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Telecollaboration successes and lessons learned: Connecting the US and Japan

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Abstract

Telecollaboration has been shown to improve perceived intercultural competence (e.g., de Castro et al., 2018; Lázár, 2014) and language competence (e.g., Casañ-Pitarch et al., 2020) and is a way to motivate students to use their second language. In the current study, the researchers used telecollaboration to connect students at universities in the US (Japanese language learners, n = 12) and Japan (English language learners, n = 9) to complete a game development project. The purpose of the telecollaboration was to provide opportunities for both sides to communicate in their second language, improve their motivation for learning, and increase their intercultural competence. The students' interactions and perceived learning outcomes were investigated. Their perceptions were collected at the end of the telecollaboration via an online questionnaire , and their contributions to a Discord server were collected and analyzed as a corpus. The results showed that the Japanese students tended to contribute less text than the US students. Based on the final questionnaire, some students gained motivation to learn their second language, and students may have improved their intercultural competence.

Keywords: telecollaboration, COIL, Japanese as a foreign language, EFL, intercultural competence

Introduction

The ability to communicate with people from other cultures is a valuable skill that requires intercultural competence, in addition to the ability to speak another language. One way to provide students with opportunities to develop intercultural competence is to incorporate telecollaboration into language classes (e.g., de

Castro et al., 2018; Lázár, 2014). Telecollaboration is "the application of online communication tools to bring together classes of language learners in geographically distant locations to develop their foreign language skills and intercultural competence through collaborative tasks and project-based work" (O'Dowd, 2011, p. 342). Other terms such as collaborative online international learning (COIL) and virtual exchange are also used to refer to the same type of collaboration.

The theoretical basis for telecollaborative projects is sociocultural theory, which states that humans learn through social interactions (e.g., Dooly, 2017; Lantolf, Thorne, & Poehner, 2015). Social interactions between participants are mediated through technology, such as text messaging apps or video conferencing software. Sociocultural theory is a general theory of learning, meaning that it applies not only to language learning, but also to the learning of intercultural competence.

The Intercultural Development Continuum (Intercultural Development Inventory, 2023; Fig. 1) can be used as a reference for evaluating students' intercultural competence. The continuum shows that intercultural development progresses through the five stages of denial, polarization, minimization, acceptance, and adaptation. Progression through the stages indicates increasing intercultural competence.

Figure 1
Intercultural development continuum, adapted from Intercultural Development Inventory (2023)
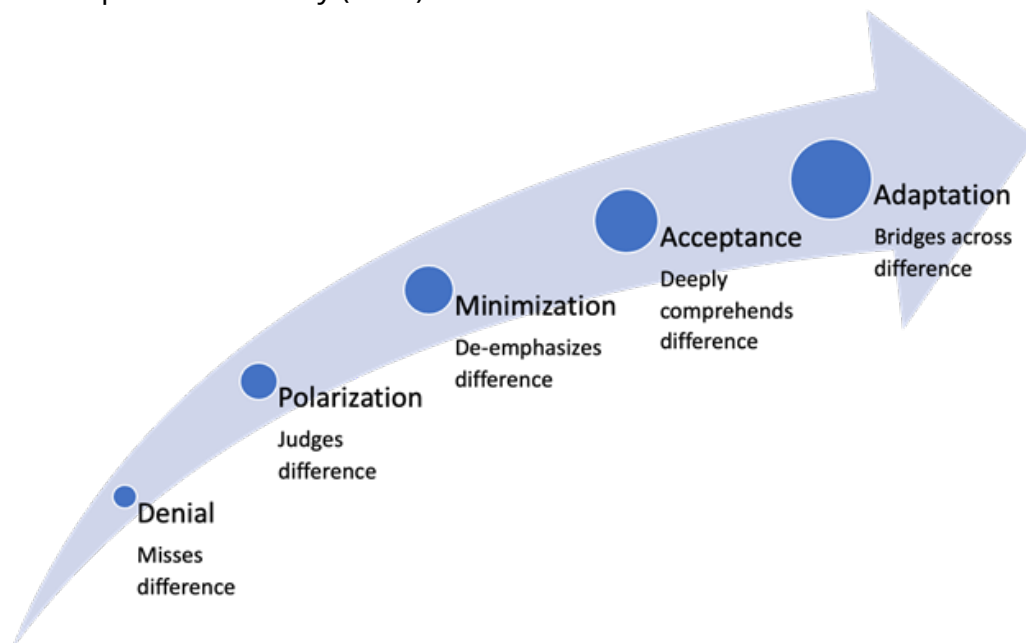
In Japan, all students learn English, but not all students have the opportunity to interact with students from another culture. Similarly, many students in the US study an additional language, but unless they study abroad, opportunities to use

