A Cross-cultural Communication Experience at a Higher Education Institution in Taiwan

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Biographical note:

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Abstract

This paper describes an online cross-cultural communication experience of a group of Taiwanese college students. Overall, students reported having more confidence in communication and gaining cross-cultural communication skills after participating in this project. The acquisition of cross-cultural communication skills was positively related to the motivation to succeed in the project and the sense of community developed within the online collaborative environment. Other positive correlations were found between (1) motivation to succeed and the development of a sense of community; (2) confidence in communication and a development of a sense of community; (3) confidence in communication and the acquisition of cross-cultural communication skills. Students' confidence in communication was found to be positively related to students' self-perceived English proficiency. Finally, the acquisition of cross-cultural communication skills was highly related to the acquisition of interpersonal communication skills through participating in the final project. Future strategies will be employed to motivate students in online collaboration and foster a sense of community within the online environment while taking their language barrier into consideration.

Introduction

The trend of globalization with the increasingly popular internationalized activities signifies the need for nurturing global citizens with effective intercultural communication skills. Cohalm (2004) highlighted the emerging dialogues among nations with the support of world leaders to facilitate cross-cultural communications. In advocating the need for internationalized activities, Mason (1994) cautioned the danger of how the lack of inter-cultural understanding could induce conflicts. Zhao and Edmondson (2005) advised against the unconsciousness beliefs in ethnocentrism. They further stated that effective

intercultural communication could only be achieved when the world devoted to a conscious recognition that no one culture possessed the only valid belief system.

Intercultural communication is not only a need, but a requirement for success in today's pluralistic society. The cost of being inadequately equipped with such skill is insurmountably high. Being able to communicate cross-culturally increases the success in international business, enables productive interpersonal contacts and decreases mutual misunderstanding. Chen (2003) noted that the interdependence of our global communities calls for more skillful interactions across nations and linguistic boundaries. According to Thomas and Inkson (2004), cultural intelligence is required in bridging the cultural divide and cultivating cross-cultural relationships. These authors advised that acquiring knowledge in intercultural interactions, being mindful to cultural difference as well as learning how to behave and perform in various cultures added to the repertoire of cross-cultural communication adequacies.

According to Levine and Adelman (1993), cross-cultural or intercultural communication occurs between people from different cultures. Williams (2003) defined cross-cultural communication skills as the ability to effectively interact with people of different cultures. Hinner (1998) referred to the same concept as the ability to communicate verbally and nonverbally with members of different cultures, and in a manner that communicative messages were not given erroneous interpretations. While some researchers suggested that the familiarity of the cultures in which the communication took place was a key component of many existing cross-cultural training programs (Gudykunst, William & Young, 1984), others proposed to include several aspects which make up a culture in the instruction of intercultural competence (Hinner, 1998). Some examples of these cultural aspects were philosophies, traditions, social structure, language, and food. Williams (2003) provided indicators of the acquisition of cross-cultural communication skills. These indicators include flexibility (open-mindedness), cultural empathy, and personal strength (stability). Other cross-cultural communication skills include being sensitive to cultural differences (Hansen & Fox, 1995), and building intercultural understanding (Ewert, 2000). Heuberger and Gerber (1999) proposed that understanding the systems and characteristics of a culture, recognizing that cultures can be reflected in individuals, families, communities, and identifying systemic biases were important in fostering the competency in cross-cultural communication. Similarly, Barrera and Corso (2002) pointed out that respect and reciprocity symbolized skilled cross-cultural dialogues. According to these researchers, respect referred to an awareness and acknowledgement of boundaries between people. Reciprocal interactions allowed an equal opportunity to contribute and make choices. When examining the cultural context of consultation, Rogers (2000) indicated that understanding one's own and others' cultures was the most emphasized cross-cultural competency.

It is inevitable to note the role of technology in human communication when we discuss interculturalism. The world has shrunk tremendously since its launching the era of information technology.   Through interactive technological tools such as the internet and e-mail, global communication is not a dream anymore. The entire world was described by

Mason (1994) as our neighbor in the global economy. It is noticeable that one needs to possess qualifications such as the ability to work in other languages and cultures in order to become more employable (Mason, 1994). Oblinger (2004) noted that our students, the Net Generation, born in and after 1982, had urged educators to modify our traditional teaching strategies to meet their needs. She also said that higher education needed to prepare students with competencies in developing a deep understanding of the global communities and technical worlds. In lieu of traditional teaching and learning, the shift of educational paradigm to the utilization of technology has influenced all levels of education. Many of these educational novelties have centered on integrating technology to more collaborative or cooperative based curricula. Researchers from various fields have investigated how computer-mediated communication tools (CMS) have influenced the teaching processes and learner outcomes. Lim (2004) recommended strategies for engaging learners in online learning environments. Nicol and colleagues (2003) evaluated the social arena of online learning. Wallace (2003) and Chen (2003) studied the role of instructors in fostering online learning communities. Meyer (2003), in reviewing studies of the World Wide Web's impact on learning, pointed out that today's college students had greater abilities in online learning. In the 21st century, higher education has to answer the demands from the world of work and prepare college graduates for employability by training them to collaborate. Felder (2001) argued that students who learned through interactive technologies had a tendency to collaborate better than those who did not. Likewise, Chen (2003) said that collaboration is necessary for the life of the century, and creating Networked Learning Communities (NLC) is one way to achieve this goal.

