



Effects of online task-based peer interaction on learners' speech development and attitudes toward English as a lingua franca

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Abstract

This paper reports the outcomes of incorporating two kinds of videoconferencing into a university English as a Foreign Language (EFL) special seminar course in Japan for two semesters. One type of videoconferencing was a weekly interview with a non-native English speaker/instructor living outside Japan using a commercial online conversation program; the other was a weekly online peer meeting on Zoom where groups of three learners practiced speaking English using role play tasks. The effects of the two types of videoconferencing were examined through pre- and post-speaking tests and a questionnaire on the participants' attitudes toward English as an International Language (EIL; Nakamura, Lee, & Lee, 2018). Additionally, a qualitative analysis of peer-group interaction was conducted to reveal what happened in the peer-group role play task. The results indicated that speaking skills improved over time, and tolerant attitudes toward variations of English were observed. Abundant opportunities for automatizing EFL use and negotiation for meaning were observed in the peer-group role play.

Keywords: videoconferencing, task-based instruction, EFL.

1. Introduction

In EFL situations like Japan, learners of English have limited opportunities to use English orally inside and outside of educational institutions. The use of commercial online conversation services can provide opportunities for learners to improve their oral communicative competence and develop tolerant attitudes toward the variation of English (Iino, 2022). Another way is online peer interaction (Hetrovicz, 2021), which is claimed to be effective to promote intercultural communicative competence as well as second language (L2) oral proficiency (Warner-Ault, 2020).

The various aspects and benefits of in-person peer interaction were reviewed in Philp, Adams, and Iwashita (2013), and Adams and Oliver (2019). Regarding online peer interaction, few previous studies have focused on online interaction between Non-Native Speakers and other Non-Native Speakers (NNS-NNS), and many of them examined psychological changes. For instance, Lenkaitis (2020) examined how videoconferencing affected L2 Spanish learners' perceived autonomy over time and also included self-reported measures of L2 speaking skills satisfaction and L2 conversation length (i.e. the amount of time participants' felt they could converse in the L2). The quantitative results of the study indicated that L2 learners reported higher levels of autonomy, speaking

skills satisfaction, and L2 conversation length after participating in weekly L2 videoconferencing sessions with their classmates. However, gaps remain in the literature regarding the relative effectiveness of online interaction for L2 learning and the influence of interlocutors' linguistic and cultural background variables.

The purpose of the present study was to examine the effects of NNS-NNS interaction through videoconferencing with learners from different L1 and cultural backgrounds. Previous studies often relied on self-reported measures to assess L2 development and did not fully investigate the effects of exposure to international English on learners' attitudes toward varieties of English. Data based on standardized L2 speaking tests could provide insight into how learners' speaking skills quantitatively change over time when videoconferencing with a diverse group of English speakers. Thus, the following research questions were investigated:

1. To what extent does group-based videoconferencing in an English-as-a-lingua-franca setting improve L2 speaking skills?
2. To what extent does videoconferencing influence L2 learners' attitudes toward English as a lingua franca/international language?
3. What kind of negotiation for meaning occurs in task-based online peer-group role plays during videoconferencing?

2. Method

2.1. Participants

Nineteen university students majoring in economics at a university in Tokyo, Japan participated in this study. For two semesters, they took a special seminar to improve their oral English proficiency and intercultural communicative competence through an active learning cycle run by one of the researchers (see Figure 1). The group consisted of eight third-year students who had experienced one year of the learning cycle described below, and 11 second-year students who were new to the learning cycle. Their English ability was between CEFR A2 to B2, with the majority at the B1 level.

