of new technologies in classroom promotes or hinders intercultural interactions among college students in two demographically (and presumably culturally) different institutions in the United States. Specifically, they attempt to examine how the students attending a small private liberal arts school in the Midwest and those attending a relatively large public university in the South interact across their campuses through the Skype and videoconferencing system during their regular class meeting time. And, more importantly, the studies investigate how students' experiences of interacting with those from another school and with very different cultural backgrounds affect their interest in future intercultural interactions and their overall intercultural competence, a very important part of interpersonal skills needed in the diverse world we live in today.

2. Review of Literature

2.1. Use of New Technology in Educational Settings

Most studies about the use of new technologies in education center on the effectiveness of particular courses. For example, Maclaren (2014) showed that the use of pen-enabled Tablet PCs was effective in motivating students and enhancing their learning outcomes in their math course. Similarly, López-Pérez et al. (2013) found that among first year college students, active participation in online assignments or activities led to better grades. In Montenery et al.'s (2013) study with nursing students, most participants reported high levels of satisfaction with their new technology-oriented course. Aleksic-Maslac and Magzan (2012) presented the role the videoconferencing system played in building social capital, therefore pinpointing the essential elements of professional interactions, collaborative work and networks with people in foreign countries in today's academic environment.

Although studies such as those reviewed above provided evidence of positive effects of new technologies on teaching various courses, some scholars addressed their limitations as well as the challenges in implementing new technology-based courses. For instance, Kinnear et al. (2002) encountered various technical challenges when implementing as an instructional renovation the videoconferencing system in a course. They warned that a simple access to the latest new technologies does not necessarily guarantee good quality of learning experiences or high levels of student satisfaction. To have active interactions or discussions between students in distant areas via videoconferencing, they pointed out, it is critical to keep the groups small. In a similar study, McGlashan and Wells (2013) suggested creating a specific tool kit for classroom activities and developing strategies to encourage critical thinking and active dialogues. Song (2007) showed how the use of mobile communication tools in K-12 and college classrooms hindered active communicative interactions among students or those between instructors and students. Targeting in particular the problem of passive learning, Sanchez-Elez et al. (2014) found that the activity of asking students to generate their own exam questions enabled them to become active learners-teachers, and that active interactions with their peers in the activity helped them achieve better academic performances.

While many researchers focused on students' experiences or perceptions of new technology-facilitated courses, others paid special attention to instructors' perspectives. García-Valcárcel et al. (2014) found most teachers in their study believed that new technologies are useful in strengthening students' social and problem solving skills, self-imitativeness, self-reliance, responsibility to others, and critical reflections as well as collaborative work. However, these teachers also mentioned some disadvantages or challenges in implementing new technologies in classrooms, including additional time for course preparation, lack of control, students' unequal participation, and challenges in assessing learning processes and outcomes. Along this line of research, Joy et al. (2014) pointed out in particular instructors' lack of technical knowledge or their low level of e-literacy (e.g., Brandtweiner, Donat & Kerschbaum, 2010; Morris, 2007). Supporting their point, Papo (2011) argued that more professors need to take advantage of new technologies even though it means additional work for them. As far as research-oriented professors' attitudes towards the adoption of new instructional technologies and towards administrative initiatives to adopt new technologies in higher education are

concerned, Johnson (2013) found research professors believe that new technologies have a limited impact on promoting their teaching goals or developing innovative pedagogies. More importantly, they perceive the adoption of new technology as causing them to lose their professional control because administrators instead of professors themselves have control over the working conditions, besides additional workload, less time for research, greater psychological stress caused by lower self-esteem and lower job satisfaction.

In summary, a majority of existing studies about the use of new technologies in education have focused on its effectiveness in teaching and learning a particular subject course, ignoring other parts of education such as developing interpersonal communication skills. The goal of higher education is not only delivering knowledge about specific subjects, but also training students to be well-rounded citizens with good social skills (Hersh, 2009). Thus, more attention should focus on the impact of new technologies on students' social interactions with their peers and teachers in classroom or in other school settings. Although the studies reviewed above incorporated some components of social skills, all but Kinnear et al. (2002) and Aleksic-Maslac and Magzan's (2012) targeted students or faculty members within their own campus. Research is needed to explore how the use of new technologies in education promotes or hinders students' interactions with students from other institutions, given a diverse body of students and cultures that we have across institutions.

2.2. Intercultural Competence of College Students

With a global trend of multiculturalism (e.g., Kymlicka, 2007; Modood, 2007) and an increasing number of students from diverse backgrounds (Association of American Colleges & Universities, 2019; American Council on Education, 2019), it is becoming critical for higher education to find ways to enhance students' intercultural competence, a key indicator of good interpersonal communication skills in today's society. Chen and Starosta (1997) define intercultural competence as "an individual's ability to develop a positive emotion towards understanding and appreciating cultural differences that promotes appropriate and effective behavior in intercultural communication" (p. 5). Of the scholarly works on intercultural competence, many focus on study-abroad programs for college students, demonstrating their effectiveness in improving students' level of intercultural competence (e.g., Covert, 2014; Houghton, 2014; Root & Ngamapornchai, 2013; Schuerholz-Lehr, 2007; Sizoo & Serrie, 2004). Some also warn against its superficial effect, pointing out in particular that studying abroad experience itself does not guarantee gaining intercultural competence (Root & Ngamapornchai, 2013; Schuerholz-Lehr, 2007). Instead, intercultural training (Sizoo & Serrie, 2004), personal interests or motivations to learn new cultures (Covert, 2014; Houghton, 2014) are necessary conditions for it to happen. For example, Covert (2014) found that students can develop intercultural competences through study-abroad programs only when they make purposeful efforts to adjust themselves to the new cultures. In his study about what stimulates Japanese students' curiosity in study-abroad programs, Houghton (2014) addressed the importance of understanding what students do not know but want to learn. He also stressed the importance of preparing teaching materials that meet such needs.