The Cross-cultural Project

The spring 2005 "Collaboration across Borders" project between Central Taiwan University of Sciences and Technology in Taiwan and Fresno City College in California, United States, stemmed from the belief that if students were granted the opportunity to engage in cross-cultural learning activities, they would be better prepared to communicate and collaborate as global citizens. The Association of Universities and Colleges of Canada (AUCC, 2004) recorded the fact that that there had been an expansion of cross-border higher education initiatives in recent years. In this decade, the distribution of cross-border higher education courses through global computer network has been a fast growing phenomenon. Several studies explored how effective cross-border projects could be formed. In examining the value of online forums for group collaboration, Anderson and Kanuka (1997) discovered that online activities enhanced the participants' knowledge of designated learning areas. Because of this finding, these researchers recommended the use of online activities to promote networking opportunities. Similarly, in reviewing online collaborative behaviors, Kim and Bonk (2002) concluded that computer conferencing induced deeper critical thinking.

Through this collaborative project, the Taiwanese students' cross-cultural experience is described in the areas of:

1. how the intercultural collaboration impacted students' understanding in conducting cross-cultural communication;
2. how the development of an online learning community affected students' confidence level in communication;
3. how the intercultural collaboration impacted students' motivation to succeed in this project and,
4. how students related themselves to the collaborative project.

The main focus of this study was to investigate the relationships among students' motivation to succeed in this project, their confidence level in communication, the acquisition of cross-cultural communication awareness and skills, as well as the development of an online learning community. Other areas explored included students' online learning behaviors, collaborative experience, the relationships among the outcomes of the final project, and the acquisition of cross-cultural communication skills.

The Participants

The Speech and Communication course, in which the project was embedded, was a year long course with a two-dimensional focus on public speaking and communication. This course is required for the fifth-year students in the five-year program division of the Applied Foreign Language department at Central Taiwan University of Science and Technology. Students enrolled in the five-year specialized programs after completing their junior high school education. During the initial offering of this course in fall 2004, students were informed of the cross-cultural infusion in the second semester of the course. There were 46 students who participated in this project. Besides the 38 students who had successfully completed the public speaking component in fall 2004, six new members joined this class in spring 2005. The 6 new members had successfully completed the first semester of this course taught by another instructor in fall 2004. Because of the lack of prerequisite enforcement of this institution, two students who failed the first component were able to register for the second-semester. The Taiwanese participants had a high level of homogeneity. Out of the 46 students, 14 were male and 32 were female. Most of them were less than 22 years old, first-time college students, majoring in English, and attending college full-time. They also had taken courses as a cohort since their first year of college. This course, speech and communication, was a year-long course instructed in English. The students were required to communicate and discuss in English both online and during their class time.

The Collaborative Method

The Internet Classroom Assistant (ICA), provided by Nicenet, a voluntary, non-profit organization based in the United States, offers free services to the internet community. ICA features conferencing, document sharing and private messaging for virtual communication. With the initial log-in information provided by the instructors, the students registered to ICA to create their own usernames and passwords. The students were asked to join online discussions in various topic areas and collaborated in completing

a group project. In addition to ICA, a joint web site was available to describe the details of the cross-cultural collaboration, provide instructions on internet conferencing, lecture notes, student progress reports and host photographs. The web site was used to reinforce the concepts introduced in class. The progress reports were used to keep the Taiwanese students updated with their performances. Throughout the semester, e-mail was adopted as the major communication method between the instructors for discussions in project management.

First, there were five asynchronous discussions throughout the semester besides the first introductory conferencing. The discussion topics were: family communication, language, non-verbal communication, dealing with conflicts and stereotypes. Students were asked to post inquiries and respond to topic-related issues. At the same time, students were required to survey their counterparts from the other country for the information of cultural influences on communication. Secondly, students from each country were evenly divided into five groups to complete a project focused on one of the discussion topics. The group project was to be completed based on the information gathered from lectures, group research, online discussions, and the results from interviewing their foreign counterparts online. These groups, five from Taiwan and five from the U.S., were given the freedom to work on topics of their interest, with one restriction that they had to be related to the field of human communication.

After the students posted a brief introductory message, the weekly discussions on the selected topics began from the second week. Computer hours were reserved for these activities during the class time but students could continue with the discussions outside of the class. The guiding postings, or prompts from the instructors and supplemental reading under the topics provided a general direction for the discussions. This information was simultaneously available in both the ICA and the joint web site.

The instructors adopted different facilitative styles in co-supervising the online forums. The Taiwanese instructor gave specific guidelines to structure the students' online activities. For example, each student was asked to post at least one message as a response to their textbook reading or a reaction to contents covered in class. At the same time, they were required to respond to other members' postings. On the other hand, the U.S. instructor gave the students latitude to explore the discussion forums with fewer structures, expecting them to fulfill the course and project requirements as discussed in the face-to-face sessions.

