

**Creating "Bilingual Books" via Cross-Cultural Collaboration
— A Case Study of a Virtual Exchange Program —
「Bilingual Book」ができるまで
—Virtual Exchange Program の実践に関する一考察—**

TOMINAGA Yuko¹, SHARP Akiko²

富永裕子¹, シャープ昭子²

Abstract

Since the academic year 2022, our study has been actively engaged in the implementation of a Virtual Exchange (VE) Program including Content and Language Integrated Learning (CLIL) between students learning Japanese at a university in Canada and students learning English at a small college in Japan. Leveraging the opportunities offered by online education, this paper provides an overview of the VE program conducted in the 2022 academic year, specifically highlighting the "Bilingual Books" created by the students using the digital book creation tool, "Book Creator". Additionally, we explore how students supported each other in achieving their language learning objectives by interchanging languages, evaluate the collaborative tasks accomplished, present student self-assessments, and offer reflections on the entire experience.

Keywords: CLIL, VE, COIL, TBLT, self-assessments

キーワード：クリル，バーチャル・エクスチェンジ，コイル，タスク達成，自己評価

1. Introduction

In recent times, in a society where diversity and multicultural coexistence are emphasized, cross-cultural understanding education is becoming increasingly important. However, on the other hand, due to the impact of the COVID-19 pandemic, many students find themselves in a situation where they have no choice but to cancel the study abroad plans they had organized. In the midst of opportunities for international exchange with students studying face-to-face being canceled, some attention is being given to innovations in online classes that can enhance quality and explore the potential for programs that can be implemented continuously.

Through these programs, the hypothesis is formulated that fostering language proficiency, critical thinking skills, and cross-cultural adaptability, essential for global talent, can be achieved, and the effectiveness as a place for

¹ Seisen Jogakuin College

² University of Calgary

human education can be expected. In this paper, as an initial stage, we aim to implement classes based on the VE program. Utilizing ICT (Information and Communication Technology) tools, we will engage in project-based learning with students from overseas. The expectation is not only an improvement in language skills but also the development of a wide range of abilities, including international knowledge, self and other understanding awareness, leadership, communication skills, and, furthermore, indispensable media literacy in the future.

Due to the advancement of ICT, educational activities aimed at connecting, collaborating, and learning online among geographically distant individuals are referred to as Virtual Exchange (VE) or Collaborative Online International Learning (COIL). Strictly speaking, VE is a general term for online collaborative learning, while COIL is specifically defined as "online international collaborative learning among multiple universities" (Murata, 2022).

In this paper, we report on one outcome of a program implemented in the process of using CLIL in course design and enhancing the quality from VE to COIL: the creation of a bilingual book. To explore the potential of practice-oriented classes based on COIL×CLIL, we observe individual student transformations during the process of collaborative tasks between Japanese and Canadian students, and analyze effective factors based on survey responses.

2. Backgrounds

2.1 CLIL and 4Cs

CLIL, a term that has been mainly used in Europe since around 1994, is a form of foreign language education aimed at teaching the language together with subject content, and is based on the philosophy of CEFR. It has been practiced actively since the 2000s, primarily by researchers and faculty related to foreign language education in Europe, and is one of the themes in which much research is being conducted. Although there are not many systematic studies of CLIL, Mehisto, Marsh & Frigols (2008) have presented specific examples of the introduction of CLIL and relevant teaching methods for teachers. In addition, one can say that Coyle, Hood & Marsh (2010) is the first publication that systematically explains the background, theory, principle, and practice of CLIL clearly (Figure 1). The principle of CLIL is "Learn as you use, use as you learn" (Mehisto, Marsh & Frigols 2008), and according to Coyle & Marsh (2010), the methodology for this is to organically connect 4Cs: Content, Communication, Cognition, and Culture, and realize a high level of education through the synergistic effect (synergy) generated by creating teaching materials, formulating lesson plans, and conducting teaching in conformity with this framework.

