

島根県立大学 総合政策学会
『総合政策論叢』第30号抜刷
(2015年11月発行)

The Effect of Cross-cultural Videoconferencing on EFL Learners' Oral Fluency

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Abstract

This study investigated whether cross-cultural videoconferencing improves EFL learners' oral fluency due to natural information gaps and English only audience brought by videoconferencing. To test this hypothesis, Japanese students' speaking rate in cross-cultural discussion was compared with their rate in uni-cultural discussion. In a uni-cultural exchange on "Family," the average speaking rate of Japanese students was 36.9 words per minute (wpm), while in the cross-cultural exchange it was 40.6 wpm. The speaking rate in uni-cultural discussion was not significantly different from that of cross-cultural exchange ($t = -0.457$, $df=5$, $p < 0.667$). Similarly, in a uni-cultural exchange on the "Meaning of Life," the average speaking rate was 30.1 wpm, while in the cross-cultural exchange it was 40.2 wpm. The speaking rate of uni-cultural discussion was not significantly different from that of cross-cultural discussion ($t = 2.001$, $df=6$, $p < 0.092$), either. Thus, these results were not congruent with the hypothesis, and the factors for this incongruence were discussed.

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Introduction

The Internet is an important educational medium in the field of English as a Foreign Language (EFL). EFL learners, who live in an environment void of English, can gain access to English content through online newspapers, movies, and blogs. In addition, EFL learners can enjoy real communication opportunities in English with native speakers through email, chat, and videoconferencing. Since lack of meaningful exposure to English in their daily lives is one of the biggest issues for EFL learners' inability to learn English effectively (Takase & Otsuki, 2012), EFL teachers are looking to the Internet as a tool to

provide an effective English learning environment.

Among various Internet-based communication tools, cross-cultural videoconferencing is probably one of the most powerful media for improving English language proficiency due to its ability to overcome distance and provide real-time face-to-face interaction. Indeed, cross-cultural videoconferencing could provide EFL learners with four environmental conditions¹⁾ that Second Language Acquisition researchers deem necessary: acculturation, comprehensible input, interaction, and comprehensible output. Videoconferencing, which can connect people living far away from each other, has the potential to promote cross-cultural understanding and positive attitudes toward English speakers by overcoming the distance between learners and English speaking countries. This characteristic is also congruent with Schuman's Acculturation model, which predicts that "the more acculturated a learner can become (that is, the closer to the target society and its members, socially and psychologically), the more successful his or her eventual learning outcomes will be" (Ortega, 2009, p.59). In addition, videoconferencing, which supports real-time interaction and has clear audio and visual images, provides EFL learners with opportunities for a two-way exchange of information in English. In other words, cross-cultural videoconferencing allows EFL learners to gain comprehensible input, interaction, and comprehensible output, which are also important ingredients in successful second language acquisition (Ortega, 2009, p.58). Thus, cross-cultural videoconferencing, if used appropriately, can enhance EFL learners' English proficiency.

This study seeks to investigate the effect of cross-cultural videoconferencing on English learners' oral fluency. This study first discusses the theoretical rationale behind the possible effect of cross-cultural videoconferencing on English learners' oral fluency, and then describes a case in which videoconferencing is used at a Japanese university for a global videoconferencing project called "Global Understanding" (GU), which was initiated by East Carolina University in the United States. Next, this study investigates whether cross-cultural videoconferencing increases the fluency of EFL learners more than uni-cultural videoconferencing. This hypothesis is tested with the speech rate of Japanese EFL learners in both cross-cultural and uni-cultural discussions via videoconferencing in English.

Theoretical Rationale for Cross-cultural Videoconferencing in EFL

Videoconferencing is a tool that allows people in distant locations to converse while viewing each other on monitors. The educational benefits of videoconferencing have been examined by many EFL researchers. Shiozawa (2005) reported that English learners were motivated to communicate in English and felt their English skills improved when they were surveyed following English videoconferencing sessions between Japanese and Thai students. 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. In Lin's (2007) study, Taiwanese students reported that their English language skills improved after videoconferencing sessions with Japanese partners in English.

