

## **The Effect of Cross-Cultural Videoconferencing on EFL Learners' English Production**

Mariko Eguchi

University of Shimane, Japan

### **Abstract**

Unlike English as a second language (ESL) learners, English as a foreign language (EFL) learners do not have genuine interaction in English with native English speakers in their daily lives. This environment prevents them from receiving comprehensible input and output, often leading to poor English proficiency among EFL learners. As a way to improve the situation, EFL researchers are eyeing the benefits of videoconferencing as it can bring English speakers into the classroom. However, previous literature on videoconferencing in the EFL context has not investigated the role of information gap as a motivator for students to engage in active English discussion. The present study investigated whether cross-cultural videoconferencing is more effective for EFL learners' English production than uni-cultural videoconferencing by comparing a cross-cultural videoconferencing discussion between Japanese and Mexican students with a uni-cultural videoconferencing discussion between two groups of Japanese students. The results indicated that the Japanese students' English production as well as negotiation of meaning increased when they talked with the Mexican students. The findings are consistent with the hypothesis that information gaps between Japanese and Mexican cultures are an important factor for generating active discussion in English, and this study suggests that cross-cultural videoconferencing can be an effective tool for EFL learning.

### **Introduction**

One of the challenges for English as a foreign language (EFL) learners is the lack of face-to-face interaction in English with native speakers of English. Unlike English as a second language (ESL) learners, EFL learners in contexts such as Korea, Japan, and China rarely have an opportunity to converse with English speakers in their social settings. Since there are few native English speakers in their societies, these learners treat English as an academic subject rather than as a tool of daily communication. They memorize English using books, CDs, or DVDs. They practice manipulating English forms through drills in the classroom. They do communicative activities with their peers to accomplish communicative goals they are given by their instructors.

However, the lack of real-time close interaction in English poses serious problems for EFL learners in terms of input and output. EFL learners who study English as a subject for exams do not have an environment in which they communicate meanings in English.

According to Krashen (1985), learners acquire language through a sufficient amount of comprehensible input, and this is the single most important part in acquiring a second or foreign language. Without comprehensible input, or linguistic exposure slightly higher than the learner's own ability level, learners would not be able to understand the meaning of a message. However, the above-mentioned EFL environment does not provide them with enough of it. It is true that they can receive input from stories and movies in the form of books and DVDs. However, extensive input is not always comprehensible for EFL learners without face-to-face interactions with English speakers who can modify their speech to make the input comprehensible. Another important principle of second language acquisition is comprehensible output, advocated by Swain & Lapkin (1995), which helps learners advance their second language proficiency by enabling them to notice their linguistic problems. The comprehensible output hypothesis states that learning occurs when learners realize that they cannot make themselves understood. However, in a social context where English speakers and English interactions are rare, an EFL learner lacks opportunities to produce output or test comprehensibility using feedback from English speakers.

Japanese English learners represent a good example of these challenges. They study English for six years throughout junior and senior high school, but their English proficiency is generally very low. Japan is a monolingual country containing very few English speakers. In order to increase the English proficiency of Japanese college students, the Japanese government and individual universities are now encouraging college students to study abroad. If they live and study in English-speaking countries, they will have opportunities to interact with English speakers and improve their English proficiency. However, this option is costly, and few students can afford it.

One possible solution is to bring English speakers into the classroom via videoconferencing. Videoconferencing is a synchronous communications technology that allows people in different locations to meet and talk to each other. High-quality audio and video enable participants to feel almost as if they are interacting face to face in the same room.

The educational potential of videoconferencing has received much recent attention in EFL research. Shiozawa (2005) conducted a survey after English videoconferencing sessions between participants in Japan and Thailand, and reported that the learners were motivated to communicate in English and felt their English skills improved. Owada (2005) designed a course involving videoconferencing between Japan and Korea and reported that more than 80% of the students felt their speaking and writing abilities improved after videoconferencing. Lin (2007) found that Taiwanese participants reported improved language skills after videoconferencing sessions with Japanese partners. Videoconferencing seems to benefit EFL learners' English abilities without requiring that they leave the classroom.