Data Collection

The data collection and analysis of this project is a mixture of instructor observations, student feedback, and surveys. While mid-term and final surveys were given to both sides of the students, the instructors constantly assessed students' reactions to the online collaboration for possible modifications during the project. As a result of these on-going assessments, a few adjustments were made. Doing so was to allow what Chen (2003) recommended to have flexibility with respect to learning content and objectives. Five

open-ended questions were given to the Taiwanese group during the fourth week of the semester to investigate their expectations for the project and difficulties encountered in the process of project participation. The students were surveyed again during the ninth week (mid-term) and at the end of the semester. The mid-term survey consisted of 48 Likert-scaled questions and 2 open-ended questions. A higher rating indicated a higher level of agreement to a question. These questions were designed to investigate students':

1. self-perception in their English proficiency,
2. experience in navigating ICA, the management system for the online discussions,
3. confidence in communication through project participation,
4. sense of community developed with students and the instructors,
5. motivation for participating in the project, and
6. acquisition of cross-cultural communication skills

The final survey, a combination of 7 dichotomous, 14 Likert-scaled, and one open-ended question, was administered at the end of the semester to determine the outcomes of the final group project and how they related to several phenomena that had been investigated previously during the mid-term period. The goal of the final group project was to investigate students' team-work experience, and the acquisition of communication skills. The final survey was also used to examine the frequencies of students' online activities and their comfort level in sharing opinions in an online setting as compared to that in a regular classroom.

Findings

Phase I

Students in Taiwan were asked to submit a written feedback about their early experience in this project during the fourth week of the semester. They provided feedback to the following questions:

1. What were your hopes for this project before participating?
2. What do you like about this project so far?
3. What has been difficult for you in participating in this project?
4. What have you learned from this project in interpersonal communication?

Out of the 46 students, 43 of them completed the survey anonymously. One of the students was a frequent absentee and had not participated in most of the class activities. This in-class assessment presented an overview of how the Taiwanese students related themselves to this project. When asked about their anticipation in collaborating with the U.S. students, ten students expressed their desire to practice their English communication skills, six of them said they wanted to make new friends, nine of them hoped to learn communication skills, which included verbal and nonverbal communications, and communicating with those from other cultures. There were 13 of them who said that they had hoped to engage in cultural exchanges through this project. Two students pointed out

that they had hoped to share study materials and learn together, which indicated their desire for group work. There were four of them who indicated that they had wanted to learn, but were not specific about their learning objectives. Two of them had hoped for this project to be fun and interesting. The following unedited statement showed how some students reacted to this cross-cultural experience.

I hope that this project is interesting and have fun, not serious.

One of the students was apprehensive about communicating cross-culturally, but was relieved after finding out that the communication was restricted to an online setting. The other one hoped that there had been more discussions in class before participating in online forums.

With regards to the second question, a majority of the students were pleased with the opportunity to communicate with people of different cultures. The theme of "friendship" emerged when they described their excitement about being able to get to know people from the other side of the world. The following original statement showed a student's excitement in discovering a shared a hobby with someone in the U.S.

I can visit some friends, and share some things about my life. I also met a special girl who like to read comics.

Their desire for a learning community was again demonstrated through statements like "I can exchange ideas and share feelings," "I can learn with students from the U.S.," "I like more discussions; I don't want to do things alone." Some of them were eager to apply the skills acquired from class for their online conversations; others enjoyed becoming more confident in communicating and delivering speeches as a result of participating in this project.

When asked about the difficulty in project participation, two barriers surfaced. One was the lack of time. Students were preoccupied with their immediate goal to pass a college matriculation exam. According to eight of the students, the stress in studying for the exam left them little time to handle any school work. The other barrier was their anxiety in their command of English. Five of the students stated that they were nervous about not having enough vocabulary, having problem understanding the postings from the U.S. students, or composing messages online. Some of their anxiety with the English language was associated with their lack of understanding of the American cultural connotations. When a student described this situation, the word "clearly" was underlined to emphasize this frustration:

I can't understand their ideas, mind, and point very <u>clearly</u>.

Only one student mentioned the problem of not having computer access. Two other students perceived the time difference between the two countries problematic when attempting to conduct effective group discussions.

Question four was asked to identify students' attitude toward this project after their first introductory posting. Initially, the students' reactions to their group experience were positive. Some original statements describing this phenomenon are listed below:

I know more about my classmates and his or her idea in another part.

Some of them will share their opinion for me. And I feel very exciting when I get the messages from them.

Other descriptions which indicated students' interest in collaborative work include, "happy to be in the group," "team work," and "sharing opinions and thoughts." Some of them thought it was not as difficult as they had speculated to communicate with those from other cultures. Most of them were delighted about sharing ideas with their U.S. counterparts. One student said, "getting to know a new guy, to communicate with a stranger is a great feeling." Another student described the U.S. students as "passionate and excited" while some others enjoyed learning about communication. Interestingly, some of them observed that the U.S. students' did not pay attention to using proper English grammar when communicating online. Aside from these, one of the most insightful sharing was when some students reflectively used this experience as an opportunity to analyze their native culture.

Phase II

The Taiwanese students' answers to the mid-term questionnaire gave an overview of the following major constructs, which were defined by the following respective sets of questions:

1. Motivation to succeed demonstrated by students' attitude in project participation
   a. I read the instructions before posting on the discussion board.
   b. I read the guiding messages from the instructors before posting for discussions.
   c. I do not know what the guiding messages are.
   d. I read the messages from my fellow students before posting for discussions.
   e. I try to complete the assigned reading prior to joining the discussions.
2. Possible increase of confidence in communication through project participation
   a. I feel more comfortable in sharing my opinions in this class than in others.
   b. I have become more confident in communicating in English.
   c. I have become more confident in communicating with people from other cultures.
3. The development of a sense of community
   a. I feel welcomed by the students from the U.S.
   b. I feel that the students in the U.S. are interested in my opinions.
   c. I feel that the students in the U.S. are interested in learning about my culture.
   d. I feel supported by my fellow students in the discussions.

     e. I feel supported by my instructors in the discussions.
4. Cross-cultural communication awareness and skills
     a. The online discussions have helped me understand other cultures better.
     b. The online discussions have helped me understand my own culture better in ways that I have never thought of before.
     c. I am interested in learning about other cultures through the discussions.
     d. I have learned about communicating with others from different cultures through this project.

