



Designing for Participation in a Japan–Australia COIL Project: Perspectives from Japanese Students

Sachiyo SEKIGUCHI

Meiji Gakuin University, Japan

Abstract

This study examines student participation in a sustained Japan–Australia COIL project from the perspective of learning environment design, drawing on experiences reported by students at the Japanese university. The project connected university students in Japan who were learning English with learners of Japanese at an Australian university. Although COIL is intended to promote reciprocal learning, providing opportunities for interaction does not necessarily ensure meaningful participation. Rather than being organised as a one-off exchange, the project unfolded over six to eight weeks through a shared digital hub, recurring meetings, staged collaborative tasks, and weekly records that enabled instructors to monitor the collaborative process. Students could use Japanese and English flexibly during interaction, while project outputs were produced in the language each group was learning. The activities also positioned students as contributors of locally grounded knowledge and required them to create shared outputs. One project, for example, involved developing sustainable travel proposals for visitors to Japan. This study focuses specifically on the experiences of the students in Japan, drawing on self-reported questionnaire data collected from 73 Japanese participants between 2023 and 2025, when the questionnaire structure and project design remained broadly consistent. Descriptive results show that 84% of participants rated the group activity positively, while 58 of the 73 students reported perceived improvement in their language ability. A thematic analysis of open-ended responses identified recurring accounts of coordinating meetings, conducting research, explaining cultural and local knowledge, proposing ideas, negotiating meaning, providing language support, and producing shared materials. Participants also described linguistic and intercultural difficulties that sometimes prompted clarification and adjustment but could also constrain participation. From an ecological perspective on language learning [1], these reported forms of participation can be understood in relation to features of the learning environment, including sustained interaction, shared digital spaces, task roles, visible collaborative processes, and shared outputs. From the perspective of the Japanese participants, meaningful participation in COIL involved more than interaction: it included opportunities to explain their knowledge, propose ideas, coordinate collaborative work, and support their partners within a shared learning environment.

Keywords: COIL, learning environment design, student participation, virtual exchange, collaborative learning, affordances

1. Introduction

Collaborative Online International Learning (COIL) and other forms of virtual exchange provide university students with opportunities to work with peers in other countries without physical mobility. COIL typically involves educators at partner institutions co-designing collaborative activities that are embedded within their curricula, with students working together online over a sustained period [2]. Such projects can create valuable opportunities for language use, intercultural learning, and collaboration. However, bringing students together online does not in itself ensure that they will participate meaningfully in the collaborative process. This distinction between opportunities for interaction and actual participation is important. Research on telecollaboration and virtual exchange has long shown that online intercultural interaction does not automatically lead to successful communication or sustained engagement; projects may also involve low participation, misunderstanding, or difficulty in negotiating meaning [3]. More recent reviews of COIL similarly suggest that outcomes depend on pedagogical, technological, and contextual conditions rather than on international online contact alone [4]. The pedagogical question is therefore not simply whether students are given opportunities to interact, but what the learning environment enables them to do together. In this study, participation is understood



broadly as the ways students contribute to shared collaborative work. The relationship between designed conditions and students' actual participation is developed in Section 2.

The present study examines participation in a sustained Japan–Australia COIL project involving students learning English at a Japanese university and students learning Japanese at an Australian university. The project was established in 2020 and has been revised over time in response to instructor observations and student experiences. Rather than organising a one-off international exchange, the project extends over six to eight weeks and includes recurring online meetings, staged collaborative tasks, a shared digital workspace, and jointly produced outputs. Students can draw flexibly on Japanese and English during the collaborative process, while project outputs are produced in the language each group is learning. Tasks have also been redesigned to give students clearer reasons to contribute knowledge from their own local and cultural contexts. The study focuses on the experiences reported by 73 students at the Japanese university who participated in the project between 2023 and 2025. Rather than evaluating whether COIL was successful as a whole, the analysis examines the forms of participation students described and considers how these relate to features of the designed learning environment. It addresses the following research question: What forms of participation did Japanese students report in the sustained COIL project, and how can these forms of participation be understood in relation to features of the designed learning environment? By examining participation in relation to the environment in which it occurred, the study aims to contribute to a more design-oriented understanding of COIL: one concerned not only with creating opportunities for international interaction, but with creating conditions in which students have meaningful ways to contribute to shared work.