However, no study has explored why videoconferencing positively increases English ability. Are participants so excited with the new technology that they want to speak English? Do they improve because they are emotionally attracted to the counterparts in

a foreign country and feel like talking with them in English? Or are they so curious about topics addressed during videoconferencing discussions that they speak English a lot? Could it be information gaps created by cross-cultural encounters that encourage the participants to engage in active discussion?

This study intends to explore the effect of information gaps created by cultural differences on EFL learners' English production. Because it can connect people in different cultures in real-time interaction, videoconferencing can provide natural information gaps. When the participants discuss cultural differences and similarities, they will notice one another's unexpected reactions and differing perspectives. Such cross-cultural experiences can increase their willingness to seek more information. This process will promote active discussion in English and ultimately facilitate language learning.

The function of information gaps as a motivator is widely known in communicative language teaching. According to Nunan (1989), "small-group, two-way information gap tasks" (p. 64) are effective to motivate students—even less confident students—to engage themselves in speaking. Klippel (1984) states that active language learning can be induced by presenting students with missing or muddled information: discrepancies can arouse the curiosity of a student, and learning is most effective when the learners are actively involved in the process. Indeed, curiosity has been recognized as an important motive that drives people to learn new things, and such curiosity can be stimulated when students are aware of gaps in knowledge (Loewenstein, 1994).

The purpose of the present study is twofold. The first is to describe a course called "Global Understanding" (GU), which is a course where college students from around the world meet online synchronously, mainly via videoconferencing, to discuss topics related to their lives in order to deepen cross-cultural understanding. The second is to report on a study that tested whether cultural differences work as a motivator for students to engage themselves in active discussion, assuming active discussion will lead to learning English. A small-scale comparison was made between a cross-cultural discussion and a uni-cultural discussion, both of whose data were collected via videoconferencing.

### **Description of The Global Understanding course**

The Global Understanding course is a cross-cultural understanding course in which students around the world discuss issues online synchronously. The first pilot of GU was conducted in 2003 by East Carolina University, US (Chia, Poe, & Yang, 2011). Since its success, the number of partners has grown to include more than 40 institutions from 26 countries across the world. The University of Shimane, Japan, joined the network in January 2010.

Because of the importance of visual cues during social interaction, Chia et al. (2011), the originators of the course, decided to use real-time videoconferencing technology to bring face-to-face cross-cultural experience into the classroom of each partner university. They also decided to use Internet Relay Chat (IRC) that supported one-to-one synchronous

text discussion. IRC allows each student to deeply connect to his or her partner, complementing the limitations of group video discussion.

GU invented a novel method to overcome the differences in the academic calendars of the partner institutions. Not all universities in the world start the first semester in September. Some start in August, or October. For example, Spring Semester in Japan is between April and July, while it is between January and May in US. These differences limit bilateral collaboration between Japan and US because there is only one month of overlapping schedule. East Carolina University, on the other hand, created a system for each partner to be linked with three partners during the semester, taking advantage of the calendar differences. For example, the first 4-5 videoconferencing links might be paired with United States, then the second 4-5 links with China, and the third 4-5 links with Russia. All these countries have different academic calendars. In this way, a country like Japan whose academic calendar is very different from other countries can participate in the global project.

Since the core goal of GU is to help students become more tolerant of cultures around the world, improving English ability is not the focus of the course. Nonetheless, GU provides an ideal place where EFL learners can learn English, because it is designed to facilitate students' understanding of other cultures through active discussion in English. In each set of 4-5 links, the first link is devoted to getting to know each other better: students introduce each other, and instructors give lectures about each culture. During the subsequent links, the students lead 30-minute group discussions about topics such as college life, family, traditions, religion, stereotypes, and prejudice. Then they continue to discuss individually using IRC. The whole class is divided into two groups, A and B. While A Group students sit in front of the camera, B Group students text-chat in front of the computer. After 30 minutes, they change places. They repeat the process in the subsequent links. After engaging in 4-5 links with one country, they meet another country for another round of 4-5 links. The students are absorbed in talking about topics, and they forget that they are also studying English. By the end of the semester, they have become familiar with the discussion questions and have gained fluency in speaking about them in English.