a language such as Japanese may be limited. Therefore, students in both countries may lack opportunities to develop their intercultural competence.

The telecollaboration in the current study involved two classes taught by the authors: An English seminar in Japan and a Japanese language class in the US. In addition to improved language and intercultural competence, the authors hoped that the telecollaboration would improve students' language competence (e.g., Casañ-Pitarch et al., 2020) and motivate the students to use their second languages.

Because this was the first attempt by the authors to collaborate on this type of project, they took an exploratory approach to investigating the outcomes. The research questions were as follows:

1 How will students in the US and Japan interact in a telecollaborative project?
2 What learning outcomes will students report?

Method

Participants

Students in two classes taught by the authors in the fall of 2022 participated in the current study, and the data of only those who consented to participate is reported here. At the first author's university in western Japan, the participants were third-year English majors, so they had studied English for more than 10 years and were at an upper intermediate (CEFR B2) proficiency level, as estimated by their teacher (the first author). They were taking a seminar class focused on games in language education which was held once a week for 90 minutes.

At the second author's university in the US Midwest, the participating students were taking second-year Japanese I, making this the third semester that they had studied Japanese language, and they were at an beginner to pre-intermediate level (CEFR A2 to B1), as estimated by their teacher (the second author). The class was held five days per week for 50 minutes.

To maintain anonymity, participants are identified by ID numbers, starting with "J" (Japan) or "A" (America). See Table 1 for more details.

Table 1

Participant demographics

	Japan	US
Class	"Games for Learning II" seminar	Second-year Japanese I
n	9	12
University year	3	1–4
Age range (mean)	20–22 (21)	18–22 (20)
Female	2	6
Male	7	6

Materials

Discord was used to facilitate communication among the students because it is free to use, students could be divided into groups, and they could communicate using text, images, links, emojis, and audio/video chat. It was also familiar to many students as a common platform for communication around games.

Students completed questionnaire surveys before beginning the telecollaboration project (demographics) and immediately after completion (see Appendix). The final survey questions were based on the Post-COIL prompts developed by Guth and Helm (2017). While these questions were originally published without mention of a specific theoretical framework, they ask about learning from the perspective of interactions with the overseas partners, making them compatible with sociocultural theory (cf. Dooly, 2007). In addition, these questions are commonly used in telecollaborative projects, so the authors determined that they were a good starting point for this exploratory study.

Procedure

The project began in mid September and ended at the beginning of December. For the students in Japan, participation in the project was worth 20% of their final grade, whereas for the US students, it was worth 5%. At the beginning of the project, students were asked to abide by ground rules related to treating others with respect and informing the professors of inappropriate behavior. The students were then divided into four groups of two or three students in Japan and three students in the US. They were asked to communicate using English and easy Japanese.

An overview of the project schedule is shown in Table 2. During the first four weeks of the project, students participated in icebreakers and comparison and analysis discussions. As icebreakers, students introduced themselves, responded to others' introductions, and played a simple game (shiritori) that was adapted to a bilingual and text-only context. The students in Japan developed the rules, explained them to the US students, and modeled the game.

After the icebreakers, students participated in three discussions (questions shown in Table 2) intended to help them compare and contrast their cultures. The final discussion, in which students discussed folktales from their cultures, was further intended to help students develop the story of an interactive narrative game in the next part of the telecollaboration.

The US university had a week-long break during Week 5 of the project, so collaborative work was paused. The remainder of the telecollaboration, Weeks 6–11, focused on a game design project. The students in Japan created interactive narrative games that incorporated elements of the folktales that students in both countries had shared. To make creating and sharing the games as simple as possible, the students were asked to use Google Forms to make choose-your-own-adventure-style interactive narrative games. The US students were asked to play the games and provide feedback on English language and game elements. The students in Japan then made improvements based on the feedback.