2.2. Treatment

The participants were directed to complete a role play task in groups on Zoom for about 30 minutes outside the class each week (online peer interaction; OPI). The task was practiced face-to-face in class beforehand in three-person groups, with each participant taking the role of a facilitator/decision maker, pro-side advocator, or con-side advocator. The learners were asked to repeat the same task with different class members online and to change their roles at will. The topics were debatable social issues, such as the use of nuclear power, internet safety, and free trade. For OPI sessions, participants submitted video recordings of their Zoom sessions to the cloud each time. In addition, the learners were asked to attend a commercial online conversation session, with which all of them had a yearlong special contract, at least once a week with a foreign national NNS conversation partner (online intercultural interaction; OII).

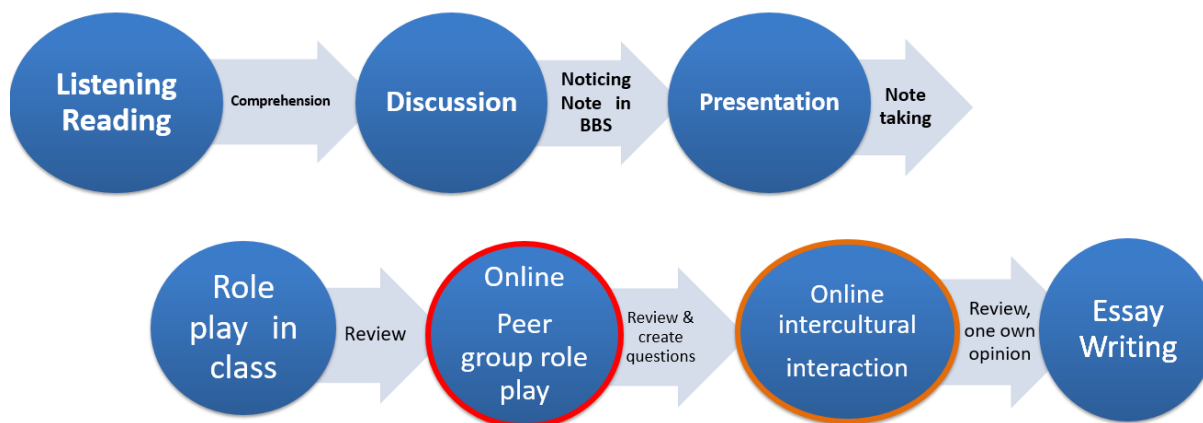


Figure 1. Active learning cycle in the special seminar: Discussion, presentation, and role play were conducted in 100-minute classes; listening/reading, online peer-group role play, and the follow-up activities were done outside of class on an individual/group basis.

2.3. Measurement

In order to measure the effects on speaking ability and attitudes toward the English language, a mixed-method research design was adopted. Speaking tests conducted by DMM, a commercial online conversation program in Japan, were administered in April, July, and December of 2021. The speaking tests scores were based on one-on-one interaction using DMM’s original scheme (see Table 1). The scoring scale was from 2 (beginner) to 8 (advanced).

Table 1. Speaking test components (DMM, 2023).

Speaking test tasks	Points
(1) Reading aloud a news article or an expository passage after one minute of silent reading	5
(2) Question and answers about the text read aloud: three comprehension questions	5
(3) Picture narration: Within one minute after planning for 30-seconds	5
(4) [Basic] Making a two-minute speech on one’s personal life; [Advanced] Compare two statistical graphs and tell what can be said from them after planning for one minute	5
(5) [Basic] Q&A about the speech in (4); [Advanced] Q&A about the issue described in (4)	10
Holistic level judgement: 2 (Beginner) – 5 (Intermediate) – 8 (Advanced)	

In order to examine the learners’ attitudes toward EFL/EIL, the *English as an international language perception scale* (Nakamura, Lee, & Lee, 2018) was used. This questionnaire was conducted in April and December. The instrument consisted of four categories, with each of them having three to four items. Participants responded to the statements using a 5-point scale.

Interaction during the online role play task was assessed by analyzing ten videos of participants who had shown significant improvement on the speaking tests. Transcripts of the role plays were analyzed for negotiation for meaning: trigger – indicator – response – reaction to response (Varonis & Gass, 1985).