Based on previous research findings, the cross-cultural communication skills that we chose to integrate in the project activities include verbal and non-verbal skills, understanding messages from others of different cultures, families, traditions, languages, sensitivity to cultural differences, empathy and understanding of own cultures.

Approximately 42% of the students read the instructions in project participation before each discussion. Particularly, only half of the class (51%) read the instructors' guiding messages and completed their assigned reading before starting their own posting, even though more than half of the class (58%) knew what the guiding messages were. A high percentage of the class (78%) actually read other students' messages prior to posting their own. However, only 25% said they enjoyed reading the discussions.

There were only a small number of students who felt that they were more comfortable sharing opinions in this class than in others. About 27% of them agreed to this question while 42% were indifferent and 31 % disagreed. However, more students (63.2%) felt more comfortable doing so compared to last semester than those (36.4%) who did not perceive any differences in their comfort level. At the same time, there were more students who gained confidence in communicating in English than the number of those who did not or remained neutral in responding to the question. Sixty-five percent reported having more confidence, 29 percent did not reveal their opinion, and only 7% felt their confidence level did not increase in communicating in English. Figure 1 shows how the students rated their confidence level in English communication.
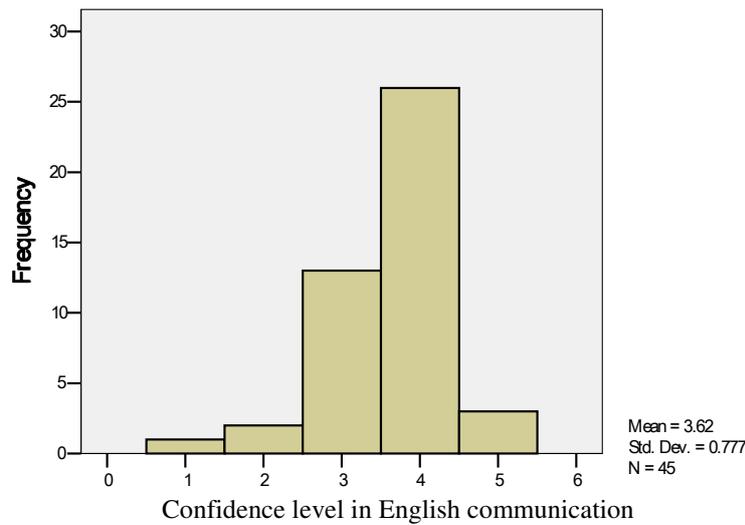
Fig. 1. A frequency distribution of students' confidence level in English communication

With regards to students' confidence level in cross-cultural communication, only a small number (6.7%) felt that this project had not assisted in improving their confidence in cross-cultural communication. Fifty three percent indicated that they had more confidence and 40% of them remained indifferent. It seems that Taiwanese students were not sure if their U.S. counterparts were interested in their opinions. Only 29 percent of them sensed the interest from the students in the U.S., and 56% of them were not certain about it. However, more students (59%) agreed that their U.S. partners were interested in learning about the Taiwanese culture, compared to a much smaller number (14%) who disagreed. Figure 2 presents this phenomenon.
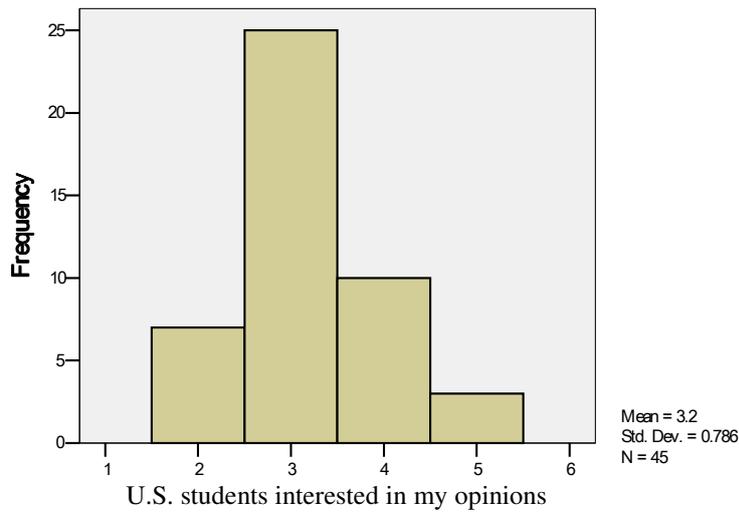
Fig 2. A frequency distribution of Taiwanese students'
perception on U.S. students' interest in their
opinions.