Table 2

Telecollaboration project schedule

Week	Activities

1–4	Icebreakers
	Comparison & analysis discussions
	  1. What is/are your culture(s)? (e.g., Japanese, American, etc.) How would you describe your culture(s)? What are some stereotypes of your culture(s)? What do you think of them?
	  2. What (digital) games have you played? What do you like about these games? What have you learned from these games?
	  3. Share a folktale from one of your cultures. Explain how it represents that culture.

5	None (Fall break in US)
6–11	Interactive narrative game design, feedback, and revision

Results

Discord posts

To answer the first research question, "How will students in the US and Japan interact in a telecollaborative project?", we analyzed the text that the students contributed to the discussions on Discord. This text was stripped of identifying information and translated from Japanese to English (where necessary) using Google Translate. This text was then analyzed as a corpus. A word cloud (Fig. 2) was produced using WordCloud Generator (https://monkeylearn.com/word-cloud/), and basic descriptive statistics (Table 2) were calculated using Google Sheets and Google Docs.

The word cloud (Fig. 2, overleaf) is useful for getting a general idea of what students discussed on Discord. They generally stuck to the topics provided, discussing ideas such as American and Japanese culture, games they had played, and folktales from their cultures. The word "Mario" even appears in reference to a particularly popular game topic, and the word "Momotaro" appears in reference to the title/protagonist of a folktale that was discussed in multiple groups.

The statistics shown in Table 2 show some differences in how the students in the US and Japan contributed to the discussion on Discord. The US students contributed more posts overall, which is not surprising given that 12 of them participated, as opposed to 9 students from Japan. On a per student basis, the Japanese students contributed slightly more posts. They also contributed slightly more English words than the US students. However, note that the US students contributed more than twice the number of Japanese characters than did the students in Japan. On a per student basis, this contrast is somewhat less, though still striking, with a ratio of about 1.6. The Japanese students should have been able to easily and quickly read the Japanese text (in comparison to the English text), so objectively, the fact that the posts were longer was not necessarily a problem for them.

Figure 2

Word cloud of text contributed by students on Discord

Table 2

Basic statistics of text contributed by students on Discord

	US	Japan	US/Japan ratio
Posts	135.0	118.0	1.14
Posts per student	11.3	13.1	0.86
English words	6291	5292	1.19
E words per student	524	588	0.89
Japanese characters	14099	6667	2.11
J char per student	1175	741	1.59

However, subjectively, the Japanese students did have a problem with the length of the posts and felt pressure to write more. In the final questionnaires, two Japanese students explicitly stated that they were more comfortable writing short messages:

• "The difference of the amount of messages. Japanese students tend to make messages shorter to be briefly. [US] students wanted us to write detail more." (J2)

• "It was bored to make sentences in two languages." (J8)

As Student J8 mentioned, some students thought they should write the same message in both languages, and in fact, that is what most of the posts reflect. Our intention was that they mix the languages, rather than repeating the same message twice, and we even provided examples of how they could do so. However, the students may have been imitating our own writing style, which repeated the same information in both languages (see, e.g., Appendix). For future projects, we will rethink how we communicate with students during the project and be clearer about how we expect them to communicate with each other, including repeating the expectations at relevant moments during the project.

In summary, the students in the project interacted by sticking to the topics that were provided and writing bilingual messages that repeated the same information in each language. However, the contributions were somewhat uneven on a per student basis, with the US students contributing more Japanese text than the Japanese students, and the Japanese students contributing slightly more English text than the US students. Subjectively, some of the Japanese students felt pressure to write longer messages, but did not want to do so.

Final questionnaires

To answer the second research question, "What learning outcomes will students report?", we analyzed the students' responses to the questions on the final questionnaire. The questionnaire was completed by 10 of the 12 US students and all 9 Japanese students. The second author read the responses many times to develop themes, then the first and second authors discussed the themes and refined them. The following three themes were agreed upon: experiencing authentic communication, increasing motivation to learn the target language, and finding similarities. Supporting quotes for each theme are listed in Table 3, overleaf.