Instead of looking at study-abroad programs, other scholars have focused on international students' learning experiences, cultural adjustment, intercultural

competence, and psychological distress at colleges and universities in the U.S. For instance, Wilton and Constantine (2003) found that Asian students held a significantly lower level of psychological distress than their Latino American counterparts, and those who stayed in the U.S. longer had a higher level of intercultural competence than those who stayed for a shorter period. In Nieto and Booth's (2010) study, students with a higher level of intercultural competence appeared to be more open-minded and to have a better understanding of international students' needs than those with a lower level of intercultural competence.

Besides international students, domestic students in host countries also encounter many cultural differences when interacting with their international counterparts on campus. For example, Jon (2013) studied domestic college students in Korea. Her findings showed that Korean students raised their intercultural competence by interacting with their intercultural partners in a peer-mentoring program and by participating in various intercultural programs on campus.

Due to its cost and time constraint, a study abroad program does not seem to work for most college students who desire to have intercultural experiences. Aware of this, scholars in the area of teaching and learning in particular have made special efforts to design special on-campus courses or training programs to promote intercultural competence for specific groups of college students. Their target groups include nursing students (Riner, 2013), prospective teachers of foreign languages (Basbagi, 2012), first year students (Liu & Dall'Alba, 2012; Mahoney & Schamber, 2004), and international business students (Sizoo & Serrie, 2004). As an example, Riner (2013) demonstrated that the community-health-orientated nursing practicum course under her study was effective in enhancing students' understanding of the local immigrant population as it provided a global perspective in their learning experiences. Liu and Dall'Alba (2012) showed that group projects are effective tools to enhance first year college students' learning outcomes, particularly their problem solving skills and their intercultural communication competence. Interestingly, students who reported that they acquired intercultural communication competence through group-work with their peers of various backgrounds also performed better in their assignments than those who did not report such. Mahoney and Schamber (2004) found, based on their analysis of two first year general education courses on diversity, that such activities as role-playing, research and small group discussion were effective in improving students' intercultural sensitivity. Watching cross-cultural movies and then holding small group follow-up discussions in an intercultural training program, participants in Jain's (2013) study revealed increased intercultural sensitivity, especially in the two dimensions of interaction engagement and interaction enjoyment.

Considering the fact that today's college students are in a large part the digital generation, a number of scholars (e.g., Anfimova, 2010; Clouet, 2013; McCalman, 2014; Pillay & James, 2013; Wang & Coleman, 2009) incorporated new technologies into their intercultural competence development courses and evaluated their pedagogical effectiveness. For instance, McCalman (2014) examined the effectiveness of an online intercultural competence course for ESL teachers, and suggested a hybrid course, which combines both traditional face-to-face meetings and online components of additional interactions and visual aids, would be the best option for ESL intercultural courses. For another example, Pillay and James (2013) adopted games as alternative pedagogical tools and demonstrated their positive effects on decision making skills, teamwork, self-awareness and intercultural competence.

While most studies about the impact of new technologies on intercultural competence courses focused on traditional students and college level courses, some scholars expanded the scope of their investigations to non-traditional students and even outside the higher education. Baumann and Shelley (2006) found in their study that the advanced adult learners of German language on a U.K. campus held a high level of intercultural competence. Peng et al. (2005) sampled college students and employees in both China and Thailand to examine the relationship between individuals' English proficiency levels and their intercultural competence. Among their findings, English majors and multinational employees' intercultural competence levels were significantly higher than non-English majors and non-multinational employees respectively. The authors attributed the higher level of intercultural competence of those research subjects to their English language proficiency (for the English majors) and to their professional experiences of intercultural interactions (for the multicultural employees). What makes their study unique is that it attempted to find differences between two Asian countries that are usually believed to be the same or very similar.

As shown in the above, the vast majority of studies about intercultural competence center on study-abroad programs, the development of special courses or training programs, and the pedagogical effectiveness of such courses and programs. However, measuring intercultural competence is equally important. Chen and Starosta (2000) are among those who accomplished the task. They developed the Intercultural Sensitivity Scale (ISS) and documented its strong reliability and validity over the years. The present two studies reported below adopted the interaction items in the ISS scale to measure intercultural competence in our investigation.

2.3. The Contact Hypothesis

As reviewed in the above section, a great number of studies about intercultural communication competence (e.g., Covert, 2014; Houghton, 2014; Jon, 2013; Nieto & Booth, 2010; Peng et al., 2005) demonstrated that individuals with more direct intercultural experiences as well as stronger interests are more willing to interact with people from different cultures, therefore confirming Allport's (1954) Contact Hypothesis. The Contact Hypothesis begins with the premise that limited or little knowledge of out-group members leads to prejudices against them. According to the Contact Hypothesis, direct interactions with members of an out-group help develop positive perceptions of the out-group as long as the interactions meet the following four required conditions. They are (1) equal status between individuals who interact with each other, (2) cooperative interdependence between individuals who interact with each other, (3) sufficient level of intimacy between individuals who interact with each other, and (4) appropriate normative context (Allport, 1954). Positive perceptions or likings, subsequently, motivate individuals to learn more about out-group members, and a higher level of accurate knowledge about the out-group eventually helps individuals get rid of or reduce in some degree their prejudice against the target group (Allport, 1954). The Contact Hypothesis is useful not only in understanding intergroup conflicts, but also in developing constructive intergroup relationships, be it direct/in-person or indirect/through a third party or the media. For a comprehensive review of the Contact Hypothesis, see Pettigrew & Tropp (2008); For a brief review of the Contact Hypothesis and the Extended Contact Hypothesis, see Zhang (2017). In intercultural contexts, its constructive power is indicated by an increased intercultural competence.