2. Designing for Participation in Virtual Exchange

2.1 From Interaction to Participation

Virtual exchange and COIL create opportunities for students in different countries to communicate and work together. However, simply providing opportunities for interaction does not mean that all students will participate in the same way or to the same extent. Previous research has shown that online intercultural collaboration can involve misunderstandings, uneven participation, and difficulties in communication as well as positive learning experiences [3], [4]. It is therefore useful to look beyond whether interaction took place and examine what students actually did within the collaborative process. In this study, participation is understood more broadly than attendance at online meetings or the amount of target-language speaking. Students may contribute to collaborative work in different ways, for example by explaining relevant knowledge, proposing ideas, coordinating tasks, asking for clarification, supporting their partners, solving problems, and helping to produce a shared outcome. The present study therefore examines participation through the kinds of contributions students reported making to the shared work of their groups.

2.2 Learning Environment Design and Affordances for Participation

From a learning environment design perspective, educators can design the conditions for participation, but they cannot directly determine how students will participate. They can design tasks, provide resources and digital spaces, organise groups and roles, and create expectations for collaboration. Students, however, may respond to these conditions in different ways [5]. For this reason, it is useful to distinguish between what was designed and what students actually did within the learning environment. The concept of affordance helps describe this relationship between the learning environment and student activity. In an ecological view of language learning, affordances are possibilities for action that emerge through the relationship between learners and their environment [1]. In other words, a task, tool, or resource does not automatically lead to a particular kind of participation. What matters is how learners make use of the possibilities available to them. This perspective has also been applied to virtual exchange. Hsieh et al. [6], for example, examined how learners identified and used different affordances during online virtual exchange, including those related to peers, technologies, tasks, and support within the learning environment. Their study highlights the importance of looking not only at what a virtual exchange provides, but also at how learners make use of the opportunities available to them. In the present study, particular attention is given to several features of the COIL learning environment: sustained interaction over several weeks, staged collaborative tasks, a shared digital space, opportunities to contribute local knowledge, flexible use of Japanese and English, and responsibility for producing shared outputs. These features are examined as possible sources of affordances for



participation. The following section describes how these elements developed within the Japan–Australia COIL project.

3. Development of the COIL Learning Environment

3.1 Project Development Since 2020

The Japan–Australia COIL project began in 2020 and has been revised over several iterations. The basic structure has remained relatively stable. Students from the two universities work in mixed groups, usually with five students in total and occasionally six. They collaborate for several weeks through regular video-conferencing meetings in which students can see and speak with one another, and they use shared digital tools to prepare materials such as slides, posters, and videos. What has changed more substantially is the design of the collaborative task. In the early projects, students selected an issue related to the Sustainable Development Goals and compared Japan and Australia. Although this provided a common topic for international discussion, instructor observations suggested that broad country comparison did not always give every student a clear reason or role for contributing to the group. In 2022, groups were given greater freedom to select their own topics. Their choices included copyright in popular culture, animal welfare, hip-hop and music culture, anime, and women in politics and the economy. This gave students greater freedom to choose topics based on their interests, but the task still depended largely on students deciding for themselves how to turn a broad topic into sustained collaborative work. The project therefore moved toward more structured, scenario-based tasks in 2023 and 2024. Rather than simply asking students to compare the two countries, each group worked with a specific situation, audience, and problem. For example, one scenario asked students to consider how a Japanese local government might support new immigrants, while another asked them to develop training for local volunteers working with Australian athletes at the 2025 World Athletics Championships in Tokyo. Other scenarios involved workplace communication between Japan and Australia and tourism in Niseko. Each group produced a video and a bilingual pamphlet or poster, with students in Japan reporting in English, students in Australia reporting in Japanese, and both sides working together on a final proposal or solution. This scenario-based design made the purpose of collaboration more concrete, but the project continued to evolve. In 2025, the main task was redesigned around sustainable travel in Japan. Mixed groups were asked to develop a concept for Australian visitors travelling sustainably in Japan. The project began with discussion of sustainability and cultural expectations, followed by research into transportation, accommodation, food, and activities in Japan, and then the development of a shared travel concept. This task explicitly called for students in Japan to contribute locally grounded knowledge, while students in Australia could contribute perspectives on the expectations and needs of potential visitors.