GU also has a mechanism to encourage students to communicate outside of the classroom. Students are required to communicate with their partners via email two or three times a week. They are assigned to work on collaborative projects with their partners. The students must work together to complete their joint projects, the process of which increases English interaction between partners outside of the classroom.

A great feature of GU in light of foreign language acquisition is that it provides participants with natural information gaps. Since the students are matched with others from a different cultural background, they are more likely to ask each other questions. They have enough in common to feel familiar with each other as young college students, as well as different enough to be curious about each other as foreigners. Such natural information gaps lead them to have more comprehensive input and output through negotiation of meaning, which is considered to promote leaning English.

## Method

### Participants

Eight Japanese students took GU as an elective course in Fall 2012. They were three juniors and five seniors, aged between 20 and 22, four of whom were female and four male. All of them had received more than nine years of English education at school, but their English listening and speaking abilities varied from very limited to fluent. They were all born and raised in Japan. The eight Japanese students were split into two groups; Group A consisted of one female student and three male students, while Group B consisted of three female students and one male student.

There were seven Mexican students in GU at Universidad de Monterrey, Mexico in Fall 2012. The three students in that class's A Group were participants in this study. There were two female students and one male student, ranging from freshmen to seniors, aged 20 to 22 years old. They were all born and raised in Mexico but were fluent and accurate speakers of English, having received bilingual education.

### Design and Procedure

As an exploratory study, a cross-cultural videoconferencing discussion between the Japanese and the Mexican students was compared with a uni-cultural videoconferencing discussion between the two groups of the Japanese students.

As mentioned before, GU partner universities typically have 4-5 links in a semester. The first meeting is for the students to get to know each other by introducing themselves and receiving lectures from the instructors. The second link focused on discussion of college life. This study recorded the third link, when the Mexican and Japanese students were scheduled to discuss the topic of family and traditions. First, a uni-cultural videoconference between A Group and B Group of the Japanese students was recorded. They engaged in a discussion about the issues of family and traditions in Japan using two videoconferencing units in two different rooms in the same building. Then, about an hour after the local videoconference, a cross-cultural videoconference between A Group of the Japanese students and the Mexican students was recorded. They discussed the issues of family and traditions both in Japan and Mexico. Both recordings lasted for 25 minutes.

Both the Japanese and Mexican students lacked a prior understanding of the families and traditions of the other culture. The Japanese students listened to a short lecture about Mexican geography and general information before the link, while the Mexican students spent two hours reading and giving presentations of general facts on Japan that they had found on the Internet.

### Hypothesis

It was hypothesized that the Japanese participants would produce more English in the cross-cultural discussion than in the uni-cultural discussion. The cultural differences

between Japan and Mexico would reveal more information gaps, which would encourage the participants to produce more English. They would want to know more about the others, want to explain their views more, and clarify their understanding about the others. Therefore, it was expected that English production and negotiation of meaning by Japanese students would increase when they talked with the Mexican students. In the uni-cultural discussion, on the other hand, Japanese students would produce less English, because sharing the same culture would probably reduce the willingness to elaborate on their opinions or to ask for clarification questions.

### **English Production by the Number of Utterances**

English Production was measured by the number of utterances produced by the students. One utterance is defined as speech given by a student in one conversational turn. One utterance may be a group of a few words, or a group of sentences. In order to count the utterances, the videoconferencing sessions were recorded and transcribed into text data. Each utterance was marked with the initials of the speaker, and the totals were tallied in order to find out who produced how many utterances.

### **Negotiation of Meaning by the Number of Questions Asked**

Negotiation of meaning was measured by the number of questions asked by the students. One question is defined as speech given by a student in a form of question. Questions are recognized by rising intonation or inverted subject-verb position. Questions include standard discussion questions provided in the GU manual. The students exchanged questions such as “At what age do children leave their parents’ house?” They also asked spontaneous questions to clarify or confirm meanings.

## **Results**

### **English Production by the Number of Utterances**

Table 1 shows the number of utterances in the Japanese uni-cultural discussion by the two groups of students.