Acknowledging cultural differences within the U.S. and a diverse body of students in higher education, and applying the Contact Hypothesis to classroom teaching and learning across two college campuses, the present two studies attempt to explore how the adoption of new technologies can promote or hinder intercultural interactions among college students with very different cultural backgrounds as indicated by their campus demographics (see details in the next section). The studies aim to answer four research questions and to test one hypothesis.

RQ1. Do students from the two different types of universities enjoy interacting with each other across-campus in the innovative cross-campus teaching and learning classes?

RQ2. Are students from the two different types of universities different in their levels of willingness to interact with people from outside their school, their state, and their country/culture?

RQ3. Are students from the two different types of universities different in their intercultural competence levels?

RQ4. Are students who are more willing to interact with outsiders also more competent in intercultural contexts?

H1. Increased interactions between students from the two different types of universities will lead to a greater willingness to interact with people from outside.

RQs 1 and 3 are raised because conflicting findings were reported about the target topics or relationships. RQ4 and H1 are proposed based on the Contact Hypothesis. They extend its application to the technology-assisted interpersonal and inter-group communication and in the mediated communication context as far as teaching pedagogy is concerned.

2.4. Two Schools in the Studies

The two schools were chosen because of their different demographics, and therefore their different cultural make-ups. The faith-based private liberal arts school has around 3,000 undergraduate students and 600 graduate students. Among 3,600 students, 52% are male and 48% are female. It is a selective institution with an average high school GPA of 3.5, and the majority are traditional students from upper-middle class families. In terms of students' racial/ethnic backgrounds, it is 86.7% White, 4.1% Black/African-American, 3.3% Hispanic, 1.6% Asian, 0.1% American Indian or Alaska Native, 2.0% multiracial and 2.2% Non-Resident Alien.

The mid-sized public university has more than 9,000 undergraduate students and more than 800 graduate students. Among them, 40% are male and 60% female. Their average high school GPA is 3.2. More than 50% of the students received Pell grants in 2014. Among its undergraduate students, 66% are traditional and 34% are non-traditional. In terms of students' racial/ethnic backgrounds, it is 66% White, 18.8% Black/African-American, 5.7% Hispanic, 1.6% Asian, 0.2% Native Hawaiian or other Pacific Islander, 5.1% multiracial, 0.4% Non-Resident Alien and 2.2% race/ethnicity un-identified.

3. Methods

Two field studies were designed to study the effectiveness of cross-campus teaching and learning that was made possible by the new online technology of Skype. Study 1 was a survey whereas Study 2 was a quasi-experiment, built on the findings from Study 1.

3.1. Study 1 Method

A preliminary study about the effectiveness of cross-campus teaching and learning between the two universities connected by new technology was conducted in a communication research methods course offered at both institutions in the fall of 2013. This unique situation was achieved through coordinating the schedules between the course instructors even though their schools are located in two different time zones. Syllabi and course contents were also coordinated before the semester started to establish a few planned joint-class meetings via Skype to allow the instructors to "co-teach" some course materials.

At the end of the semester, the instructors distributed a self-administered survey to their respective class. In the survey, the variable ***enjoyment*** was measured by a single question, asking students to rate on a 1-10 point scale (1=Least Enjoyable and 10=Most Enjoyable) their level of enjoyment with the cross-campus teaching and learning experiences. They were also asked to indicate on a 1-10 point scale (1=Most Unwilling and 10=Most Willing) their ***willingness in interacting with people*** (1) from another school in the same state, (2) from another school in a different state, (3) from another culture in the U.S., and (4) from another country/culture. The authors of the current study created the above four willingness items, following the examples from the WTC (Willingness-To-Communicate) with strangers items by McCroskey (1992). As Peng et al. (2005) state, "the willingness to communicate with strangers is actually the willingness to communicate interculturally because members from culturally different groups are inherently strangers" (p. 121).The four items measure the variable of willingness to interact with people from different backgrounds in terms of four different geographical contexts. They have an alpha score of α = .98, indicating a strong internal consistency.

4. Study 1 Results

To find the answer to RQ1 ("Do students from the two different types of universities enjoy interacting with each other across-campus in the innovative cross-campus teaching and learning classes?"), the data from a convenience sample of the authors' research method students (N=29, with 12 students from one school and 17 from the other) was analyzed. T-tests using SPSS showed that the students from both schools somewhat enjoyed the cross-campus teaching and learning (M=5.41 on a 10-point scale with higher scores standing for greater ***enjoyment***, SD = 2.06 for one school and M=6.75, SD = 2.01 for the other, non-sig.). However, t-test results demonstrated that the two groups were different in their ***willingness*** to interact with people from the four backgrounds as specified in the above paragraph (ps<.05 on all items). Therefore the answer to RQ2 ("Are students from the two different types of universities different in their levels of willingness to interact with people from outside their school, their state,

and their country/culture?") is a yes. To be specific, students from the private liberal arts school (LA) were less willing than those from the public university (PU) to interact with people (1) from another school in the same state (LA M = 6.76 , SD = 3.05; PU M = 9.45, SD = 1.04; p = .00), (2) from another school in a different state (LA M = 6.82, SD = 3.07; PU M = 9.40, SD = 1.58; p = .01), (3) from another culture in the U.S. (LA M = 6.59, SD = 3.10; PU M = 9.27, SD = 2.10; p = .02), and (4) from another country/culture (LA M = 7.06, SD = 3.15; PU M = 9.60, SD = .97; p = .01). Even when the four items were aggregated as a scale (α = .98), the former group was still significantly less willing to interact with people from outside than the latter (M = 6.81, SD = 3.05 for the private liberal arts school students vs. M = 8.88, SD = 2.05 for the public university students, p = .05).