The students who were unsure if they were supported by their instructor and other students counted for 44% and 42% respectively. The difference in the frequencies between feeling supported and unsupported by other students was not big. Figure 3 demonstrates students' perceptions on receiving the support from other students in this project.
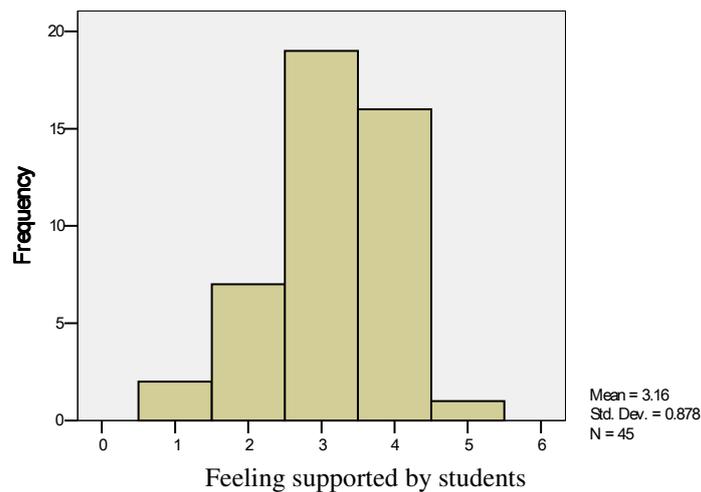

Fig. 3. A frequency distribution of students' perception on
feeling supported by fellow students.

Almost 69% of the students perceived gaining cross-cultural communication skills by participating in this project. Sixty two percent of them reported that they had developed a

better understanding in other cultures while 55% said they had learned more about their own cultures from this experience. Figure 4 shows the survey result of students' perception on gaining cross-cultural communication skills.
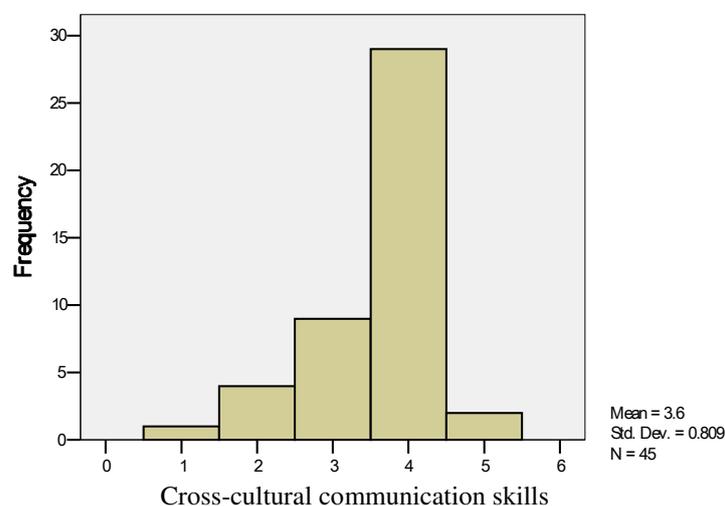

Fig. 4. A frequency distribution of students' cross-
cultural communication skills.

The Pearson correlation was performed to determine the inter-correlation among the four constructs of (1) students motivation to succeed in this project, (2) the increase of confidence level in communication through this experience, (3) the development of a learning community, and (4) the acquisition of cross-cultural communication skills. These four constructs were evaluated by summating the scores of the respective sets of questions described previously. The analysis suggested statistically significant correlations between (a) students' motivation to succeed in this project and the acquisition of cross-cultural communication skills, $r(33) = .517$, $p < .001$. The effect size is large according to Cohen (1988); (b) the development of a sense of community and the acquisition of cross-cultural communication skills, $r(33) = .630$, $p < .001$. The effect size is large according to Cohen (1988); (c) the acquisition of cross-cultural communication skills and their increase of confidence level in communication through this experience, $r(33) = .427$, $p < .005$. According to Cohen (1988), the effect size is medium-large; (d) a sense of community and the motivation to succeed, $r(33) = .336$, $p < .005$. The effect size is medium according to Cohen (1988); and (e) the confidence in communication and a sense of community, $r(33) = .357$, $p < .005$. The effect size is medium according to Cohen (1988).   Table 1 summarizes these findings.

The positive correlations suggested the following:

- The more motivated students were in project participation, the better they acquired cross-cultural communication skills and became more cross-culturally aware.

- The more students developed a sense of belonging to the learning environment, the more likely they acquired cross-cultural communication skills and gained cross-cultural awareness.
- The more confident students became in communication through this project, the more likely they acquired cross-cultural communication skills.
- The more students felt belong to this online learning community, the more likely they were motivated to succeed in this project.
- The more students felt belong to this learning community, the more confident they became in communicating with others.

Table 1

Inter-correlations of Cross-cultural communication skills, motivation to succeed, confidence in communication, and sense of community

Measure	1	2	3	4
1. Cross-cultural communication skills	---			
2. Motivation to succeed in project	.517**	---		
3. Confidence in communication	.427*	.102	---	
4. Sense of community	.630**	.336*	.357*	---

Note. Listwise $\underline{N}$ = 35
** $\underline{p}$ < .01, two tailed.
 * $\underline{p}$ < .05, two tailed.

In trying to understand how students' self-perceived English proficiency was related to their acquisition of cross-cultural communication skills and confidence in communicating with others, another correlation statistical analysis was performed. There was a significant positive correlation between students' self-perception about their competency in English with their confidence in communication, r (40) = .542, p < .01. The effect size is large, according to Cohen (1988). No statistical significance was found between students' self-perceived English proficiency with their acquisition of cross-cultural communication skills. It showed that the better the students considered their ability to read, write and speak in English, the more confident they were in communicating with others. However, their self-perception about their English language skills was not related to their learning to communicate cross-culturally.   Figure 5 shows how Taiwanese students rated their overall ability in English. The variable "overall ability in English" was summated from students' ratings on their self-perception in English reading, writing and speaking abilities. Higher means indicated more positive responses to the survey questions. Only a small number of the students thought their ability in English communication was good or excellent, which was represented by a rating scale of 4 or 5 as

responses to the original questions.   A number of the students showed no opinions to these questions.