Table 3 reinforces the observation that the Japanese students preferred to write short messages, showing that in the final questionnaire, the Japanese students generally wrote very short responses, such as single sentences. This was true regardless of whether they wrote in English or Japanese. Because their responses were so short, the Japanese students provided few responses relevant to the themes. This lack of data from the Japanese students means that the themes are most relevant to the experiences of the US students and are of questionable relevance to the experiences of the Japanese students.

The theme of "finding similarities" was seen in the greatest number of students' responses. These responses are clear indications that these students were at the stage of minimization, according to the Intercultural Development Continuum (Intercultural Development Inventory, 2023; see Fig. 1). Some of the students, such as A2, seem to indicate that they progressed along the continuum due to the telecollaboration. However, in the future, measuring students' intercultural development before and after the project would provide more useful data.

Table 3

Themes and supporting quotes from final questionnaire

Theme	Final questionnaire response
Experiencing authentic communication	I think the most important thing that I learnt through the project is that through interactions with people who understand a language that you are learning you are much more likely and able to practically use the knowledge that you learn in the classroom because even though you are able to learn all about particles and grammar in class sometimes using that in a practical conversation is something that people struggle with and through this program I believe it has helped me learn how to do that better. (A6)
	I was able to practically use my Japanese for things other than a workbook or in class activity. (A7)
	I was challenged to be more communicative with my Japanese. In class, we tend to focus on the forms and vocabulary we are actively learning, but when I really had to communicate about separate topics, I was forced to utilize the language as a whole. (A10)
	I learned how to make English sentences more natural. (J2)
Increasing motivation to learn the target language	I feel like I gained some confidence in my Japanese skills in that I was able to speak well with authentic Japanese speakers! (A2)
	It made me more excited to learn Japanese and excited for my study abroad next semester. (A9)
	I'm always anxious about making mistakes, which can dissuade me from practicing my Japanese, but I really feel like this project has forced me to overcome that. (A10)
Finding similarities	I think I learned that stereotypes I had in mind about Japanese students were kind of wrong. I initially thought that Japanese students were very serious and competitive in school and therefore not super friendly, but my partners were super nice and very friendly! I think it made me realize that even college students across the globe are just as friendly and nice as the people I live on campus with. (A2)
	They can have different cultural expectations and upbringings, but at the same time, they can have similar tastes in games, music, etc, which I think can be applied to not just Japanese students but students from all over the world. (A3)
	That everyone, regardless of where they're from or what they do, has a personal backstory that has shaped their worldview, and it's fascinating to be able to draw comparisons to your own life. (A4)
	I really enjoyed being able to relate and share similar experiences with my overseas partners. (A9)
	I think it was a reminder that national boundaries are not the true arbiter of cultural difference; for instance, generational similarities can often transcend national ones. I often felt a companionship with the Japanese students simply by our shared experience of being students. (A10)
	I could know there is no big difference between them and us. (J4)

To summarize, the US students wrote responses to the final questionnaire that suggested that they experienced authentic communication, increased their motivation to learn the target language, and found similarities between their own culture and Japanese culture. The Japanese students also provided some responses that suggested similar learning outcomes, but their tendency to write very short responses prevents us from saying much about their learning.

Discussion and conclusion

This study was valuable because students interacted in the telecollaboration in ways that we could not have predicted. Specifically, students in the US and Japan had different styles of contributing text to the discussions. The Japanese students preferred to write short messages compared to the US students, and this caused conflict at times. One possible reason for the difference in message length is that the US students were enthusiastically communicating with a Japanese person their own age for the first time, whereas the Japanese students had previously had some opportunities to communicate with peers in English and therefore were less excited about the opportunity. Another reason relates to the length of messages that students are accustomed to writing in daily life. The Japanese students might be used to writing only short messages via smartphone messaging apps, rarely writing longer messages such as emails. While the US students also write short text messages, they are also accustomed to writing longer messages, such as emails, as part of their academic life. In future iterations of this project, explaining these differences to students and asking them to accommodate each other might help them interact more successfully.

While the length of the messages that students posted differed, most of the students in this study posted bilingually, including the same message in both languages. One strategy for avoiding this is to specify the language that students should post in. Alternating language by activity or by week would give all students opportunities to use their second language for both input and output.