5. Study 2 Method

In the spring of 2014, the research methods courses were offered on both campuses again at the same time periods on the same dates. Built upon the findings from Study 1, especially those about the differences between the two schools in their willingness to interact with outsiders, not only were more interactive activities between the students from the fall classes added to the cross-campus teaching syllabi by each instructor, but the intercultural competence scale developed by Chen and Starosta (2000) was also used in their self-administered survey at the end of the semester. With more interactions between the two groups, in other words applying the Contact Hypothesis (Allport, 1954) to cross-campus teaching and learning at an enhanced level, an increased willingness of the private liberal arts school students to interact with people from outside in general was expected. The intercultural competence scale was used to measure how the students from both schools felt and behaved in intercultural settings. It measured not only their attitudes towards other cultures and people from other cultures, but also their behaviors when interacting with people from other cultures. By including *intercultural competence* as a variable in Study 2, it aims to expand the prejudice reduction research built on the Contact Hypothesis (Allport, 1954) to the domain of intercultural competence research that diversity and multicultural scholars (e.g., Chen & Starosta, 2000) focus on in the internet connected world we live in.

Interactions were formalized in the cross-campus teaching and learning syllabi. To make sure that students from the two classes interact with each in the cross-campus teaching and learning program, student syllabi were marked with such activities as (1) introduce themselves to students from the other school (at the beginning of the semester); (2) share their research interests when talking about possible topics for their research projects (a few weeks into the semester); (3) conduct two focus group interviews on two topics (Olympic Games and career development) in front of the other half of their class while the other half as well as those from the other school observe and take notes of the focus group (at the middle of the semester); and (4) present their formal quantitative research findings to both classes (at the end of the semester). As far as these interventions in this quasi-experiment are concerned, H1 states that increased interactions designed in the cross-campus teaching and learning course in the spring of 2014 will lead to a greater willingness among the private liberal arts school students to interact with people from outside in the spring of 2014 than in the fall of 2013.

Intercultural competence and other measures. The Intercultural Sensitivity Scale (ISS) by Chen and Starosta (2000) was used in Study 2 to measure intercultural

competence in addition to the survey questions used in Study 1. The 24-item scale measures several dimensions of ***intercultural competence***. The dimensions are:

(1) ***Respect*** for cultural differences (α = .78), 6 items, e.g., "I respect the ways people from different cultures behave."
(2) Interaction ***engagement*** (α = .69), 7 items, e.g., "I tend to wait before forming an impression of culturally-distinct counterparts."
(3) Interaction ***confidence*** (α = .66), 5 items, e.g., "I feel confident when interacting with people from different cultures."
(4) Interaction ***enjoyment*** (α = .69), 3 items, e.g., "I often get discouraged when I am with people from different cultures."

Among them, number 1, 3 and 4 are attitudinal dimensions whereas number 2 is a behavioral dimension.

Two additional scales were also used in our survey to factor (1) participants' ***personality***, namely friendliness (α = .92, 10 items, e.g., "warm," "friendly," and "responsive to others" that measure responsiveness in McCroskey and Richmond's 1996 communication style scale), and (2) their ***perceptions of diversity on their own campuses*** (α = .76, 6 items, e.g., "At this university, getting to know people with racial backgrounds different from my own has been easy" that Tamam developed in his 2013 study) into the analysis. A total of N = 37 students (22 from one school, with 7 males and 15 females; 15 from the other school, with 8 males and 7 females) from the authors' classes answered the above questions at the end of the semester.

6. Study 2 Results

Enjoyment in RQ1 ("Do students from the two different types of universities enjoy interacting with each other across-campus in the innovative cross-campus teaching and learning classes?"). T-test results indicated that both classes enjoyed the cross-campus teaching and learning (LA M = 5.95, SD = 2.32; PU M = 6.73, SD = 1.75; non-sig.), as expected based on Study 1 findings. T-tests were also used to find whether students' levels of enjoyment changed from fall 2013 to spring 2014 between their cohorts. No change was found between class 2013 and class 2014 in each school.

Willingness in RQ2 ("Are students from the two different types of universities different in their levels of willingness to interact with people from outside their school, their state, and their country/culture?"). The spring 2014 classes were not different in their willingness to interact with people from outside (LA M = 7.51, SD = 2.37 and PU M = 8.19, SD = 1.38; non-sig.) as measured by the 4-item willingness scale (α = .91). Such a finding was expected because it showed that the increased interactions between the two groups of students in the cross-campus teaching and learning course designed in the spring of 2014 actually worked to make the students more open-minded, especially for the private liberal arts school students, therefore lending support to the Contact Hypothesis by confirming our H1 ("Increased interactions between students from the two different types of universities will lead to a greater willingness to interact with people from outside."). In other words, even though the 2014 class in the private liberal arts school were not significantly different from their 2013 cohort in their willingness to approach people outside their school or state or country/culture, they caught up with their counterparts in the public university in that social attribute as a result of interacting

with the more diverse student body of the public university in the cross-campus teaching and learning program.

Intercultural competence in RQ3 ("Are students from the two different types of universities different in their intercultural competence levels?"). T-test results did not show significant differences between students from the two schools in their intercultural competence on all 4 dimensions, therefore answering RQ3. These findings mean that the participants from both schools had more or less the same levels of respect for people from other cultures (LA M = 4.27, SD = .83 and PU M = 4.50, SD = .36; non-sig.). They were equally engaged in interacting with people from other cultures (LA M = 4.07, SD = .53 and PU M = 4.12, SD = .45; non-sig.). In such intercultural interactions, they were as confident as their counterparts were (LA M = 3.55, SD = .54 and PU M = 3.87, SD = .59; non-sig.). Overall, they all enjoyed intercultural interactions (LA M = 4.01 on a 5-point scale, SD = .89 and PU M = 4.38, SD = .52; non-sig.).