The correlations among students' self-perceived English proficiency, their cross-cultural communication skills and their confidence in communication are summarized in Table 2.
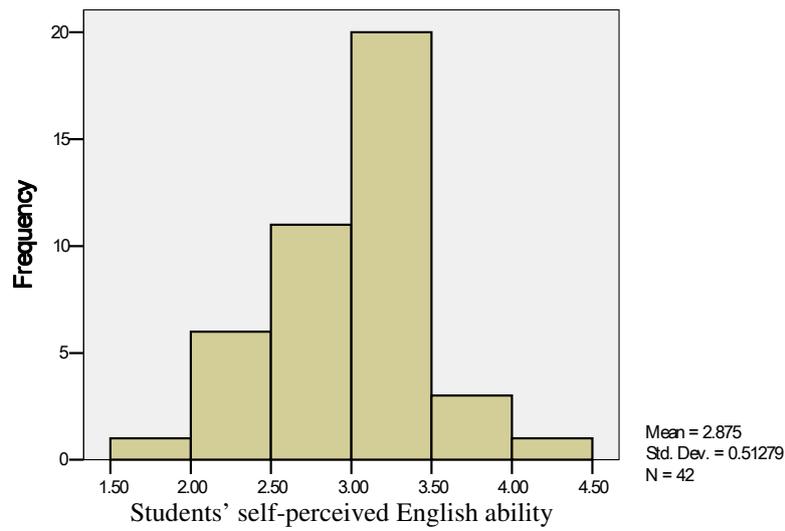

Fig. 5.   Mean distribution of students' self-perceived English skills.

Table 2
Inter-correlations of students' self-perceived English ability, cross-cultural communication skills, and confidence in communication

Measure	1	2	3
1. English ability	---		
2. Confidence in communication	.542**	---	
3. Cross-cultural communication skills	.166	.230	---

Note. Listwise $\underline{N} = 42$.
**$\underline{p} < .01$, two tailed.

Phase III

Through the final survey, 74.5% of the students agreed that this experience helped them organize their thoughts. A majority of them, represented with a high percentage of 80.9, reported that they had learned to make group decisions through this experience. Besides, 80.8% of them indicated that they had learned to deal with differences among the group

members. In addition, 89.4% of the class agreed that they had learned about how to communicate with others through the project. Interestingly, 68% of the group revealed that they felt more comfortable sharing their opinions online than in a regular classroom.

After performing the Pearson correlations on the outcomes of the final project, several statistical significances were found. There were positive correlations between the following concepts: (a) enjoying working together for the final project and that the group work helped organize individual thoughts, $r(45) = .46$, $p < .01$, with a medium-large effect, according to Cohen (1988); (b) enjoying working together for the final project and learning to communicate with others, $r(45) = .49$, $p < .01$, with a large effect size, in accordance with Cohen (1988). Other outcomes that have high positive correlations were: (c) learning to communicate and that the group work helped organize one's own thoughts, $r(45) = .59$, $p < .01$; (d) enjoying working together and learning to make group decisions, $r(45) = .57$, $p < .01$; and finally, between (e) gaining confidence in interpersonal communication and learning to communicate with others, $r(45) = .53$, $p < .01$. The effect sizes are large, according to Cohen (1988).

In determining the correlations among the outcomes of the final group project and the acquisition of cross-cultural communication skills, motivation to succeed in the project, the confidence in communication, the development of a sense of community, and students' self-perceived English proficiency, a statistical significance was found between the concepts of learning to communicate through the final project and the acquisition of cross-cultural communication skills, $r(45) = .57$, $p < .01$, the effect size is large, according to Cohen (1988). It seemed that the more the students felt they were learning to communicate in the final group project, the better they were in acquiring cross-cultural communication skills. The concept of feeling more comfortable in sharing online than in class was significantly associated with learning to deal with the differences among group members through the final project, $r(45) = .56$, $p < .01$, with a large effect size, according to Cohen (1988).

When students were surveyed on the most memorable experience from this cross-cultural project, they gave mostly positive responses. Their statements were coded into three categories: their perceptions about the U.S. students, the content or skills learned from participating in this project, and the interactions with their U.S. counterparts. Those answers with similar contexts were categorized together. Many of them indicated that this project had challenged their stereotypes about the U.S. cultures and people. For example, the Taiwanese students had discovered more similarities than differences between the American students and themselves. They also thought that the U.S. students were more motivated, participative, and open in sharing their opinions during the collaboration. From this cross-cultural collaboration, the students learned about communication skills through various cultural perspectives. They also learned about proper etiquettes in conducting online communications and working in groups. With regards to interacting with the U.S. students, many of the Taiwanese students felt they had made friends with them by sharing interests and opinions. However, they regretted for not having all of the U.S. students'

photographs available on the project web site.   The coding chart of the students' cross-cultural experience is provided in Table 3.