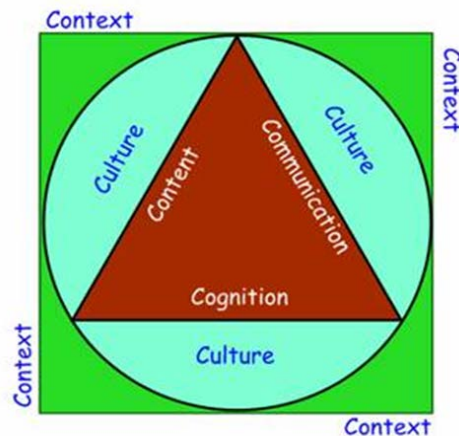


Figure 1. The Image of CLIL (Coyle , Hood, & Marsh, 2010 p.41)

Muranoi (2014) conducted intercultural exchange via Skype with South Korean university students. The results of both quantitative and qualitative analyses revealed that CLIL activities had a positive impact on English learning motivation, as well as on grammar and vocabulary acquisition. Muranoi recognizes the effectiveness of designing classes based on CLIL. His study indicates its indispensability in enhancing the quality in the transition from VE to COIL.

2.2 VE and COIL

COIL is a significant educational approach where students and educational institutions from different countries and cultures collaborate to enhance intercultural understanding and collaboration skills. This approach involves engaging in four processes while reflecting on the activities:

- 1) Icebreaking/Team building,
- 2) Comparison/Discussion,
- 3) Project-based activities, and
- 4) Presentation/Reflection summary.

As already mentioned, COIL is a form of VE that specifically utilizes online international collaborative learning involving multiple universities. The quality of tasks in COIL is higher compared to mere online collaborative learning, and it is driven by factors such as globalization, internationalization, advancements in ICT, and the increasing need for educational reforms in higher education institutions. Research and practical implementation of COIL have gained attention primarily since the early 2000s.

Belz & Thorne (2006) focus on intercultural foreign language education in online environments and their examination of theory and practice in COIL. After a while, Jones & Hafner (2012) shifted their attention to digital literacy within COIL projects. They proposed practical suggestions for digital collaboration across cultures. In alignment with this, Beaven, Comas-Quinn & Sawhill (2013) explored open virtual mobility, presenting a project that proposed new approaches to theory and practice in COIL. Furthermore, De Wit & Wieland (2015) delved into the topic of internationalization in higher education globally, reporting on various international collaboration approaches, including COIL.

In 2018, MEXT(the Ministry of Education, Culture, Sports, Science and Technology of Japan) promoted the introduction of COIL into educational institutions as one of the teaching methods under the "Enhancement of Globalization Capability of Universities" initiative. In response to this initiative, the Japan Foundation has been supporting COIL projects where international and Japanese students collaborate. They have organized numerous COIL projects both within Japan and internationally. In recent years, the presentations of university projects have also become more prevalent online. SUNY COIL Center (<https://coil.suny.edu/>) is a notable platform that showcases a variety of practical programs in this regard.

Kodama (2018) states as follows in both Japanese and American COIL settings.

Through COIL activities, one can deeply touch upon the humanity of students, including aspects of their personality and thinking, which one cannot grasp in regular language classes. As students engage directly with different cultures, they spontaneously gain insights and, by critically perceiving things, acquire a relative perspective that transcends themselves and their ethnic backgrounds. One can closely observe the transformation of their worldview.

(Translated from Japanese to English by authors: p.106)

Murata and Sato (2022) discuss the selection of themes in COIL activities, noting that project-based activities related to the Sustainable Development Goals (SDGs), a popular theme in recent years, tend to be more abstract and linguistically and conceptually challenging compared to more familiar topics. They emphasize that SDGs project-based activities require not just one-time discussions but a certain level of sustained dialogue. In the process of transitioning from VE to COIL, they suggest considering learners' knowledge and proficiency levels, carefully examining and maintaining program themes,

and highlighting the necessity of continuity. The comprehensive support provided by CLIL is undoubtedly crucial in this context.