Finally, hierarchical regression was conducted to find the answer to RQ4 ("Are students who are more willing to interact with outsiders also more competent in intercultural contexts?") by regressing each dimension of intercultural competence on (1) perceived campus diversity, (2) friendly personality, (3) cross-campus teaching experience, and (4) willingness to interact with outsiders. The test results showed that willingness to interact with outsiders is positively related to three (namely the ***respect, engagement and enjoyment*** dimensions with β = .58, p = .00; β = .35, p = .04; and β = .41, p = .00 respectively) of the total four dimensions of intercultural competence. The more willing our participants were in interacting with people from outside their own school, state, country or culture, the more interculturally competent they were. ***Confidence*** is the only dimension that is not significantly related to intercultural competence. It should be pointed out that zero-order correlational tests showed that willingness to interact with outsiders is significantly related to all the intercultural competence dimensions (ps = .00 for the first three dimensions mentioned in the above and p = .01 for the confidence dimension). Therefore, the answer to RQ4 is "Yes, students who are more willing to interact with outsiders are also more competent in intercultural contexts."

An interesting finding from the regression analyses is that friendly personality is the only variable that consistently predicts intercultural competence in all dimensions (β = .38, p = .01 for ***respect***; β = .49, p = .01 for ***engagement***; β = .37, p = .05 for ***confidence***; and β = .30, p = .04 for ***enjoyment***). Zero-order correlational tests showed that not only friendly personality (r = .62, r = .56, r = .46, r = .63 for the four dimensions respectively, ps = .00), but also the level of campus diversity is related to intercultural competence in that the more diverse a campus is perceived to be, the better chance for people on the campus to be interculturally competent (r = .43, p = .01 for ***respect***; r = .28, p = .04 one-tailed for ***engagement***; r = .32, p = .05 for ***confidence***; r = .60, p = .00 for ***enjoyment***).

7. Discussion

Both Studies 1 and 2 showed that students at a small private liberal arts school in the Mid-West and at a mid-sized public university in the South somewhat enjoyed the cross-campus classes mediated through Skype and video conferencing. Two inferences can be made from this finding. First, it means students in both institutions are interested in or curious about other college students who are very different from themselves.

However, students' high level of curiosity or enjoyment of intercultural interactions does not mean they are willing to interact with people from different cultures. In Study 1, students from the mid-sized public university showed a significantly higher level of willingness for intercultural interactions than those from the private liberal arts school despite their same level of enjoyment.

This difference can be attributed to the different levels of diversity on the two campuses. The mid-sized public university is much more diverse in terms of students' racial/ethnic backgrounds than the private liberal arts school. Since the students in the private liberal arts school are predominantly White upper-middle class young adults, they must have had very limited opportunities for intercultural experiences, resulting in a lower level of willingness for intercultural interactions.

Interestingly, students from such a low diversity campus, nonetheless, perceived their campus as diverse as their counterparts from the public university. What is more, their perceived campus diversity was not related to their willingness to interact with outsiders. Such a finding reminds us that what people have in their mind may not reflect the outside reality. This illustrates Martin and Nakayama's (2011) notion that Whites tend to have misperceptions regarding the number of racial/ethnic minorities. That is, they tend to perceive there is a large number of racial minorities when the actual population of minorities is very small. Similarly, in the present studies, students in the private liberal arts school tend to perceive their campus as having a large number of students with diverse cultural backgrounds when the actual number of minority students and faculty members is rather small on their campus.

At the same time, a lack of interactions between the two groups of students in Study 1 could have negatively affected the private school students' willingness to engage in intercultural interactions as reflected in their responses to the open-ended questions in the survey, asking them what they enjoyed most (the most frequently mentioned are such as "meeting other students" and "seeing a different perspective"), what problems or challenges they found (the most frequently mentioned are technical problems such as "sound was awkward, camera speed awkward"), and what suggestions they had (the most frequently mentioned are "work on technology" followed by "more communication between students of both universities"). It can be argued that a limited number of interactions cannot lead individuals to pursue intercultural experiences in depth. In other words, individuals should have a certain level of interactions in order to be willing to have further interactions with people from different cultural backgrounds. Supporting this argument and in alignment with the Contact Hypothesis (Allport, 1954), when more interactional activities between the two groups of students were added to the cross-campus teaching syllabi in Study 2, students at the small liberal arts school showed a similar level of willingness to interact with outsiders as those at the mid-sized public university. Such cross-campus interactions in Study 2 as (1) getting to know each other at the beginning of the course, (2) exchanging their research interests when brainstorming the topics for their research projects, (3) conducting focus groups and taking observation notes and (4) presenting their research projects, were all designed for the students of the private liberal arts school to elevate their level of willingness to interact with outsiders. These techniques worked, as demonstrated in their increased willingness to interact with outsiders. Thus, the overall results of the two studies confirm the positive correlation between frequency of intercultural interactions and willingness for intercultural interactions derived from the Contact Hypothesis (Allport, 1954). They also lend support to previous studies (e.g., Jon, 2013; Liu & Dall'Alba,

2012; Nieto & Booth, 2010; Peng et al., 2005; Wilton & Constantine, 2003) that suggest frequent interactions or more time spent with persons from different cultural backgrounds lead to individuals' intercultural competence.