In addition to the reports of improved English skills by students, there is a small body of literature on the effects of videoconferencing on learning processes and outcomes. Mouhadjer (2013) reported that cross-cultural videoconferencing increased English learners' vocabulary and grammar development by describing detailed instances of their making sense of a new word and extending their inter-language grammar. Eguchi (2014) also analyzed the language data taken from videoconferencing and found that Japanese English learners produced more utterances when they interacted with fluent English speakers than when they interacted with their classmates who shared the same mother tongue. However, the effect of videoconferencing on learners' fluency has not yet been investigated.

It is worth exploring the effect of cross-cultural videoconferencing on EFL learners' fluency due to three features of cross-cultural videoconferencing: naturally created information gaps, availability of an English-only audience, and availability of fluent English speakers.

First, cross-cultural videoconferencing creates information gaps that facilitate a greater willingness to speak. The function of information gaps as a motivator to speak is widely known in communicative language teaching. According to Nunan (1989), "small-group, two-way information gap tasks" (p.64) are effective in motivating students – even less confident students – to engage in speaking. In the cross-cultural videoconferencing setting, information gaps are naturally occurring, because groups of participants do not share common cultural knowledge. When culturally different participants exchange information, it is expected that they will encounter situations where one does not understand the other clearly, causing an information gap. When an information gap occurs, a participant will feel like asking a question to resolve the problem. In this way, oral communication may increase.

Second, cross-cultural videoconferencing provides English learners with a context in which they are forced to speak English. Reluctance to use English in the Japanese English classroom is a serious problem. Although students are encouraged to use English as a communication tool in the classroom, few are willing to speak in English, since speaking Japanese with classmates is easy and natural while speaking English is difficult and awkward. This problem is common in classrooms where students share a mother tongue. Afzai (2013) recommends creating a situation that makes the use of an L2 unavoidable, thus forcing students to speak it. Conversational exchange with an English-only audience via videoconferencing is an effective way to create such a situation. In cross-cultural videoconferencing, English is the only possible language of communication; therefore, speaking English is not only natural, but also unavoidable. Japanese English learners will probably speak a great deal of English when they meet English speakers in

other countries, and thus increase their fluency.

Third, cross-cultural videoconferencing allows English learners to interact with more proficient English speakers. Since Japanese students' English proficiency is typically low (MEXT, 2015), it is likely that they will encounter more proficient English speakers in cross-cultural videoconferencing. This encounter will probably improve Japanese students' fluency based on Communication Accommodation Theory as developed by Howard Giles. This theory states that "individuals adapt to each other's communicative behaviors in terms of a wide range of linguistic-prosodic-nonverbal features including speech rate, pausal phenomena and utterance length, phonological variants, smiling, gaze, and so on" (Giles, Coupland, and Coupland, 1991, p.7). It can be expected that when Japanese EFL learners interact with English speakers whose fluency is higher than their own, they will be more likely to imitate their partners' speaking styles and will eventually increase their English fluency.

Description of the Global Understanding Course

The Global Understanding (GU) course is a college level course in which students around the world discuss cultural topics synchronously via videoconferencing. The pilot GU course was conducted in 2003 by East Carolina University in the United States (Chia, Poe, & Yang, 2011). Since the success of this pilot, the number of partners has grown to more than 40 institutions from 26 countries globally. The University of Shimane, Japan, joined the network in January 2010.

Due to 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 a face-to-face cross-cultural experience into the classroom of each partner university. They also decided to use Internet Relay Chat (IRC), which supports one-to-one synchronous text discussion. IRC allows each student to connect deeply with his or her partner, redressing the limitations of group video discussion.