Table 1. Development of the COIL learning environment

Period	Main task structure	Main design emphasis
Early projects	Broad SDG-based comparison of Japan and Australia	Creating an international topic for discussion
2022	Student-selected topics such as popular culture, animal welfare, music, anime, and gender	Increasing student choice and interest
2023–2024	Scenario-based problems with a defined audience and shared solution	Giving collaboration a clearer purpose and structure
2025	Designing sustainable travel in Japan for Australian visitors	Making locally grounded knowledge necessary to the shared outcome

The table shows the development of the task design rather than a comparison of the effectiveness of different project versions. The present study focuses on student responses collected between 2023 and 2025, when the project had moved toward more structured collaborative tasks and when the questionnaire remained broadly consistent. Across these revisions, the task design gradually shifted from simply giving students a topic to discuss to giving them a shared problem that required contributions from all members. In this sense, the project was increasingly designed for participation rather than simply for interaction.

3.2 The 2023–2025 Learning Environment



Across the 2023–2025 cohorts, the core structure of the learning environment remained consistent. Students worked in mixed groups of approximately five members over six to eight weeks, met online weekly, used shared digital spaces and collaborative documents, completed staged tasks, recorded their meetings on Padlet, and produced bilingual or target-language outputs. The specific task and output format varied by year, but these core elements were retained. In the 2025 project, for example, students first discussed sustainability and cultural expectations, then researched sustainable travel options in Japan, developed their concept, and finally produced a digital poster. The Australian students also prepared a video presentation in Japanese based on the jointly created poster, with the Japanese students supporting script writing, presentation practice, and video production. Meeting records on Padlet were a continuing feature across the project years and were used to make the collaborative process visible. In 2025, for example, each group submitted six sets of meeting minutes across the project period. The minutes included the date, participants, discussion points, action items, and the student responsible for recording the meeting. Students were also asked to distribute roles among group members. These records were intended not simply as administrative documentation. They were intended to help groups maintain continuity between meetings by recording decisions, responsibilities, and next steps. They also provided instructors with a record of out-of-class collaboration, making it possible to identify groups that were not meeting regularly or were having difficulty progressing and to provide support when needed. Flexible use of Japanese and English was another feature shared across the three cohorts. Students could use both languages during group interaction, while the project outputs created more structured opportunities for target-language use. The exact output format varied by year. In the scenario-based projects, students in Japan reported in English and students in Australia reported in Japanese before jointly producing a conclusion or compromise. In 2025, the shared poster was produced in English, while the Australian students prepared a Japanese-language video with support from their Japanese partners. These features created multiple ways to contribute beyond speaking during video calls. Section 5 examines how these forms of participation appeared in students' reported experiences.

4. Method

4.1 Participants and Data Collection

The study draws on questionnaire responses from students enrolled in an elective COIL course in the Faculty of Letters at the Japanese university. Across the three cohorts from 2023 to 2025, 80 students were enrolled in the course and eligible to complete the end-of-semester questionnaire. Seventy-three unique students responded (91.3%): 20 in 2023, 34 in 2024, and 19 in 2025. No student participated in more than one of the three cohorts included in the analysis. Two duplicate submissions were removed during data cleaning. The questionnaire was administered online by the author, who was also the course instructor, after all course activities had been completed. Completion of the questionnaire and participation in the research were voluntary. Students were informed that they could withdraw from the research at any time and that participation or non-participation would not affect their course grade. Responses were identifiable to the instructor at the time of collection, and written informed consent was obtained for the research use of questionnaire responses and quotations. The questionnaire included several five-point Likert-type items, most using an agreement scale from 1 (strongly disagree) to 5 (strongly agree). The group activity and students' own participation were each rated from 1 to 5, with higher scores representing more positive evaluations. Perceived language improvement was measured with a yes/no item, followed by an open-ended question asking students to explain why they felt their language ability had or had not improved and in what ways. The questionnaire also included required open-ended questions asking students to describe their role in the project, what they felt they had done well, what they found difficult, and what skills they felt were needed or developed. These open-ended prompts were identical across the three cohorts.