Second, supporting many previous studies (e.g., Maclaren, 2014; Montenery et al., 2013; Pillay & James, 2013; Sanchez-Elez et al., 2014), the present two confirm the positive impact of new technologies on students' satisfaction and enjoyment of their course. Judging by the answers to the open-ended questions about likes and dislikes, challenges and suggestions, it was obvious that students in both institutions appreciated and enjoyed the opportunities to meet people with very different backgrounds through video conferencing system and Skype although they did experience some technical problems. Neither of the studies distinguishes which one (interacting with students from the other institution or the adoption of video conferencing system/Skype in cross-campus teaching) played a more significant role in helping students enjoy their classes. However, it is obvious that new technologies such as Skype have the potential to provide students, particularly those in a small institution and with a highly homogeneous culture, with more opportunities of intercultural experiences. Thus, the present studies extend the Contact Hypothesis (Allport, 1954) to the domain of the use of digital technologies as far as intercultural relations and teaching and learning pedagogy are concerned.

Based on the findings about the effects of technology on the students' social and psychological developments, intercultural competence in specific, four practical implications are apparent. First, it is critical to develop and provide more chances for intercultural experiences to actually take place so that they end up enhancing students' intercultural sensitivity and competence. Specifically, it is plausible that small private institutions that have a homogeneous body of students should offer more diversity/intercultural training programs as well as intercultural communication courses. They should also try to recruit a diverse body of faculty and students to achieve the real-life diversity. In addition, considering Nieto and Booth's (2010) finding that students with a higher level of intercultural competence are more willing to help international students, it would be beneficial to provide both students of the host country and international students studying on their campus with more diversity/intercultural training programs.

Second, recognizing possible challenges small private institutions face when recruiting a more diverse body of students and faculty members, we suggest that they take advantage of new technologies. New technologies can be used not only to enhance students' learning outcomes for specific courses, but also to improve various types of social skills, including intercultural competence (García-Valcárcel et al., 2014). Furthermore, global networks through new technologies can be useful social capital in career development, especially for business majors (Aleksic-Maslac & Magzan, 2012). In the present two studies, Skype and the video conferencing system played a key role in running the co-taught classes across two institutions. And as the results indicated, students in both institutions enjoyed it. Since a majority of young traditional college students have grown up with various types of new technologies, we believe the most effective way to create opportunities for intercultural experiences without a strong resistance from students is perhaps through new technology assisted cross-campus teaching and learning.

However, as many researchers warned, the use of new technologies does not always improve students' learning outcomes, nor promote their satisfaction (e.g., Kinnear et al.,

2002; Mc Glashan & Wells, 2013; Song, 2007). To effectively incorporate new technologies in educational settings, both individual instructors' efforts and institutional level support must exist (Joy et al., 2014; Montenery et al., 2013; Pallavi & Naika, 2012). Research oriented institutions need particularly to make greater efforts to provide adequate systems and supports since their faculty members seem to have negative attitudes towards and a strong resistance against using new technologies in classrooms (Johnson, 2013).

Furthermore, there are problems in relying too much on new technologies in education, as some studies revealed. In fact, in both of the present two studies, one of the most frequently mentioned discomforts with the co-taught classes was such technical problems as slow transmission of audio/video messages, not clear or loud enough audio/video that the system produced, and a long waiting time for the connection. They align with O'Dowd's (2013), and Kinnear et al.'s (2002) findings about various types of barriers in adopting videoconferencing system in classroom settings. Therefore, following previous researchers' suggestions (e.g., Jain, 2013; McCalman, 2014; Pillay & James, 2013; Schamber, 2004), it is of great importance to incorporate a variety of pedagogical techniques rather than relying only on new technologies to ensure positive intergroup interactions or intercultural experiences.

A couple of limitations in both studies need to be pointed out. First, the samples in both studies were very small. Small classes may be ideal to implement innovative teaching and learning pedagogies (Kinnear et al., 2002); however they make it difficult to find statistical significance when it comes to data analysis. As far as research findings from very small samples are concerned, they are not as generalizable as those from large samples. Therefore, future studies should use larger samples to further test the relationships found in the present studies. Second, intact cohorts (2013 class and 2014 class at each school) were studied to detect change at each school in students' willingness to interact with people from different cultures and different backgrounds. Causal relationships established with the quasi-experiment design in the present studies should be interpreted with care because the "presumed comparability will never be as high with cohorts as with random assignment" (Shadish, Cook & Campbell, 2002, p. 149). A better research design could be a panel study or a true experimental design to find change before versus after an intervention. Future studies should use those designs to establish causal relationships.

8. Conclusion

The present two studies aim to assess not only the effectiveness of new technology-mediated cross-campus teaching and learning (RQ1. Do students from the two different types of universities enjoy interacting with each other across-campus in the innovative cross-campus teaching and learning classes?), but also the effects of cross-campus teaching and learning on students' willingness to interact with outsiders (RQ2. Are students from the two different types of universities different in their levels of willingness to interact with people from outside their school, their state, and their country/culture?), and on their intercultural competence (RQ3. Are students from the two different types of universities different in their intercultural competence levels? RQ4. Are students who are more willing to interact with outsiders also more competent in intercultural contexts?) due to increased cross-campus interactions (H1. Increased interactions between students from the two different types of universities will lead to a

greater willingness to interact with people from outside.). Results show that students from the two demographically (therefore culturally) different institutions (one small private liberal arts school in the Mid-West and the other mid-sized public university in the South) somewhat enjoyed their technology-facilitated cross-campus teaching and learning classes in both fall 2013 and spring 2014.