3. Results

The results of the speaking tests at three points in time indicated that a statistically significant improvement was observed with a large effect size (Table 1). Post hoc comparisons for the total test scores showed a statistically significant increase from April to December ($p < .05$).

Table 2. Results of the speaking tests.

	April		July		December		<i>F</i>	<i>p</i>	η_p^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Q1	3.79	0.85	4.53	0.51	4.63**	0.76	16.70	.001	0.48
Q2	3.21	1.03	3.68	1.06	3.95	1.18	5.16	.074	0.20
Q3	3.89	0.74	4.32	0.75	4.53**	0.51	5.03	.012	0.22
Q4	3.63	0.76	3.63	0.68	4.00	0.82	1.69	.198	0.09
Q5	6.68	1.49	6.89	1.37	7.11	1.63	0.88	.360	0.05
Overall	21.21	3.94	23.05	2.68	24.21*	3.19	5.60	.008	0.24
Level	5.89	0.94	6.32	0.67	6.58	0.69	4.85	.014	0.21

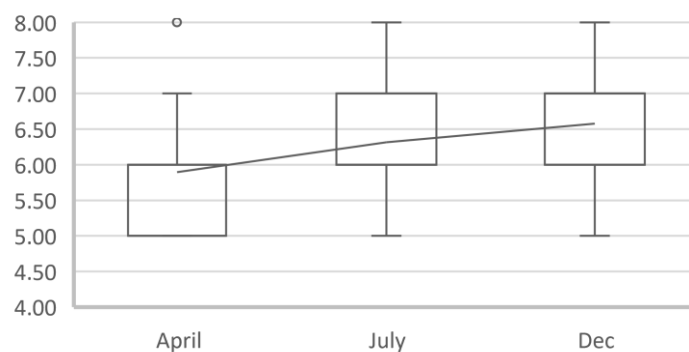


Figure 2. Box plots showing changes in speaking skills over time (levels).

As for the results of the questionnaire, a significant difference with a moderate effect size was found for scores derived from the fourth category of the instrument which examined participants' perceptions of English speakers' identities, $t(16) = 2.17, p = .046, d = .53$. No significant differences were observed for the other three categories (i.e. understanding of the current status of English; attitude toward varieties of English; and strategies for multilingual/multicultural communication).

Table 3. Descriptive statistics for the fourth category of the questionnaire.

Perception of English Speakers' Identity	Time 1 (April)		Time 2 (Dec)	
Items	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
(1) English teachers should not push me to speak like a 'native' English speaker.	3.29	0.92	3.82	1.07
(2) I don't mind if people laugh at my English accent when I speak because it is my own English.	2.82	0.88	3.24	1.03
(3) It is unnecessary to speak like American or British English speakers as long as my English is intelligible to others.	3.06	1.20	3.47	1.18

In the qualitative analysis of online peer interaction, spoken data from ten Zoom recordings, five from April and five from December, were examined. Occurrences of Negotiation for Meaning (NfM) were observed in five videos (50%). L1 use for unknown words was seen as a trigger and indicator of NfM as were other active conversational features, such as asking extended questions and commenting on opinions (Table 4).

Table 4. Instances of negotiation for meaning observed during online role play videoconferencing.