GU also invented a novel method to overcome differences in the academic calendars of the partner institutions. Not all countries' universities begin their first semester in September. Some begin in August, or October. For example, the Spring Semester in Japan is between April and July, while in the United States, it is between January and May. While limited overlap in schedules could hinder bilateral collaboration between Japan and the United States, East Carolina University created a system for each partner to be linked with three different partners during the semester, thus taking advantage of these calendar differences. For example, Japan can be paired with the United States for the first 4-5 videoconferencing links, with China for the second 4-5 links, and with Russia for the third 4-5 links. All of these countries have different academic calendars and in this way, a country like Japan whose academic calendar differs greatly 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. Nevertheless, GU provides an ideal place where EFL learners can learn English, because it is designed to facilitate students' understanding of other cultures through active interaction in English. In each set of 4-5 links, the first link is devoted to getting to know each other better: students introduce themselves and instructors give lectures about their respective cultures. During the subsequent links, the students lead 30-minute group discussions about topics such as "College Life, Family, Traditions, Religion, Stereotypes, and Prejudice." They then continue to discuss these topics individually using IRC. The whole class is divided into two groups: A and B. While Group A students sit in front of the video camera, Group B 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 a school from one country, they meet with one from another country for additional 4-5 links. The Japanese students get absorbed in discussing topics, and forget that they are also studying English, because the discussion is meaning focused. By the end of the semester, they would have become familiar with the discussion questions²⁾ and would have gained fluency in discussing these topics in English.

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

In addition, GU has a mechanism to increase student interaction. The students are assigned to work together on collaborative projects with their partners until the final link day, and this process increases the level of English interaction between partners, which will eventually improve the EFL learners' fluency.

Methods

Participants

Nine Japanese students took GU as an elective course in the fall of 2013. They consisted of four juniors and five seniors, between at the ages of 20 and 22, five of whom were female and four male. All the students had received more than nine years of English education at school, but their English listening and speaking abilities varied from very limited to intermediate. They had all been born and raised in Japan. The nine Japanese students were split into two groups: Group A consisted of two female and two male students, while Group B consisted of three female and two male students.

Twelve American students from East Carolina University, United States, participated in GU in the fall of 2013. There were seven female and five male students, ranging from freshmen to seniors.

Design and procedure

As mentioned previously, GU partner universities typically have 4-5 links per semester with each country. There were two meetings per week, on Tuesday and Thursday in Japan and Monday and Wednesday in the United States. During the first meeting, students got to know each other and received lectures from the instructors. The second link focused on a discussion of college life. This study recorded the third and fourth links, on October 24 and 29, 2013, when the American and Japanese students discussed the topics of “Family and Traditions” and “Meaning of Life,” respectively. These timings were selected for analysis on the ground that they must feel comfortable each other by the third meeting and be able to carry on meaningful discussion.

Prior to each cross-cultural link, a uni-cultural videoconference session between Groups A and B of the Japanese students was recorded. On October 22, the Japanese students exchanged ideas in English about “Family” locally using the prepared discussion questions in two different rooms equipped with videoconferencing machines. On October 24, they exchanged ideas in English about “Family and Traditions” internationally with the American students. Unfortunately, the researcher failed to find sufficient class time for Japanese students to discuss “Traditions” locally. The Japanese students also discussed the topic “Meaning of Life” locally on October 24 and internationally with American students on October 29.

The cross-cultural videoconferencing discussions between the American and Japanese students were compared with the uni-cultural videoconferencing discussions between the two groups of Japanese students in order to determine the following hypothesis that the Japanese students would speak faster in the cross-cultural discussion than in the uni-cultural discussion.

English fluency measured by speaking rate

English fluency was defined as the speaking rate of a speaker. It was measured by the number of English words spoken per minute. It is common in fluency research to ask a speaker to speak for one minute to measure their speaking rate. In this study, however, a different method was employed, because it was conducted in a real life situation in which students spoke freely.

In order to measure the speaking rate, four videoconferencing sessions were recorded: uni-cultural videoconferencing about “Family” between Groups A and B, uni-cultural videoconferencing about “Meaning of Life” between Groups A and B, cross-cultural videoconferencing about “Family and Traditions” between the University of Shimane and East Carolina University, and cross-cultural videoconferencing about “Meaning of Life” between the University of Shimane and East Carolina University.

The recordings were converted into audio-only MP3 format. The audio files were then uploaded to a music-editing program called Garage Band, which can convert a single track into multiple tracks. In order to find out how long each speaker spoke in total, the researcher divided the continuous conversation of all the participants into segments

according to the turn of each speaker. Then the researcher separated the single track consisting of multiple speakers into multiple tracks of the speakers.