To address the fall 2013 classes' need for more interactions with students from the other school, the instructors' syllabi were redesigned so that in the following semester students from the two campuses interacted not only at the beginning of the term, but also conducted cross-campus focus group studies in the middle of the semester and finally presented cross-campus their survey research findings at the end of the spring 2014 semester. To refine the preliminary study of the fall of 2013, the follow-up study in the spring of 2014 included the intercultural competence variable to see whether the relatively homogenous private liberal arts school students will become more willing to interact with people from different places and different cultures (H1), and whether students who are more willing to interact with outsiders are also more competent in intercultural contexts (RQ4). As expected, the programmed interactive activities and assignments worked in that students from the small liberal arts school showed the same level of willingness to interact with outsiders as did their public university counterparts, even though their improved willingness was not significantly different from their 2013 schoolmates'. The findings that those who are willing to interact with outsiders are also more interculturally competent lends further support to both the Contact Hypothesis (Allport, 1954) in the digital context of teaching pedagogy and the crucial role open-mindedness and interactions play according to intercultural competence theories (Chen & Starosta, 2000). More importantly, such findings provide evidence of possible theoretical connections between the two. They point to future studies that examine the effects of intercultural courses or diversity training programs in improving intercultural competence through direct vs. mediated intercultural interactions.

References

Allport, Gordon W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.

Aleksic-Maslac, Karmela & Magzan, Masha. (2012). ICT as a tool for building social capital in higher education. *Campus -- Wide Information Systems*, *29*(4), 272-280. doi:10.1108/10650741211253868

Association of American Colleges & Universities (2019). *Facts & figures: College students are more diverse than ever. Faculty and administrators are not*. Retrieved from https://www.aacu.org/aacu-news/newsletter/2019/march/facts-figures

American Council on Education (2019). *Race and ethnicity in higher education: A status report.* Retrieved from https://www.equityinhighered.org/wp-content/uploads/2019/02/Race-and-Ethnicity-in-Higher-Education.pdf

Anfimova, Liudmila. (2010). Multimedia technologies in innovative high educational establishments: Developing intercultural communicative competence and new levels of competitiveness. International Journal of Interdisciplinary Social Sciences, 5(1), 231-237. doi:10.18848/1833-1882/CGP/v05i01/53082

Başbaği, Ragıp. (2012). Intercultural communication skills among prospective Turkish teachers of German in the context of the comparative country knowledge course. Educational Sciences: Theory & Practice, 12(3), 2187-2193.

Baumann, Uwe & Shelley, Monica. (2006). Distance learners of German and intercultural competence. *Open Learning*, *21*(3), 191-204. doi:10.1080/02680510600953153

Brandtweiner, Roman; Donat, Elisabeth & Kerschbaum, Johann. (2010). How to become a sophisticated user: A two dimensional approach to e-literacy. *New Media & Society, 12*(5), 813-833. doi:10.1177/1461444809349577

Chen, Guo-Ming & Starosta, William J. (2000). The development and validation of intercultural sensitivity scale. Paper presented at the Annual Meeting of the National Communication Association (86th), Seattle, WA.

Clouet, Richard. (2013). Understanding and assessing intercultural competence in an online environment: A case study of transnational education program delivery between college students in ULPGC, Spain, and ICES, France. *RESLA (Revista Espanola De Linguistica Aplicada), 26,* 139-157.

Covert, Hannah H. (2014). Stories of personal agency: Undergraduate students' perceptions of developing intercultural competence during a semester abroad in Chile. *Journal of Studies in International Education*, *18*(2), 162-179. doi:10.1177/1028315313497590

García-Valcárcel, Ana; Basilotta, Verónica & López, Camino. (2014). ICT in collaborative learning in the classrooms of primary and secondary education. *Comunicar*, *21*(42), 65-74. doi:10.3916/C42-2014-06

Hersh, Richard H. (2009). A well-rounded education for a flat world. *Educational Leadership, 67*(1), 50-53.

Houghton, Stephanie A. (2014). Exploring manifestations of curiosity in study abroad as part of intercultural communicative competence. *System*, *42*, 368-382. doi:10.1016/j.system.2013.12.024

Jain, Sachin. (2013). Experiential training for enhancing intercultural sensitivity. *Journal of Cultural Diversity*, *20*(1), 15-20.

Jon, Jae-Eun. (2013). Realizing internationalization at home in Korean higher education: Promoting domestic students' interaction with international students and intercultural competence. *Journal of Studies in International Education*, *17*(4), 455-470. doi:10.1177/1028315312468329

Johnson, David R. (2013). Technological change and professional control in the professoriate. *Science, Technology & Human Values*, *38*(1), 126-149. doi:10.1177/0162243911430236

Kinnear, Heather; McWilliams, Sandra & Caul, Leslie. (2002). The use of interactive video in teaching teachers: An evaluation of a link with a primary school. *British Journal of Educational Technology*, *33*(1), 17-26.doi:10.1111/1467-8535.00235

Kymlicka, Will. (2007). *Multicultural Odysseys*. Don Mills: Oxford University Press.

Liu, Shuang & Dall'Alba, Gloria. (2012). Learning intercultural communication through group work oriented to the world beyond the classroom. *Assessment & Evaluation in Higher Education*, *37*(1), 19-32. doi:10.1080/02602938.2010.494233

López-Pérez, María V.; Pérez-López, María C.; Rodríguez-Ariza, Lázaro & Argente-Linares, Eva. (2013). The influence of the use of technology on student outcomes in a blended learning context. *Educational Technology Research & Development*, *61*(4), 625-638. doi:10.1007/s11423-013-9303-8

Maclaren, Peter. (2014). The new chalkboard: The role of digital pen technologies in tertiary mathematics teaching. *Teaching Mathematics & Its Applications*, *33*(1), 16-26. doi:10.1093/teamat/hru001

Mahoney, Sandra L. & Schamber, Jon F. (2004). Exploring the application of a developmental model of intercultural sensitivity to a general education curriculum on diversity. *The Journal of General Education*, *53*(3/4), 311-334.