3. Method

3.1 Objective

This research, based on the belief that maintaining and enhancing learning motivation can be achieved through mutual support of each other's target languages and accomplishing tasks through collaborative work, aims to explore the potential of practice-oriented classes based on COIL. The study involves Japanese and Canadian students collaborating through a VE program to achieve tasks. The observation of individual student transformations through the accomplishment of tasks, primarily via questionnaire surveys, is intended. Through analysis, the study seeks to identify effective factors contributing to the observed transformations, with the ultimate goal of considering educational styles and curriculum reforms that contribute to the development of global talent in the future.

3.2 Participants

The participants in this study consisted of 11 students (aged 20 to 28) enrolled in the "Topics in Japanese Language in an Immersion" course at a university in Alberta, Canada, and 14 students (aged 20 to 22) enrolled in the English Communication course at a small college in Nagano Prefecture, Japan. The age range among Canadian students is wide due to the university's dual-course selection process, where many students aim for two or more degrees at graduation, such as a combination of science and language studies. Each student has varying levels of proficiency in Japanese and English. Among the Canadian students, there is a difference in the duration of Japanese language learning, ranging from 1 to 5 years. In terms of CEFR levels, the students range from A2 to B2 levels, and their styles for learning Japanese vary. What they have in common is a strong interest and motivation in learning about Japanese language and culture. While none of them have prior experience studying abroad in Japan, a few students have visited Japan before. Japanese students also exhibit differences in English proficiency, with TOEIC scores ranging from 355 to 615. This level also corresponds to the CEFR A2 to B2 range. There are no students with extensive overseas experience, but five of 14 have undergone short-term language training programs lasting around two weeks.

2.3 Materials

In this research, various ICT teaching materials are employed to suit different objectives. Initially, there was concern about potential confusion

among students due to the use of multiple applications. However, it turned out that there was no need to worry, as students adeptly handled multiple applications beyond expectations. The tools utilized in the study are as follows:

- Communication: Slack (used as an LMS)
- Online Classes: Zoom (utilized breakout rooms for group work)
- Group Progress Tracking: Padlet (for recording, sharing, and collaborative work)
- Assessment and Final Projects: Bookcreator



Figure2. An example of Padlet

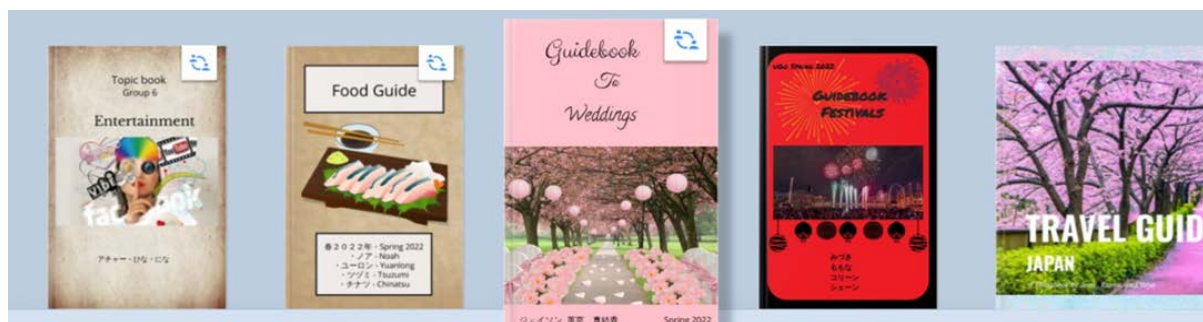


Figure3. An example of Bookcreator

The lesson structure, with a focus on CLIL, is as follows (Table 1). In this activity, the task is the creation of a bilingual book with the aim of understanding Japanese culture. The content in CLIL 4Cs addresses the cross-cultural understanding. The main topics covered include Food, Tourism, School (Life), Wedding, Festival, Entertainment, and Shopping (Products). The task for this project involves creating a bilingual book based on specific topics, which will serve as the assessed outcome.