Due to the complexity of this process, the researcher established a number of rules for the segmentation. First, time that passed between the end of one speaker's turn and the beginning of the next speaker's turn was included in the turn of the next speaker, because this time could be considered "thinking time" for the next speaker. Second, time when Japanese speakers spoke Japanese sentences was removed from the analysis. The Japanese students tended to have side conversations with members of their groups, during which they discussed how to say something or what to say. Since such side conversations were not addressed to their videoconferencing partners, such time was removed. Third, time when a Japanese speaker spoke Japanese words, not sentences, such as "etto" or "unto," was included in his or her turn. These words are comparable to English words such as "well" or "uh," which indicate that the speaker is looking for words to express an idea. Fourth, speaker's silence in a sentence or between sentences was included in his or her turn, because silence also indicates that the speaker is looking for appropriate words.

In this manner, the single track for multiple speakers was divided into a series of segments of speakers. Next, the segments of speakers were divided into multiple tracks of individual speakers, as seen in Figure 1. The 1st row indicates the now empty track of the original MP3 file, the 2nd row indicates the speaker T, the 3rd row speaker Y, the 4th row speaker K. The rest of the rows belong to the tracks of American speakers' turns. In this way, each participant's speaking time was then measured.

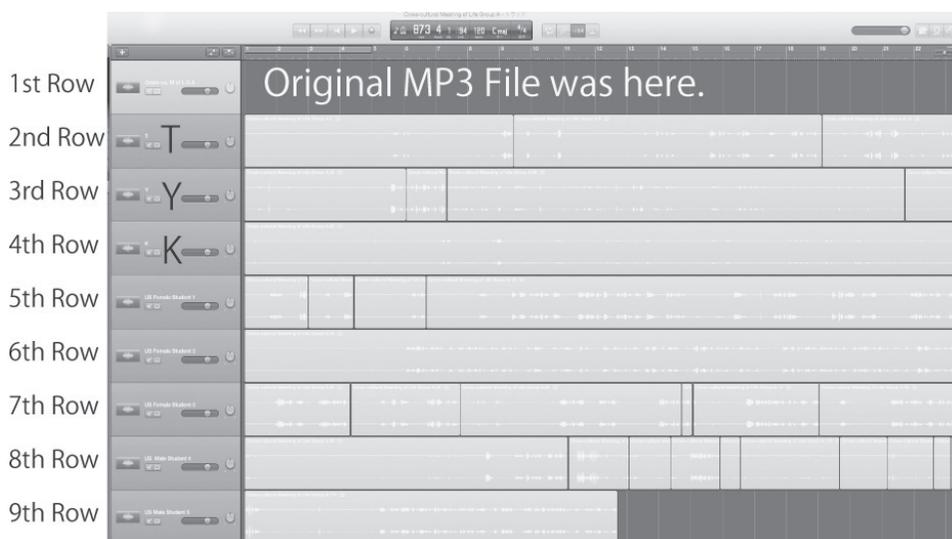


Figure 1. *Garage Band tracks of multiple speakers.*

In addition, the videoconferencing conversation was transcribed to calculate the

number of English words spoken by the students. The researcher counted the number of meaningful English words spoken by each speaker. However, fillers such as “*etto*,” “*ah*,” “*uhn*,” and other Japanese words were not counted.

Results

The number of English words spoken by each speaker was divided by their total speaking time. Some speakers spoke for less than one minute, so the words were first divided by seconds, and the speed was then multiplied by 60 to obtain the number of words spoken per minute, namely, the speaking rate (wpm). The results are shown in the tables below.