Martin, Judith & Nakayama, Thomas. (2011). *Intercultural communication in contexts (6th ed).* New York, NY: McGraw Hill.

McCalman, Claudia L. (2014). International instructor preparing teachers for multicultural classrooms in the United States: Teaching intercultural communication competence online. *New Directions for Teaching & Learning, 138,* 73-81. doi:10.1002/tl.20098

McCroskey, James C. (1992). Reliability and validity of the willingness to communicate scale. *Communication Quarterly, 40*(1), 16-25. doi:10.1080/01463379209369817

McCroskey, James C. & Richmond, Virginia P. (1996). *Fundamentals of human communication*. Prospect Heights, Il: Waveland.

McGlashan, Ann & Wells, Alastair. (2013). The road less travelled: A pre-service approach towards the technology teaching profession. *International Journal of Technology & Design Education*, *23*(4), 939-952. doi:10.1007/s10798-012-9218-4

Modood, Tariq. (2007). *Multiculturalism: A civic idea*. Cambridge, UK: Polity Press.

Montenery, Susan M.; Walker, Marjorie; Sorensen, Elizabeth; Thompson, Rhonda; Kirklin, Dena; White, Robin & Ross, Carl. (2013). Millennial generation student nurses' perceptions of the impact of multiple technologies on learning. *Nursing Education Perspectives*, *34*(6), 405-409. doi:10.5480/10-451

Morris, Anne. (2007). E-literacy and the grey digital divide: A review with recommendations. *Journal of Information Literacy, 1*(3), 13-28.doi:10.11645/1.3.14

Nieto, Claudia & Booth, Margaret Z. (2010). Cultural competence. *Journal of Studies in International Education*, *14*(4), 406-425. doi:10.1177/1028315309337929

O'Dowd, Robert. (2013). Telecollaborative networks in university higher education: Overcoming barriers to integration. *Internet & Higher Education, 18,* 47-53. doi:10.1016/j.iheduc.2013.02.001

Pallavi, G. & Naika, K. Venkata Ranga. (2012). An analysis of instructional technologies used by teachers as perceived by students in a state agriculture university. *International Journal of Agriculture, Environment & Biotechnology*, *5*(3), 287-291.

Papo, William. (2001). Integration of educational media in higher education large classes. *Educational Media International*, *38*(2/3), 95-99. doi:10.1080/09523980110041908

Peng, Shi-Yong; Rangsipaht, Savitree & Thaipakdee, Supaporn. (2005). Measuring intercultural sensitivity: A comparative study of ethnic Chinese and Thai nationals. *Journal of Intercultural Communication Research, 34*(2), 119-137.

Pettigrew, Thomas F. & Tropp, Linda R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology, 38,* 922–934. doi:10.1002/ejsp.504

Pillay, Soma & James, Reynold. (2013). Gaming across cultures: Experimenting with alternate pedagogies. *Education + Training*, *55*(1), 7-22. doi:10.1108/00400911311294924

Riner, Mary E. (2013). Globally engaged nursing education with local immigrant populations. *Public Health Nursing, 30*(3), 246-253. doi:10.1111/phn.12026

Root, Elizabeth & Ngampornchai, Anchalee. (2013). I came back as a new human being: Student descriptions of intercultural competence acquired through education abroad experiences. *Journal of Studies in International Education, 17*(5), 513-532. doi:10.1177/1028315312468008

Schuerholz-Lehr, Sabine. (2007). Teaching for global literacy in higher education: How prepared are the educators? *Journal of Studies in International Education, 11*(2), 180-204. doi:10.1177/1028315307299419

Sanchez-Elez, Marcos; Pardines, Inmaculada; Garcia, Pablo; Miñana, Guadalupe; Roman, Sara; Sanchez, Margarita & Risco, Jose Luis. (2014). Enhancing students' learning process through self-generated tests. *Journal of Science Education & Technology*, *23*(1), 15-25. doi:10.1007/s10956-013-9447-7

Shadish, William R.; Cook, Thomas D. & Campbell, Donald T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. New York, NY: Houghton Mifflin Company.

Sizoo, Steve & Serrie, Hendrick. (2004). Developing cross-cultural skills of international business students: An experiment. *Journal of Instructional Psychology*, *31*(2), 160-166.

Song, Yanjie. (2007). Educational uses of handheld devices: What are the consequences?. *Techtrends: Linking Research & Practice to Improve Learning*, *51*(5), 38-45. doi:10.1007/s11528-007-0068-y

Tamam, Ezhar. (2013). Interracial bridging social capital among students of a multicultural university in Malaysia. *Journal of College Student Development, 54*(1), 85-97. doi:10.1353/csd.2013.0000

Veen, Wim & Vrakking, Ben. (2006). *Homo zappiens: Growing up in a digital age*. London, UK: Network Continuum Education.

Wang, Liang & Coleman, James A. (2009). A survey of internet-mediated intercultural foreign language education in China. *ReCALL, 21*(1), 113-129. doi:10.1017/S0958344009000056

Wilton, Leo & Constantine, Madonna G. (2003). Length of residence, cultural adjustment difficulties, and psychological distress symptoms in Asian and Latin America international college students. *Journal of College Counseling*, *6*(2), 177-186. doi:10.1002/j.2161-1882.2003.tb00238.x

Zhang, Yunying. (2017). Stereotyping and communication. *Handbook of intercultural communication* (HOCS 9, pp. 529-562) in the series of *Handbooks of communication science.* Berlin, Germany: De Gruyter.

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