Table 1 *4Cs Lesson design*

Content	Cross-cultural understanding (understanding own culture) Social issues (Food loss, coronavirus, etc.)
Communication	4 skills Interaction Reading and Writing
Cognition	Cultural awareness Awareness of understanding own culture and mother tongue How to communicate to encourage understanding
Culture	International awareness Respect for others

3.4 Procedure

In 2022, this project took place from May 12th (Thursday) to May 28th (Saturday) in Japan time. During this period, Zoom exchanges were conducted four times within the class on May 12th, 19th, 26th, and 28th. The session times were scheduled to accommodate the time difference, from 18:00 to 19:30 (Canada) / 9:00 to 10:30 (Japan), each lasting one and a half hours.

Outside of class, students exchanged their contact information (mainly through LINE) and were able to communicate with each other, and group work was facilitated using Padlet.

Seven groups were formed based on the topics, with each group comprising 3 to 4 members. The table below indicates the topics and the number of students in each group. "J" represents Japanese students, and "C" represents Canadian students.

Table 2 *Topics and group members*

	Topic	Members
1	Food	J: 2 C: 2
2	Tourism	J: 2 C: 1
3	School (Life)	J: 2 C: 2
4	Wedding	J: 2 C: 1
5	Festival	J: 2 C: 2
6	Entertainment	J: 2 C: 1
7	Shopping (Products)	J: 2 C: 2

The general flow of each class session is as follows:

- 1) 15 min. Introduction (Warm-up, Directions)
- 2) 30 min. Work with your group members (Breakout rooms)
- 3) 30 min. Progress report
- 4) 15 min. Wrap-up / Announcements

Additionally, each group received the following instructions.

Your group book must have:

- Title page
- Title
- Your name • partners' names
- Year (Spring 2022)
- Introduction or Preface (explain about the book)
- Table of Contents - indicate pages
- Contents
(minimum:TWO Chapters or Section and TWO pages/chapter/ection)
- Chapter or Section 1
- Chapter or Section 2
- More (if you like)
- Reference (min. 5 sources)
- About authors
- The book has to have both Japanese and English.
- List the original source of photos and images.

NOTES:

Please don't copy and paste phrases from dictionaries or the internet. - see academic misconduct.

HOMEWORK:

Enter comments on Padlet and exchange progress updates and opinions.

Surveys were conducted, including pre-survey, post-survey, and surveys for each group activity. Each question for the surveys was created based on the Communication Apprehension Scale by Yashima (2002). According to Yashima, many people experience anxiety when speaking a foreign language, and one of the emotional factors that influences communication is 'language anxiety.' The main questions for the pre- and post-surveys were as follows, while the survey for each group activity involved open-ended responses, as their comments.

Pre-surveys

1. What are you looking forward to?
2. Do you have any concerns?
3. Have you ever done any online exchange sessions ?
4. Please describe details about your online exchange experience (hours, number of students in a group, and so on).

Post-surveys

1. This is the questionnaire for COIL: Please let us know what you think now.
2. How was the class? Please write in as much detail as possible.
3. What were the challenging aspects in this class?

In this class, participants were asked to reflect on and articulate the difficulties they encountered during the course. This question aimed to gather detailed insights into the specific challenges faced by students. The inquiry sought to uncover various aspects, such as the complexity of the course content, the nature of assignments, any language barriers, or challenges related to the online learning environment. Participants were encouraged to provide specific examples and elaborate on their experiences to offer an understanding of the difficulties they encountered throughout the class. The responses to this question contribute valuable information for analyzing the course's effectiveness and identifying areas for potential improvement.

4. Results

The results of the questionnaire surveys are as follows. The answers are listed exactly as the students wrote them.