Zoom recording 1 (19'28" 26 turns) Spring
NfM 1 (5'20"-5'34") R: What kind of <u>measure</u> [trigger]do you think the government should take? K: <u>Measure</u> ? What kind of <u>measure</u> ? [indicator] R: ... Like, <u>measure</u> is a solution. [response] K: Like a solution [reaction to response]
NfM 2 (12'43"-13'40") R: Everyone does not get <u>vaccinated</u> (Trigger) K: Does not get <u>vaccinated</u> (Indicator: repetition) R: Still young people do not get <u>vaccinated</u> . Still no <u>wakuchin</u> . (R: repetition & L1 translation) K: Ah, <u>Wakuchin!</u> So we should take <u>vaccine</u> for Olympics. (RR: confirmation & modified output)
Zoom recording 2 (31'44" 44 turns) Spring
NfM 3 (9'16"-10' 25") K: ...only pay for student who is, <u>nante iun daro na, yarukiga aruhito te?</u> (What should I say for a person who has motivation?) [trigger & self-initiated indicator: using L1 to ask for help] Y: People who have motivation. [R: L2] K: Who have motivation and Japanese government pay education fee for students who have more motivation [RR: repetition & modified output]
Zoom recording 3 (15'49" 24 turns) Spring
NfM 4 (10'34"-10'53") Y:...It is <u>contemporary</u> , <u>janakute</u> (not this word). [trigger/self-initiated indicator in L1] B: Temporary. (R: co-construction) Y: Temporary. So the benefit is temporary. (RR: repetition & modified output)
NfM 5 (12'25"-14'12") Y: For example, like snowmobile stadium... (T) A: Are there snowmobiles as Olympic summer sports? Y: Sorry? (Clarification request) A: So you say stadium for special sports like snowmobile, right? (Confirmation check) Y: Yes. (Indicator) A: Is there snowmobile? Yes? (R: Clarification) B: Snowboarding, <u>janai?</u> Snowboard, snowboard. Yeah? Ski, ski. (R: Correction) Y: (L1) All right. I just wanted to mention some sports because I don't know many names of sports. (RR: mentioning the reason in the L1 for the mistake)
Zoom recording 4 (19'28" 26 turns)
Asking questions referring to previous utterances: R: Do you guys have any questions to each other? Y: Yeah, I have a question. You said that we build TPP without China, but ... what do you think about it? (Active listening and <i>Wh</i> -question)

4. Discussion

The first research question examined the effect of group-based videoconferencing in EFL on L2 speaking skills. The results indicated that the participants' L2 speaking skills improved over time, with statistically significant gains on interactive speaking tests. This finding corresponds to the results of Lenkaitis (2020) in which participants reported increased satisfaction with their L2 speaking skills after six-weeks of videoconferencing in L2 Spanish. The opportunities provided by online EFL conversation and peer interaction in the current study could have motivated the learners to use English for communicative purposes and led to increased oral communication skills.

The second research question asked about the extent to which videoconferencing in EFL influences L2 learners' attitudes toward EFL. Although scores from three sections of the questionnaire did not significantly change over the course of the research, scores related to participants' perceptions of English speakers' identities significantly increased, which supported the findings of Iino (2022). This result could indicate that the participants began to develop attitudes that were more accepting of varieties of English and more forgiving regarding their own and others' non-native-like language use. Exposure to and participation in communicative environments in which ELF is used could bring about positive attitudinal changes which promote L2 learning.

Finally, the third research question looked at qualitative aspects of online group role plays. L1 use was observed to some extent, which often facilitated comprehension. In sessions without NfM, it is possible that the participants prioritized continuing the conversation without giving negative feedback or asking for assistance. In sessions with NfM, the third-year students often showed supportive attitudes to the younger students; this support may have made the students less anxious and less hesitant to modify their output (Philp, Adams, & Iwashita, 2013).

5. Conclusions

The purpose of the current study was to examine the effects of videoconferencing in EFL. Overall, the results provided evidence for the facilitative effects of L2 interaction through videoconferencing and the communicative tasks on L2 learners' speaking skills and attitudes toward EFL. Standardized speaking tests revealed increases in L2 learners' speaking ability over time, and the learners' showed more acceptance to varieties of English to which they had little previous exposure. Furthermore, the qualitative results indicated that NNS-NNS videoconferencing can provide opportunities for learners to negotiate meaning and support each other throughout the learning process. Future studies could examine which aspects of L2 speaking skills change over time in synchronous computer-mediated environments and how learners qualitatively perceive interlocutor background variables.

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