Table 3
Taiwanese students' perceptions about the cross-cultural project

Item number	What the students learned		
	The U.S. students	Content/Skills learned	Interactions with the U.S. students
1	were interesting	communicating via the internet	feeling free in interacting
2	were kind/polite	respecting other's opinions	being able to share
3	were responsive	American cultures	fun
4	were participative	communication skills	asking and answering questions
5	asked good questions	being open-minded	learning about each other
6	were similar to the Taiwanese students	examining their beliefs	sharing interests
7	presented different cultural perspectives	perceptions from those of different cultural backgrounds	making friends
8	communicated well	learning about their own culture	did not like questions left unattended
9	were open-minded	how to deal with conflicts	regretting for not seeing all of the U.S. students' pictures posted on the joint website
10	worked hard on the project	learning to resolve conflicts with parents	
11	were eager to learn	challenging stereotypes about Americans	
12	were patient	courtesy in online communication	
13	were thorough in providing answers	comparing cultures	
14	were inspirational	English expressions/slang	
15	gave lively discussions	working together as a group	
16	wrote informally		
17	presented individualized thoughts		
18	stood for what they believed in		
19	were willing to share		
20	motivational		

Discussion

The fact that only 42% of the students actually read the instructions for online participation prior to their discussions indicated that most of them were not clear on what was required for a successful online collaboration. Also, only 51% of them spent time to browse the instructors' prompts as required before posting, despite the fact that 57.8% of them knew where to locate these messages. It showed that they did not fully understand the expectations for the collaboration. One of the false assumptions about online learning that Lim (2004) cautioned us to guard against was that learners had the learning strategies. The fact that these students failed to follow through the participatory requirements suggested that they did not have the desired attitude for learning. It also showed that collaborations need to be structured and organized (Felder, 2001). Assuming that the students would understand the directions well with announcements in class or e-mail messages afterwards was apparently not sufficient.

The reason why most of the students did not enjoy reading the messages on the discussion board might be related to their language barrier. As Figure 1 shows, only a small number of students rated their English proficiency high when asked about their self-perception on it. Other researchers also found language barrier an inevitable disturbance to a satisfying cross-cultural collaboration (Daniel et al, 1998 & Lebaron et al, 2000). Having noticed this problem while the project was in progress, the Taiwanese instructor constantly provided positive feedback to the students after they had successfully completed an online task. It was reinforcing that 65% of the group felt more confident in communicating in English after participating in this project.

Even though the students did not feel more comfortable in sharing opinions in this class as they did in other classes, a number of them felt more comfortable in expressing their thoughts than they had been in the previous semester. Their training in English public speaking from the previous semester might have benefited them in achieving this.

One of the aims of this study was to help students develop a sense of community. Two of the indicators of the formation of a learning community in this study were defined by students' feeling supported by the instructors and their fellow students. Particularly, those who did not feel supported or those who were uncertain about whether or not they were supported by their fellow students accounted for 58%. As some students pointed out, the physical distance between the two groups and the time difference had somehow created a division in stead of unity among them. Daniel and colleagues (1998) experienced similar challenges which affected the participants' motivation in their multinational project. As this problem may be inherent with asynchronous activities, discussion topics built around students' interest may be included besides the task-driven ones. Increasing student interactions may be achieved by adopting more structured participatory criteria for both groups. Some researchers suggested building more structures in the design of online learning tasks to promote online interactions (Nicol et al., 2003). In this study, the Taiwanese instructor required more structures for the online interactions than the U.S. instructor did. The two different facilitative styles might have created a discrepancy in students' interactive styles, frequencies in participation, and outcomes.

There were more students who reacted positively to the cross-cultural experience than those who did not. Overall, they felt that they had increased cross-cultural awareness and acquired communication skills. Since the development of a sense of community was positively related to the acquisition of cross-cultural communication skills, a modification of the project design to induce more satisfying interactions can perhaps increase students' level of success in learning about cross-cultural communication.

The positive association between students' acquisition of cross-cultural communication skills and their learning about interpersonal communication through the group project concurred with what was proposed by Osborne and colleagues (1996) that there was a demonstrated link between interpersonal and cross-cultural communication. Similarly, Goldstein (1998) stressed the importance of interpersonal skills for cross-cultural interactions.

The final project proved to be a success in allowing the students to practice interpersonal communication skills as well as learning to deal with differences among group members. The phenomenon that nearly 70% of students felt more comfortable in sharing opinions online than in a regular classroom setting was investigated for possible associations with other phenomena discussed in this study. However, no statistical significant relations were found between students' feeling more comfortable in expressing online and the variables investigated with the mid-term and final surveys. Some possible connections with this phenomenon can be further explored in a replicated or follow-up study.

Challenges

One of the challenges that affected the outcomes of this study was the difference in semester schedules. Students in Taiwan did not begin the semester until the last week of February. The first class meeting did not occur until the first week of March. By that time, the students in the U.S. had already met for over seven weeks into the semester. This had given the U.S. group more time to become familiarized with the topics for discussions. The Taiwanese group, on the other hand, had to catch up to get ready for the online collaboration starting right at the beginning of the semester.

In the first discussion when the students introduced themselves to one another, there was an obvious excitement and anticipation for this cross-border collaboration on both sides. The excitement weaned off a little after the first week when the students from the U.S. suddenly became on-task to interview their Taiwanese counterparts as the deadline for their final assignment was approaching. At this stage, the Taiwanese group was still trying to acquaint themselves to the new course and the project. Thus, they became overwhelmed. In completing the final project, the U.S. students divided themselves into five topic groups for online discussions. Each group would choose only one area to work on throughout the semester. On the other hand, the Taiwanese students were anticipated to participate in the discussions of all five topics. At this point, the instructors realized that there was a misunderstanding in each other's intentions about these online forums. The Taiwanese instructor had planned to have the students participate in all discussions on a weekly basis. The U.S. instructor had envisioned the students working with their own groups on their topic area throughout the semester. The lack of unity in structuring the format of the discussion had created some confusion. The solution to this problem was to readjust the goals. First, the due date for the final project was postponed to allow the U.S. students to participate in all of the discussions. Next, the topic-driven discussions were organized on a weekly basis. Finally, the U.S. students were asked to tone down their task-oriented discussions to re-focus on the relationship building of the learning community.