Results of the Pre-Survey:

1. What are you looking forward to?
 - Meeting new students and learning about Canadian culture. I would like to inquire about the lives and daily routines of fellow university students.
 - Meeting students, talking with Japanese students, and sharing the experience of studying in different countries.
 - Different cultural exchange and conversations with Japanese students.
 - Making friends with Japanese students.
 - Hoping to meet interesting people.
 - Looking forward to experiencing the different culture of Japan.
 - Excited about meeting new people.
 - Looking forward to meeting Japanese students.
 - Learning about life abroad.
 - Talking to many Canadian students.
 - Excited about the exchange.
 - Looking forward to talking with local university students.
 - Excited about the opportunity to interact. Hoping to have many conversations.
 - Interested in hearing what kind of English people actually speak.

2. Do you have any concerns?

- I am worried if I can convey what I want to say.
- I am anxious about whether I can have meaningful conversations with Canadian students due to my limited English proficiency.
- Concerns about not getting along with students and misunderstanding assignments while talking to Japanese students.
- My Japanese is slow...
- Concerns about accents in the spoken language.
- Worried about not being able to convey the message without misunderstanding.
- I am worried that my nerves will prevent me from speaking or hearing well.
- Concerns about group work due to time differences and difficulty in communication.
- Worried that my Japanese is not good enough.
- Concerned that I won't be able to properly communicate with Japanese students.
- Yes. My mind is blank.
- Concerns about whether communication will be possible.
- Concerns about whether the other person will understand my explanation.
- Concerns about the stability of the internet environment.
- Fear of being unable to speak, leading to prolonged silence.
- Concerns about effective communication. There is a bit of anxiety about whether my English will be understood and if I can comprehend the other person's Japanese.
- Concerns about the possibility that no one will speak. There might be a situation where the project does not progress.

3. Have you ever done any online exchange sessions ?

Yes 52.6% No. 47.4%

4. Please describe details about your online exchange experience (hours, number of students in a group, and so on).

- COIL project involved collaboration with a Japanese university. Despite some confusion due to time differences, the overall experience was interesting.
- The exchange spanned approximately 3 weeks with around 16 Japanese students. There were challenges with time zones when trying to coordinate, and I believe there were about 20 students in total. Each session lasted 1 hour and 30 minutes.

- Last year, in a similar class, we had groups of about 3:3. The exchanges, lasting around 90 minutes, gathered approximately 30 participants. In groups of 4 or 5, discussions on various themes were frequently conducted in breakout rooms. When working in pairs, the sessions were longer, lasting around 30 minutes.
- We had a similar experience in a previous class, where I don't recall the exact total number of participants, but I remember engaging in exchanges with 3 to 5 people in breakout rooms. It was a lot of fun!

Results of the Post-Survey:

1. This is the questionnaire for COIL: Please let us know what you think now.
 - The presentation was enjoyable and interesting.
 - It was challenging but interesting. Thank you for teaching us something new.
 - It was difficult but fun.
 - I think it was good.
 - This class was challenging. People didn't seem to want to talk.
 - The class was a bit stressful. I enjoyed answering the questions at the end.
2. How was the class? Please write in as much detail as possible.
 - There were challenges in the smooth progression of the class.
 - Creating a book in a short amount of time was considered difficult.
 - Explaining "san-san-ku-do" and describing unique Japanese customs were challenging.
 - I didn't know many of the kanji we wrote, and we didn't have time to add hiragana, so I presented in English. I feel a bit bad that I didn't present in Japanese, but I believe our book is good.
 - It was difficult to speak together.
 - Sometimes I didn't understand Japanese.
3. What was challenging in this class?
 - The group is interesting. Mixing English and Japanese is a bit challenging. I love learning about Japanese festivals; it's very beneficial! I think the project is going well!
 - It was fun but a bit embarrassing. The group was really kind, which was good. We spoke in both English and Japanese. However, since the Japanese students are good at English, we mostly spoke in English. Japanese festivals seemed interesting, and I learned a lot about them.
 - It was scary but I think it was fun. Actually, I didn't speak much... My

Japanese is very slow.