Table 1
Japanese Students’ Speaking Rate between Uni-cultural Discussion and Cross-cultural Discussion on “Family and Traditions”

Name	Uni-cultural Discussion on “Family” 10 minutes 4 seconds				Cross-cultural Discussion on “Family and Traditions” 53 minutes 52 seconds				Difference of wpm
	Words	Seconds	wps	wpm	Words	Seconds	wps	wpm	
T	121.0	126.0	1.0	57.6	547.0	686.0	0.8	47.8	-9.8
Y	70.0	107.0	0.7	39.3	246.0	218.0	1.1	67.7	28.5
R	29.0	34.0	0.9	51.2	150.0	346.0	0.4	26.0	-25.2
To	35.0	103.0	0.3	20.4	74.0	102.0	0.7	43.5	23.1
K	28.0	60.0	0.5	28.0	91.0	175.0	0.5	31.2	3.2
S	20.0	48.0	0.4	25.0	85.0	185.0	0.5	27.6	2.6
Mean	50.5	79.7	0.6	36.9	198.8	285.3	0.7	40.6	3.7
SD	38.7	37.2	0.3	15.0	182.2	211.9	0.3	15.9	20.0

In the uni-cultural exchange on “Family,” the average speaking rate was 36.9 wpm, while the average speaking rate in the cross-cultural exchange on “Family and Traditions” was 40.6 wpm. In order to determine if this difference is significant, a t-test was performed. However, the speaking rate of uni-cultural discussion was not significantly different from that of cross-cultural discussion, ($t = -0.457$, $df=5$, $p < 0.667$).

Table 2
Japanese Students' Speaking Rate between Uni-cultural Discussion and Cross-cultural Discussion on "Meaning of Life"

Name	Uni-cultural Discussion on "Meaning of Life" 19 minutes 33 seconds				Cross-cultural Discussion on "Meaning of Life" 61 minutes 46 seconds				Difference of wpm
	Words	Seconds	wps	wpm	Words	Seconds	wps	wpm	
T	185.0	220.0	0.8	50.5	705.0	662.0	1.1	63.9	13.4
Y	94.0	149.0	0.6	37.9	299.0	272.0	1.1	66.0	28.1
To	84.0	166.0	0.5	30.4	221.0	630.0	0.4	21.0	-9.3
K	9.0	43.0	0.2	12.6	172.0	329.0	0.5	31.4	18.8
Y	64.0	185.0	0.3	20.8	83.0	125.0	0.7	39.8	19.1
S	48.0	109.0	0.4	26.4	74.0	161.0	0.5	27.6	1.2
E	89.0	166.0	0.5	32.2	54.0	103.0	0.5	31.5	-0.7
M	81.9	148.3	0.5	30.1	229.7	326.0	0.7	40.2	10.1
SD	54.2	57.4	0.2	12.2	227.6	232.9	0.3	17.8	13.3

In the uni-cultural exchange on "Meaning of Life," the average speaking rate was 30.1 wpm, while the average speaking rate in the cross-cultural exchange was 40.2 wpm. A t-test was performed to test the hypothesis that the speaking rate of uni-cultural discussion is equal to that of cross-cultural discussion. The speaking rate of uni-cultural discussion was not significantly different from that of cross-cultural discussion ($t=2.001$, $df=6$, $p<0.092$).

To calculate the speaking rate of the American students, the same process was performed as shown in Tables 3 and 4.

Table 3
U.S. Students' Speaking Rate on "Family and Traditions"

Cross-cultural Discussion on "Family and Traditions"				
Name	Words	Seconds	wps	wpm
F1	363.0	247.0	1.5	88.2
F2	100.0	119.0	0.8	50.4
F3	379.0	251.0	1.5	90.6
F4	32.0	42.0	0.8	45.7
F5	236.0	120.0	2.0	118.0
F6	669.0	383.0	1.7	104.8
F7	272.0	114.0	2.4	143.2
F8	58.0	28.0	2.1	124.3
M1	149.0	103.0	1.4	86.8
M2	86.0	51.0	1.7	101.2
M2	217.0	124.0	1.8	105.0
M3	95.0	85.0	1.1	67.1
Mean	221.3	138.9	1.6	93.8

Table 4
U.S. Students' Speaking Rate on "Meaning of Life"

Cross-cultural Discussion on Meaning of Life				
Name	Words	Seconds	wps	wpm
F1	698.0	451.0	1.5	92.9
F2	152.0	85.0	1.8	107.3
F3	356.0	138.0	2.6	154.8
F4	116.0	63.0	1.8	110.5
F5	475.0	190.0	2.5	150.0
F6	126.0	88.0	1.4	85.9
M1	348.0	225.0	1.5	92.8
M2	101.0	85.0	1.2	71.3
M2	201.0	112.0	1.8	107.7
M3	39.0	23.0	1.7	101.7
Mean	261.2	146.0	1.8	107.5