Previous research on intercultural competence (e.g., de Castro et al., 2018; Lázár, 2014) indicated that students could improve this competence through telecollaboration, and the authors hoped their students would do so through this project. Although the evidence of change in this study is limited, many students, particularly US students, wrote questionnaire responses that indicated that they were at the stage of minimization on the Intercultural Development Continuum (Intercultural Development Inventory, 2023; Fig. 1). Future research could aim to explicitly measure change. This is particularly important for observing the change in students who tend to write minimal responses, such as the Japanese students in this study.

The authors hoped that their students would feel motivated to use their second languages by participating in this project. Some students indeed indicated their increased motivation in their questionnaire responses. Looking beyond the data for this study, one of the US students was inspired by the game format created by

the Japanese students, and she created her own online game in another Japanese class in the following semester. On the other hand, some of the Japanese students in particular indicated that posting messages was tiresome. In the future, measures of motivation before, during, and after the project would provide data that is easier to interpret.

The authors also drew important pedagogical implications through conducting this project that do not appear in the student data. First, the schedule can be tricky to arrange because of differences in when semesters begin, pause for a break, and end. For this reason, planning is essential, but remaining flexible is also important to accommodate unexpected problems.

Second, the telecollaboration in the current study was conducted via text only, which may have limited students' motivation to communicate with their overseas partners. Although "voice channels" were set up for each group on Discord, and the students were encouraged to arrange video chats, none of the groups took advantage of it. The time difference between the US and Japan makes scheduling video chats difficult, but having at least one video chat to kick off the project might increase students' motivation to work together. Another strategy for helping students to feel closer is to require them to share video introductions of themselves.

Third, because some students in Japan said that they did not find the discussion topics interesting, the first author encouraged them to start their own discussions about topics of their choice. In one case only, a student (J5) did so, and he was successful in getting responses from the US students. Asking students to develop the discussion topics themselves may encourage them to take ownership of the telecollaboration and feel more motivated to participate.

Finally, having a shared goal and equal roles for all students is recommended. In the current study, the classes had asymmetrical roles, with the Japanese students creating a game and the US students providing feedback on it. Ideally, students should work together to accomplish a shared goal so that they have a genuine need to communicate in their shared languages. Truly collaborative tasks, as mentioned in O'Dowd's (2011, p. 342) definition, may lead to more satisfying outcomes for all students.

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Appendix A

Post-COIL Student Reflection Survey (based on Guth & Helm, 2017)
Here are the learning objectives for this project:
COILプロジェクトの学習目標

- Enjoy communicating with students from another culture using English and Japanese.
文化の異なる学生と英語・日本語でコミュニケーションを楽しむこと。
- Deepen your understanding of another culture.
異文化に対する理解を深めること。
- Design games (Japan) OR provide design help and feedback on games (US) for learning English and/or Japanese.
英語・日本語学習のためのゲームを開発すること（日本）またはゲーム開発の支援・フィードバックを提供すること（アメリカ）。

  1 Do you think you achieved these objectives? Why or why not?
  上記の目標を達成したと思いますか?どうしてですか?
  2 What was the most important thing you learned from the COIL project?
  プロジェクトで学んだ最も重要なことを教えてください。
  3 Please describe how working with your overseas partner(s) impacted your learning in this course.
  海外パートナーとの交流は、（あなたの)学習にどのような影響を与えましたか?
  4 Please describe how working with your overseas partner(s) changed the way you understand the world.
  パートナーと交流することによって、どのように自分の考え方が変わりましたか?

5   How do you think your cultural background impacted the way you interacted with your overseas partner(s)?
    自分の文化は、パートナーとの交流にどのような影響を与えたと思いますか?
6   Were any aspects of this COIL project stressful? If so, please describe them and what you learned from them.
    プロジェクトでストレスがありましたか? どのようなストレスでしたか? その経験から何か学びましたか?
7   What do you want to learn more about as a result of this connection to students from another culture?
    このプロジェクト終了後、異文化についてもっと学びたいことは何ですか?
8   Do you plan to keep in touch with your overseas partner(s)? Why or why not?
    これからも海外パートナーと連絡をとるつもりですか?どうしてですか?

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