Table 1  
*Number of Utterances in Uni-cultural Discussion*

A Group		B Group	
T	19	N	3
Mi	6	Yr	9
Ma	1	Mr	8
D	6	Yk	3

In the uni-cultural exchange, the total numbers of utterances in Groups A and B were 32 and 23, respectively. The average numbers of utterances per member of each group were

8 and 6, respectively. There was a lot of side conversation in Japanese among the participants of each group. The utterances spoken in Japanese were not counted. Student T was the most fluent, and he spoke a lot in English, dominating the rest of the members.

The number of utterances in the cross-cultural discussion between the Group A Japanese students and the Mexican students is shown in Table 2.

Table 2  
*Number of Utterances in Cross-cultural Discussion*

Japanese		Mexicans	
T	19	L	39
Mi	18	M	32
Ma	2	J	33
D	1		

In the cross-cultural exchange, the total numbers of the utterances are 40 for the Japanese and 104 for the Mexican students. The average number of utterances for the Japanese students was 10, while that of the Mexicans was 34.

Compared with the number of the Japanese students' utterances in the uni-cultural exchange, the results are mixed. At the level of averages, the cross-cultural discussion seemed to increase the number of students' utterances from 8 to 10. However, on the individual level, the student T showed no change, Mi increased her output a lot, Ma showed almost no change, and D decreased his output.

### **Negotiation of Meaning by the Number of Questions Asked**

The number of questions asked in the uni-cultural discussion between the two groups of Japanese students is shown in Table 3.

Table 3  
*Number of Questions Asked in Uni-cultural Discussion*

A Group		B Group	
T	5	N	0
Mi	0	Yr	0
Ma	0	Mr	0
D	0	Yk	0

In the uni-cultural exchange, the total numbers of questions asked in each group were 5 and 0. Group A and B averaged 1 and 0 questions, respectively. Student T introduced the questions described in the GU manual, and everyone took a turn giving their own

answers. They did not raise any spontaneous questions in English. They asked questions in Japanese, but those questions were about how to say ideas in English.

Table 4 shows the number of questions asked in the cross-cultural discussion by the Group A Japanese students and the Mexican students.

Table 4  
*Number of Questions Asked in Cross-cultural Discussion*

Japanese		Mexicans	
T	6	L	13
Mi	5	M	7
Ma	1	J	6
D	0		

In the cross-cultural discussion, the total numbers of questions asked were 12 for the Japanese and 26 for the Mexican students. The average was 3 for the Japanese students and 9 for the Mexican students.

Compared with the number of the Japanese students' questions in the uni-cultural exchange, the result seems to show a positive increase. In the cross-cultural discussion, students' average number of questions increased from 1 to 3. On the individual level, the students T and Ma showed an increase of 1. Mi had an increase from 0 to 5 questions, but D was quiet in both cultural settings.

Table 5 shows the total number of utterances and questions by the Japanese students in both settings. In terms of utterances and questions asked, the numbers increased in the cross-cultural setting compared with those in the uni-cultural one.

Table 5  
*Total Number of Utterances and Questions Asked by Japanese Students*

	Uni-cultural Setting	Cross-cultural Setting
Utterances	32	40
Questions	5	12

## Discussion

The data showed that the Japanese participants produced more utterances and questions when they spoke with Mexicans than with their Japanese peers. In the uni-cultural discussion, they produced 32 utterances and 5 questions, while they produced 40 utterances and 12 questions in the cross-cultural discussion. These results are congruent

with the information gap theory of second language acquisition. They seem to support the hypothesis that Japanese students would produce more language and negotiate meaning more when they interact with a culturally different group of people than with those who share the same culture.

However, it is too early to conclude that the increased English production and negotiation of meaning by the Japanese participants were triggered by their perception of missing information and their willingness to fill the gaps. There may be other possible explanations for the participants' enhanced speech production in the cross-cultural interaction. For example, they might have felt more comfortable with the Mexican students than with the other Japanese students, as the Japanese students perceived the Mexicans as more outgoing and relaxed. Therefore, the Japanese students' perceptions of the Mexican students and their own Japanese peers must be investigated.