Tables 3 and 4 show the speaking rate of the American students. The average speaking rate was 93.8 and 107.5 wpm, respectively. These speaking rates are relatively slower than the average native English speakers' speaking rate of 196 wpm as reported by Yuan, Liberman, and Cieri (2006). Therefore, it can be said that the American students adjusted to the Japanese students by speaking more slowly than their regular speech rate.

Discussion

The results of this investigation did not demonstrate the expected effect on EFL learners' fluency of cross-cultural videoconferencing with native English speakers. The Japanese students' English speaking rate when they spoke with Japanese English learners was no different from that when they spoke with the American students. Therefore, the results are not congruent with the theory that cross-cultural discussion would probably increase fluency due to information gaps and English-only conversational partners whose English is at a higher level than that of Japanese students. Why, then, did the information gaps and English-only conversational partners not influence the fluency of the EFL learners?

First, this study did not consider the inability of EFL learners to use reduced forms of language. It was assumed that EFL learners would speak more quickly if they were motivated to speak, and that they could adapt to the native speakers' speech. However, this view was naive. Although the American students spoke significantly slowly to accommodate the Japanese students, the Japanese students, who hardly had experienced speaking to native speakers, were shocked at the continuous flow of words of the native speakers. They were unable to understand the natural spoken language, which contained unstressed forms, and frequently requested that the Americans speak

slowly. In addition, when it was their turn to speak, they seldom used reduced forms or connected unstressed syllables. It might be necessary for Japanese students to speak fluently to learn how to pronounce words quickly and naturally. That might be a reason for the results.

Second, this study did not consider the cognitive load placed on the speaker in producing meaning heavy speech. The topics of the cross-cultural exchanges were "Family and Traditions" and "Meaning of Life," and the Japanese students practiced discussing these topics in their uni-cultural exchanges, using prepared discussion questions. In the cross-cultural videoconferencing sessions with American students, however, they asked spontaneous questions, and the Japanese students were required to make impromptu speeches. They needed to consider not only what to say but also how to say it. Such meaning-focused tasks generally place additional cognitive load on the speaker. Therefore, it probably took more time for those who wanted to explain in detail to produce utterances in English, and their speaking speed did not improve despite their most likely experiencing enhanced motivation to speak.

Third, there was no time constraint on the speakers in this study. The students were not asked to hurry to finish the prepared discussion questions. These questions were merely a guide for the videoconferencing discussion and no penalty was incurred for unfinished questions. The students had plenty of time to exchange ideas before and after the videoconferencing sessions during class using IRC in addition to email and Facebook outside of class. The researcher realized later that time pressure was probably necessary to develop fluency. In the well-known 4/3/2 fluency-enhancing technique devised by Maurice (Nation & Newton, 2009, p.153), a language learner first gives a speech in four minutes, then gives the same speech with a different partner in three minutes, and finally gives the same speech with yet another partner in two minutes. By giving time pressure the 4/3/2 activity helps language learners to achieve fluency. In this study, however, the Japanese students were not under any time pressure. The lack of time pressure may be the cause of the slow speaking speed of the Japanese participants.

Fourth, the data used in this study were too small, which may have caused the insignificant results of the study. The data were collected on October 22, 24, and 29, which was too short to provide effective data for analysis. The researcher was able to compare only two pairs of videoconferencing sessions, one of which lasted only 10 minutes and four seconds. Student R spoke only 29 words in 34 seconds, while student S spoke only 20 words in 48 seconds. Thus, these students spoke for less than one minute. In many fluency studies, the speaking rate is calculated by asking the subject to speak for one minute. In order to discuss if information gaps and an English-only audience help EFL learners' fluency, more data should be collected for analysis.

There are other problems in the research design of this study. In this study, the data were collected from the uni-cultural setting first and then from the cross-cultural setting.