The life situation of the Taiwanese students influenced their project experience. This group of students was focused on the preparation for a college matriculation exam while this project was in progress. In Taiwan, graduates of a five-year specialized program

compete by passing an exam to enter the next level of higher education. It was difficult to motivate these students to study and participate with desirable attitudes while their minds were set on their immediate goal. Under this circumstance, they chose to participate minimally.   For example, most of the discussion messages would arrive on the due dates. This last-minute work indicated a lack in involvement. According to the mid-term survey, a majority of the Taiwanese students had computers and internet connections at home. They also shared that finding computers to use on campus had not been a problem. The less than satisfactory involvement in this collaboration was clearly a motivational issue, not a problem of lacking computer access. In spite of this, more laboratory hours were reserved to allow more class time for collaborative work.

It also seemed that students were unfamiliar with appropriate online communication etiquettes. For example, students felt frustrated when they did not hear from other participants immediately. Some of the Taiwanese students were confused by the U.S. students' spelling and grammatical errors in addition to their usage of colloquial terms. A "Netiquette" section was added to the class web site to provide students with guidance in conducting appropriate online communication.

One thing to be considered for the future organizations of this type of projects is how cultural differences between the students of different countries, between the students and instructors, and possibly between the instructors may influence the project outcomes. For example, we observed that the Taiwanese students preferred clear guidance which transpired to step-to-step instructions on how to participate in the project. To accommodate this need, the instructors divided each activity into several units to allow the Taiwanese students to pace along. Compared to the American students, the Taiwanese group seemed to want more assurance from the instructors on their class performance and project participation. It was observed that under the traditional didactic educational system in Taiwan, an adjustment period was needed before the Taiwanese students could start to feel comfortable in a more autonomous way of learning. An orientation course which introduces the Taiwanese students to active learning would be helpful in preparing them for participating in interactive projects. Also, because the Taiwanese instructor is familiar, experienced and identified with the commonly adopted American educational system, it was important for this instructor to not overlook how the cultural values of the Taiwanese students' might have affected students' behaviors in the participation of cross-cultural projects.

The interface of ICA was not intuitive. Not only that the navigation of discussion was difficult, the function for threaded discussions was not satisfactorily interactive. The ICA, short of a function in tracking the posting activities and identifying incoming messages, made the monitoring of online discussions extremely time consuming. For a cross-national project like this to thrive, we need to identify a better interactive communication tool with technical assistance readily available.

Conclusion

According to the findings from this study, an attention should also be drawn to how students' motivation level can be improved to increase their level of success in learning cross-cultural communication skills. In this study, motivation referred to primarily reviewing the messages posted by others, following the instructors' prompts, and finishing the assigned reading prior to joining the discussions. A rubric can be incorporated to induce these desired outcomes. This concept was supported by Lim (2004), who suggested setting guidelines for participation.

Creating synergy is the goal for our next collaboration. This will require the instructors to agree on a unity in structuring online activities. Precisely, the contents, participative guidelines, and schedules of the activities should be coordinated. We also need to challenge some Taiwanese students' misperception about these online discussions. Obviously, some of them associated the discussions with conversational "chat rooms", which were without an embedded purpose. According to Lim (2004), establishing goals for online activities was critical in ensuring effective discussion and satisfactory learning outcomes. Also, to achieve a better success in similar projects, a more accommodating institutional policy for computer laboratory reservations would be helpful in addition to having technical assistance available for the maintenance of the project.

A separate social colloquium can be developed to facilitate a stronger sense of community. As Lim (2004) suggested, learners were more likely to be engaged in the learning process when familiarity was developed. Incorporating virtual tours of local scenes and students' life can also be used to enhance the cultural exchange, with the availability and accessibility of multimedia tools.

To alleviate Taiwanese students' anxiety in communicating in English, we will generate strategies to foster collaboration (Bannon, 1995). We believe that improving the development of a learning community can reduce Taiwanese students' apprehension in communicating in English. A possible way to facilitate this can be including forums which feature the cultures of Taiwan. Doing this may enable non-native English speakers to take advantage of their familiarity with and knowledge of their own cultures to initiate active discussions with their foreign counterparts. Likely, it may help elevate their confidence in cross-cultural interactions.

Although the study limits to a small sample, the lessons learned can perhaps offer insights to other researchers who wish to conduct similar projects. Despite the challenges that need to be resolved for future improvements, the participants from Taiwan expressed a satisfaction in learning cross-cultural communication skills and contents, which was one of the main goals of this project. This project also helped the Taiwanese students connect to their own cultures when they interacted through culturally driven discussions. A future comparative study focusing on the attitudinal and motivational aspects of cross-cultural differences would be worthwhile. The results of this study also yield potential explorations of how interpersonal skills and cross-cultural communication may influence

each other, how the development of a sense of community may interact with the acquisition of cross-cultural communication, and what make some students feel more comfortable in sharing online than in a traditional classroom setting.

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