- It was nerve-wracking, but I think it was fun. When using Japanese, I think I made some vocabulary mistakes.
- Today's class was challenging, I think. I couldn't speak much, but I'm looking forward to it. I hope our project turns out well.
- Everyone seemed a bit nervous. Speaking was sometimes embarrassing and difficult, but let's do our best. I am looking forward to us hopefully doing well!

The figures below show some parts of the work, “Bilingual Book”.



Figure 4. Parts of the work

5. Analysis and Discussion

Students were initially quite nervous, but as this exchange program progressed, it became evident that their participation was transforming into an enjoyable experience. However, when it came to the group work of creating the Bilingual Book, there were comments in the reflections that highlighted difficulties and discomfort, particularly with periods of silence. This activity was more challenging and painful compared to discussion and presentation

activities (oral activities), and it took some time for the students to get used to it. The process leading up to the creation of the Bilingual Book involves the utilization of all four language skills, with a particular emphasis on the development of reading and writing skills as the completion approaches. Therefore, expressing ideas becomes challenging, and reading becomes time-consuming. Furthermore, the need for literacy skills becomes apparent, emphasizing the importance of speaking slowly and clearly to facilitate effective communication.

On the other hand, it seems that students have developed a keen interest in learning more about each other's countries. However, due to the limited time of the exchange, many students express concerns about insufficient time. If this program were to be consistently incorporated into the curriculum in the future, it could be anticipated that students' motivation and satisfaction would increase. Moreover, an interesting observation is the synergistic effect where students emulate the attitudes of their counterparts, leading to self-reflection on their own learning attitudes. Simultaneously, there appears to be a realization that they should take a greater interest in their own country's situation and culture. The learning insights include comments after group activities such as:

- I thought I should try harder.
- I felt the need to increase my study output.
- I realized my attitude was not proactive enough.
- I feel that my way of thinking has changed.
- I came to believe that studying can be enjoyable.
- In intercultural exchange, I think the most important thing is to consider the feelings of the other person.

Supporting each other's target language learning and achieving tasks through collaborative work are considered to enhance and maintain learning motivation. By defining COIL as the ultimate goal of the online program, it might contribute to learners' autonomy and personal development. To achieve this, it is essential to further examine the innovations and factors required in online programs. Additionally, continuous incorporation of this program into the curriculum could lead to even greater benefits. Through this VE program, it is evident that participants are not only enjoying language use opportunities but also learning the importance of patience, respect, and mutual appreciation. Even when faced with challenges in communication due to language barriers, the participants encourage each other and make efforts to communicate positively, leaving a strong impression.

However, a persistent challenge lies in the issue of time zone differences.

While aligning with early morning Japan time and late afternoon Canadian time seems most convenient, adjustments may be necessary concerning other subjects and the university's academic calendar. Furthermore, the transition from VE to COIL involves an increased load from oral skills to literacy skills. This suggests that further research and innovation are needed regarding topics, tasks, and the overall process of the course.

6. Conclusion

This research, though still in progress, currently indicates that the "awareness" from this learning experience is influencing learners' autonomy. Kolb (1984) identifies the Experiential Learning Cycle as a form of awareness leading to self-directed learning.

Kolb's Experiential Learning Cycle:

1. Concrete Experience: The individual has a specific experience in their own situation.
2. Reflective Observation: The individual reflects on their experience from various perspectives.
3. Abstract Conceptualization: The individual generalizes and conceptualizes the experience to apply it in other situations.
4. Active Experimentation: The individual actively tries the new knowledge in a new situation.