4.2 Data Analysis

Closed-response items were analysed descriptively using frequencies and percentages. These results were used to provide an overall picture of students' experiences rather than to test changes or differences between cohorts. All open-ended questions described in Section 4.1 were included in the qualitative analysis. Once students chose to complete the questionnaire, responses to these items were required, so all 73 respondents provided open-ended responses. The analysis was conducted by the



author. Responses were read inductively for recurring actions and experiences related to participation, and initial categories were generated from the data rather than from a predetermined coding framework. Initial categories included activities such as coordinating meetings, conducting research, proposing ideas, explaining information, checking understanding, supporting partners with language, and contributing to shared materials. Related categories were then grouped into broader patterns of participation. The analysis also examined accounts of difficulty and constrained participation alongside more positive accounts. Quotations were selected as representative examples of recurring patterns and, where relevant, to illustrate contrasting or constrained experiences. After the participation patterns had been identified, they were interpreted in relation to features of the learning environment described in Section 3. This interpretive step did not assume that a design feature caused a particular form of participation; rather, it examined how students' reported actions occurred within, and could be understood in relation to, the designed environment. Participants are identified by anonymised codes indicating the year of participation (e.g., 2025-S01). Quotations originally written in Japanese were translated into English by the author.

5. Findings: Forms of Participation

Seventy-three questionnaires were included in the analysis. Overall evaluations of the group activity were positive: 61 of the 73 students (83.6%) rated the group activity as 4 or 5 on a five-point scale. Self-evaluations were somewhat lower, with 52 students (71.2%) rating their own participation as 4 or 5. In addition, 58 students (79.5%) reported that they felt their language ability had improved. These results provide a general picture of the students' experiences, but the following analysis focuses on what students reported actually doing during the collaborative process. Three recurring forms of participation were identified in the open-ended responses: contributing knowledge and ideas; coordinating and producing shared work; and negotiating meaning and supporting group interaction. These categories were not mutually exclusive. Individual students often described several forms of participation within the same project.

5.1 Contributing Knowledge and Ideas

Students described participation in terms of contributing information, research, perspectives, and proposals that were needed for the group's project. This included researching the topic assigned to them, suggesting directions for the project, and bringing knowledge from their own context into group discussions. This was particularly visible in the 2025 sustainable travel project. One student, whose home area was included in the proposed trip, explained:

"Because Iwate, the main destination of our trip, is my home area, I suggested things that I personally thought would be interesting." (2025-S02)

The student was therefore contributing not simply as an English learner, but as someone who had relevant local knowledge that could influence the group's shared proposal. Another 2025 participant described contributing actively when the group had difficulty deciding on the direction of its travel plan:

"I actively suggested travel ideas and was able to propose and plan an SDG-based plan that the other group members could agree with." (2025-S15)

The student also explained that when few ideas were emerging in the early stage, they presented a travel plan they had prepared in order to move the group discussion forward. Similar forms of contribution appeared in the scenario-based projects. In the 2024 immigration scenario, for example, one student described researching the actual situation and problems faced by immigrants in a Japanese municipality and considering advice for people moving to Japan (2024-S29). Across the responses, participation therefore involved not only speaking in English but also bringing information and ideas into the group that could be used in making decisions and developing the final product.

5.2 Coordinating and Producing Shared Work

A second major form of participation involved organising the collaborative process and helping to produce the group's final work. Students described scheduling meetings, chairing discussions, assigning or checking tasks, writing meeting minutes, reminding members about deadlines, and creating or editing slides, posters, and videos. For example, one 2024 participant described their role as:

"Assigning the meeting minutes, sending reminders and checking submissions, and creating the PowerPoint." (2024-S18)



The same student also reported proposing an idea in English when the discussion had stalled, which helped the group decide on its research plan. Another student described several different forms of contribution:

"I decided the poster design, produced the presentation video, suggested the opening of the presentation, added subtitles to part of the video, and wrote the meeting minutes." (2024-S20)

This student also reported initiating communication about meeting arrangements during the project. These accounts are important because much of this participation would not be visible if participation were measured only by how often students spoke during online meetings. Keeping the project moving, connecting one meeting to the next, and bringing different pieces of work together were also substantial contributions to the collaborative process. In a project extending over several weeks, these forms of coordination connected work across individual meetings. Recurring meetings, staged tasks, and the requirement to produce a shared output formed the context for this type of participation.