The order of the discussions might have produced a rehearsal effect on increased fluency in the second discussion. The order of uni-cultural discussion and cross-cultural discussion must be reversed in the future study in order to obtain more accurate data. Also, this study did not examine the language of the Japanese students in the cross-cultural exchange. The researcher noticed that the Japanese students frequently requested repetition to the American students who spoke faster, by asking, "Please repeat." Such phrases might have increased the number of words spoken by Japanese speakers in the cross-cultural setting, while the Japanese students rarely asked for repetition to their fellow Japanese students who speak slowly. The researcher was not able to examine the use of such strategic use of language that might have influenced apparently increased fluency. In addition, this study failed to consider the influence of IRC chat before videoconferencing. One of the groups of the Japanese students warmed up using IRC chat before going on to the videoconferencing session with the Americans. The group that participated in IRC before videoconferencing may show higher fluency than the group that chatted with their partners after videoconferencing. Future investigation into fluency should take these issues into consideration.

Conclusion

This study investigated whether cross-cultural videoconferencing influenced EFL learners' oral fluency. It was hypothesized that cross-cultural videoconferencing would positively influence EFL students' oral fluency due to natural information gaps and English-only audience, but the data did not support this hypothesis. This study suggested that information gaps and the English-only environment of cross-cultural videoconferencing were probably not sufficient to develop the oral fluency of EFL learners, and that EFL learners should receive fluency development training to improve their fluency. Such training might include understanding and practicing fluency-related features of spoken English under a time constraint.

Although this study did not support the hypothesis, it advanced the fluency research of EFL. The previous fluency research has had a speaker speak for a few minutes and counted the number of words to produce the speech rate. This study, however, employed a new method of collecting data using videoconferencing. Videoconferencing can easily be recorded and the content can be reviewed for investigation. This study also used a new method of measuring fluency. This study used a program that enabled calculation of speaking rate in a natural conversational setting. The software Garage Band was useful for separating a single track of multiple speakers into individual tracks by speaker, and that made the measurement of speech rate accurate.

It is, however, too early to conclude that videoconferencing does not give any positive influence on the development of oral fluency of EFL learners. The samples employed in this study were too small to generalize the results, and the research design was not without fault. The relationship between the use of videoconferencing and

the development of fluency is an issue to be investigated further. Videoconferencing offers synchronous face-to-face experiences for EFL learners with authentic English speakers, which is more exciting than mock conversation practice in the classroom made up of students sharing the same mother tongue and culture. With the help of videoconferencing, EFL learners can meet real native English speakers without leaving the classroom. International videoconferencing courses in English, such as GU, can satisfy the need of EFL learners for more meaningful communication in English.

In the age of globalization where people from different cultural backgrounds need to collaborate, it is important for everyone to be able to communicate in a foreign language in order to understand each other and for a peaceful world. Long-term study abroad is the ideal way for language learners to acquire foreign language skills, but the financial burden is too great a barrier for most learners. Bringing native speakers of a target language into the classroom is a cost-effective alternative, and real-time face-to-face videoconferencing offers a way to equip today's young people with language ability as well as cross-cultural understanding.

Further investigation into the effective use of videoconferencing in EFL education will provide EFL educators with theories and know-how, and more and more educators will use new technologies for effective language teaching as well as effective cross-cultural understanding.

Notes

- 1) Ortega (2009) summarizes the environmental conditions of language learning as follows: "The five environmental ingredients that together contribute to (but do not guarantee) optimal L2 learning are: acculturated attitudes, comprehensible input, negotiated interaction, pushed output, and a capacity, natural or cultivated, to attend to the language code, not just the message." (p.79)
- 2) The discussion questions are prepared in the GU syllabus and shared by the partner universities that offer GU.

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Acknowledgements

This research was supported by JSPS Grants-in-Aid for Scientific Research (KAKENHI), (FY2012-FY2013, Grant Number 24520634, Principal Investigator: Mariko Eguchi)

I would like to thank Prof. Marion Eppler and her students taking Global Understanding at East Carolina University for giving the Japanese students the opportunity to discuss cultural issues on video and chat.

KEYWORDS: cross-cultural understanding, videoconferencing
second language acquisition, fluency

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