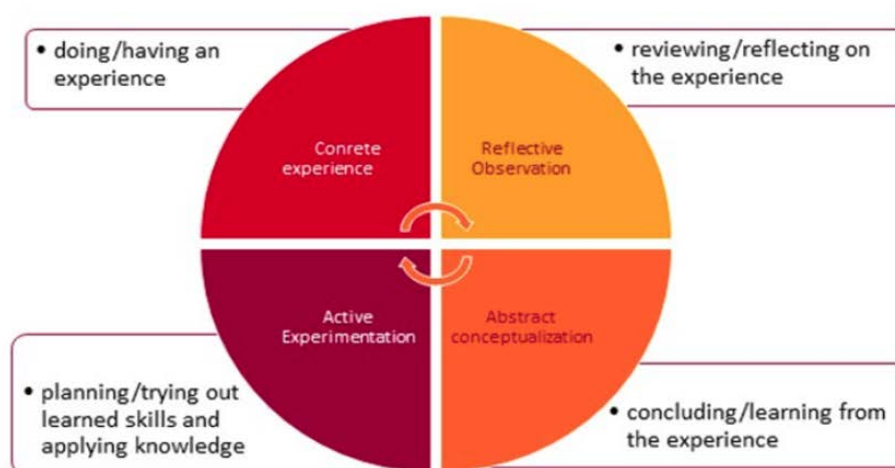


Figure 5. Kolb's Experiential Learning Cycle (1984)

In this VE program, from the results of the student pre-and post-surveys, it is believed that students are following this learning cycle. Furthermore, building on this cycle, by taking the COIL task sequence: 1) Icebreaking/Team building, 2) Comparison/Discussion, 3) Project-based activities, 4)

Presentation/Reflection summary, as the vertical axis (i.e., the structure of the class), and handling the course content as the horizontal axis (i.e., incorporating CLIL), a genuine elevation to COIL can be achieved. The figure below represents this concept.

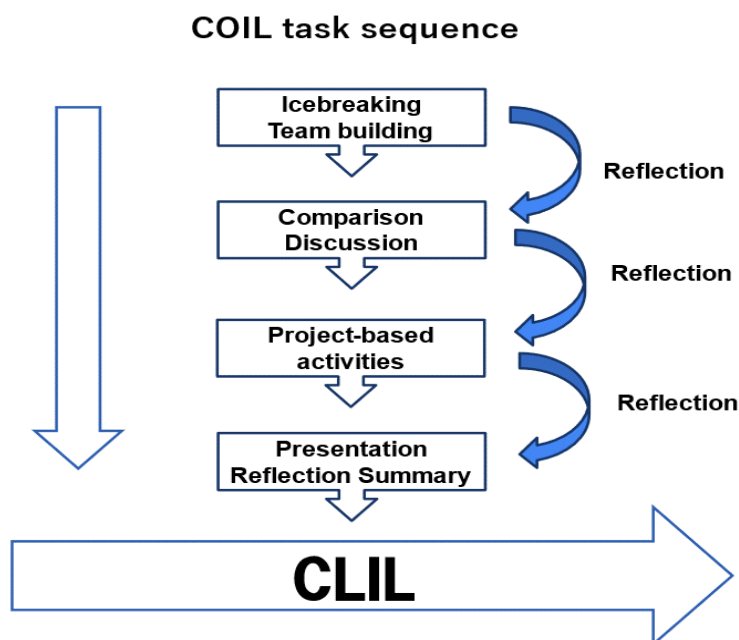


Figure 6. COIL Task Sequence and CLIL

In order to expand the future possibilities for students beyond their respective countries, fostering intercultural competence becomes imperative. We plan to continue implementing practical classes based on COIL, a new teaching method where Japanese and Canadian students learn together. Moreover, to determine the class content and activities, we intend to conduct profile studies on individuals who can effectively work in cross-cultural settings. Additionally, our research will focus on implementing intercultural collaborative class activities and research projects aimed at enhancing students' awareness, critical thinking, development of a relative perspective, and transformation of worldview.

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要旨

CLIL を念頭に、2021 年度よりカナダの大学で日本語を学ぶ学生と日本の大学で英語を学ぶ学生を対象にオンラインだからこそできる授業を工夫し Virtual Exchange Program を実践している。本論では、2022 年度に実施したプログラムの 1 つ「Bilingual Book の作成」を通して、電子ブック作成ツール「Book Creator」を使用して、学生が使用言語を入れ替えながらお互いの学習目標言語を支援し、協働作業を通して達成したタスクや学生の自己評価などについて報告する。