5.3 Negotiating Meaning and Supporting Group Interaction

The third recurring form of participation involved managing communication itself. Students described checking whether others had understood, asking questions, explaining again, changing expressions, correcting language, and using both Japanese and English to help the group continue its work. One student described what they did when communication was unsuccessful:

"When something did not get across, I tried changing the expression and explaining it more carefully." (2023-S02)

The same student reported that differences between Japanese and English expressions sometimes created differences in understanding. Other responses showed students using the two languages strategically. One 2023 participant explained that when English was dominating the meeting, they sometimes used easier Japanese so that no member would be left behind. The student also reported actively revising the Australian students' Japanese scripts to make them easier to understand (2023-S18). In another case, a student described stepping in when another Japanese group member's English was not understood:

"When another group member's English did not get across to the Australian students, I was able to explain it using both English and Japanese." (2024-S30)

Students also described checking interpretations rather than assuming that both sides understood the task in the same way. One 2024 participant reported that when the Japanese and Australian groups realised that they had interpreted the instructions differently, they "double-checked" what they were supposed to do and made the decision again together (2024-S29). These examples suggest that participation in the project included work on maintaining the interaction itself. Students were not simply exchanging information in the target language; they were also attempting to make communication possible by clarifying, reformulating, confirming, and supporting one another. At the same time, these processes did not always work successfully. Students also reported difficulty expressing ideas immediately in English, differences in interpretation, scheduling problems, and difficulty reaching agreement. Difficulties sometimes prompted clarification and adjustment, but they could also constrain participation. One student, for example, gave themselves a low self-evaluation because they felt unable to speak up and make proposals:

"I could not speak up and make proposals myself, so I mainly followed the suggestions made by other members and supported them." (2024-S34)

Other students similarly reported cases in which misunderstandings remained unresolved or differences between group members made the collaborative process difficult. Thus, the designed environment provided possibilities for participation, but these possibilities were not taken up in the same way by every student.

6. Discussion: Participation in Relation to the Learning Environment

The findings show that participation in the COIL project involved more than speaking during online meetings. Students reported contributing local knowledge and ideas, organising collaborative work, producing shared materials, negotiating meaning, and supporting communication. These findings are consistent with the distinction made earlier between designed conditions and what learners actually do within them. The contribution of this case is not to demonstrate that particular design features caused participation, but to show the forms participation took within a sustained COIL project involving two groups of language learners.



One important pattern concerned the contribution of local knowledge and experience. Across the project versions, students were expected to contribute knowledge relevant to the shared task, and the 2025 sustainable travel project made this particularly clear. Students drew on knowledge of local places and conditions and used their own proposals in group decision-making. These accounts show that students participated not only as language learners but also as group members whose knowledge was useful to the shared work. The task did not determine these contributions, but it provided a setting in which local knowledge could become part of the collaboration.

A second pattern involved organising and maintaining the group's work. Students reported arranging meetings, recording decisions, sending reminders, checking progress, and producing shared materials. These activities took place within a project structure that included recurring meetings, staged tasks, shared digital spaces, and Padlet records. The records were intended to help groups maintain continuity and to make out-of-class activity visible to instructors. The student accounts do not show that these structures caused sustained participation, but they do show that organisational work itself became an important form of contribution within a multiweek project.

Using both languages to support communication formed a third important pattern. Students described using Japanese and English flexibly to clarify meaning, support partners, and keep communication moving when difficulties occurred. These accounts suggest that participation in a COIL project involving language learners cannot be understood only in terms of how much target-language speaking took place. In some cases, using both languages helped students maintain interaction or support another member's contribution. At the same time, the present data do not show how this kind of bilingual support affected each student's target-language practice or language development.