This study has a number of limitations. First, it used a small number of participants, and only one combination of cultures was compared. It is possible that Japanese students were affected by the energy and speaking speed of the Mexican students, not by information gaps created by cultural differences. If Japanese are paired with people who produce fewer words, they may produce less English. In order to find out why cross-cultural videoconferencing is effective in EFL learning, more studies should be conducted incorporating a larger number of participants and a variety of combinations of cultures. In addition, a detailed investigation of the language data should be conducted to find out what type of information gaps seem to cause what type of negotiation of meaning.

Although the results of this study cannot be generalized because of its small sample size and the limited variety of cultures, this study still supports the effectiveness of cross-cultural videoconferencing in English on EFL learning in light of English production and negotiation of meaning. Cross-cultural videoconferencing in English is an excellent opportunity for English learners to have real-time interaction with English speakers. With the help of videoconferencing that supports synchronous face-to-face interaction, EFL learners can increase comprehensible input and output from a variety of English speakers in the world without leaving the classroom. International videoconferencing courses in English such as GU satisfy the need of EFL learners for authentic communication stated by Klippel (1984):

For learners who are studying English in a non-English-speaking setting it is very important to experience real communicative situations in which they learn to express their own views and attitudes, and in which they are taken seriously as people. (p. 5)

In the age of globalization, the ability to communicate in English is important to exchange ideas and overcome stereotypes and prejudice. A long-term study abroad in an English speaking country is the ideal way for EFL learners to acquire English skills, but the financial burden is too big a barrier for most learners. Bringing English speakers into the classroom to discuss cultural differences is a cost-effective alternative method, and programs like GU offer innovative new ways to incorporate authentic cross-cultural

interactions into foreign language learning. The examination of a wider variety of cultural combinations could provide additional insights into the value of videoconferencing and other technologies for communicative language learning. Indeed, teaching English through synchronous face-to-face English interaction may one day be a norm for twenty-first century EFL education.

## References

- Chia, R., Poe, E., & Yang, B. (2011). History of Global Partners in Education. *Global Partners in Education Journal*, 1, 3-7.
- Klippel, F. (1984). *Keep talking: Communicative fluency activities for language teaching*. Cambridge: Cambridge University Press.
- Krashen, S. (1985). *The input hypothesis: Issues and implications*. Torrance, CA: Laredo Publishing Company.
- Lin, C. (2007). EFL college students' perceptions of video-conferencing-assisted English learning. *English Teaching and Learning*, 31, 77-116.
- Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretations. *Psychological Bulletin*, 116, 75-98.
- Nunan, D. (1989). *Designing tasks for the communicative classroom*. Cambridge: Cambridge University Press.
- Owada, K. (2005). The effective use of videoconferencing in cross-cultural English language instruction. *Proceedings of the 9<sup>th</sup> Conference of Pan-Pacific Association of Applied Linguistics*. Retrieved from the Pan-Pacific Association of Applied Linguistics (PAAL) website:  
<http://www.paaljapan.org/resources/proceedings/PAAL9/pdf/Owada.pdf>
- Shiozawa, Y. (2005). Strategic use of videoconferencing in intermediate EFL. *Journal of the Faculty of International Studies*, 16, 103-114. Kanagawa; Bunkyo University, Faculty of International Studies.
- Swain, M., & Lapkin, S. (1995). Problems in output and the cognitive processes they generate: A step towards second language learning. *Applied Linguistics*, 16, 371-391.

## About the Author

**Mariko Eguchi** is a professor of English language education at the Faculty of Policy Studies, the University of Shimane, Japan. She received her BA and MA in British and American Literature from Seikei University, Tokyo, and MA in Communication and Theatre from the University of Illinois at Chicago. She has been teaching the Global Understanding, a cross-cultural understanding course through videoconferencing, since 2009. She has been editor-in-chief of Real Reporter, an international English language newspaper since 2003. She can be reached at [ma-eguchi@u-shimane.ac.jp](mailto:ma-eguchi@u-shimane.ac.jp). She would like to thank Professor Ana Cristina Salinas from Universidad de Monterrey as well as her students for their providing information. This research was supported by JSPS Grants-in-Aid for Scientific Research (KAKEN-HI), (FY2012-FY2013, Grant Number 24520634, Principal Investigator: Mariko Eguchi)