The findings also show that students participated differently within the shared core structure of the project. Some students proposed ideas or coordinated group work, while others reported difficulty contributing in the ways they had hoped. The account of 2024-S34 is useful here: the student reported being unable to make proposals but also described supporting the suggestions of others. This can be understood as both a form of contribution and a limitation on the student's own voice or initiative. These accounts also caution against treating continued group activity or task completion as evidence that participation was equally distributed among group members. Such variation is consistent with an ecological view of affordance, in which possibilities for action do not determine how learners will act [1], [6]. This interpretation is also consistent with a learning environment design perspective in which designed arrangements create conditions for activity without determining learner behaviour [5]. The contribution of the present case is to make visible some of the concrete forms participation can take in sustained COIL: contributing local knowledge, organising collaborative work, and using both languages to support communication. These forms may be missed if participation is understood only as attendance or target-language speaking. Looking at what students actually contribute to shared work can therefore give a fuller picture of participation in virtual exchange.

7. Conclusion

This study examined participation in a sustained Japan–Australia COIL project from the perspective of learning environment design. The findings show that participation involved more than attending online meetings or speaking in the target language. Students described contributing local knowledge and ideas, organising collaborative work, producing shared materials, negotiating meaning, and using both Japanese and English to support communication. These forms of participation were examined in relation to features of the designed learning environment, including staged tasks, recurring meetings, shared digital spaces, meeting records, flexible language use, and shared outputs. The study also shows that students participated differently within the shared core structure of the project. Some students took active roles in proposing ideas or coordinating group work, while others contributed through support roles or reported difficulty participating in the ways they had hoped. This supports a view of learning environment design in which educators can create conditions and possibilities for participation without determining how students will act. The contribution of this case is to make visible forms of participation that may be missed when COIL is understood mainly in terms of international interaction or target-language speaking. The study is limited by its reliance on self-reported questionnaire data from students at the Japanese university and does not include direct observation of interaction or the perspectives of the Australian participants. Future work could examine how these forms of participation develop during interaction and how students make use of different features of the learning environment over the course of a sustained virtual exchange.



REFERENCES

- [1] van Lier, L., *The Ecology and Semiotics of Language Learning: A Sociocultural Perspective*, Dordrecht, Kluwer Academic Publishers, 2004. <https://doi.org/10.1007/1-4020-7912-5>
- [2] Hackett, S., Dawson, M., Janssen, J., and van Tartwijk, J., "Defining Collaborative Online International Learning (COIL) and Distinguishing it from Virtual Exchange," *TechTrends*, vol. 68, no. 6, 2024, pp. 1078-1094. <https://doi.org/10.1007/s11528-024-01000-w>
- [3] O'Dowd, R., and Ritter, M., "Understanding and Working with 'Failed Communication' in Telecollaborative Exchanges," *CALICO Journal*, vol. 23, no. 3, 2006, pp. 623-642. <https://doi.org/10.1558/cj.v23i3.623-642>
- [4] Fukkink, R., Helms, R., Spee, O., Mongelos, A., Bratland, K., and Pedersen, R., "Pedagogical Dimensions and Intercultural Learning Outcomes of COIL: A Review of Studies Published Between 2013-2022," *Journal of Studies in International Education*, vol. 28, no. 5, 2024, pp. 761-779. <https://doi.org/10.1177/10283153241262462>
- [5] Goodyear, P., Carvalho, L., and Yeoman, P., "Activity-Centred Analysis and Design (ACAD): Core Purposes, Distinctive Qualities and Current Developments," *Educational Technology Research and Development*, vol. 69, no. 2, 2021, pp. 445-464. <https://doi.org/10.1007/s11423-020-09926-7>
- [6] Hsieh, M.-H., Chuang, H.-H., and Albanese, D., "Investigating Student Agency and Affordances During Online Virtual Exchange Projects in an ELF Context from an Ecological CALL Perspective," *System*, vol. 109, 2022, article 102888. <https://doi.org/10.1016/j.system.2022.102888>